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| Learner Manual |
| ***Module 3*** |

**NATIONAL Certificate:**

**GENERIC MANAGEMENT**

**59201**

**GENERIC MANAGEMENT**

**(LP60269)**

**Skills Program 3-Decision Making**

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# Notes to the Learner

Dear Learner,

Welcome to this Learning programme. We trust that this Learning programme will be of great value to you during your studies and in your new learning experience. To succeed in anything in life requires a lot of hard work.

It will be expected of you to work through this study guide with a great deal of attention. It provides you with information on how to work through the material, details exactly what will be expected of you and what objectives you need to achieve during the study of this Learning programme.

* Complete your assignments with dedication and submit them in time.
* Complete the self-study sections for your own benefit. The self-study sections provide you with the opportunity to practice what you have learnt.
* Act as adult learners

The theory you are learning helps you to understand why you are doing things in a specific way. It also gives you a way to compare what you are doing to the way others do things. However, the only way to become competent is by doing the actual work according to the unit standards. This Learning programme provides you with a step-by-step method that you must apply to all unit standards.

As all parties to this learning intervention have duties and responsibilities to fulfil, so do you, in your capacity as the learner. On the final page of this section, you will find a commitment letter which serves to confirm your commitment to this learning intervention. Please read it and sign it, if you agree thereto. Should you not agree, please notify your facilitator so that the matter can be resolved.

# The learning approach

* **Active**

You have to participate and complete tasks. Actively participate in the teaching and learning process.

* **Constructive**

The learning content will be to your benefit. Be constructive and actively convert your learning by integrating the new knowledge you gain in this learning programme with previous experience.

* **Cumulative**

The learning content builds on your existing experience. The cumulative character of learning implies that we need to build new knowledge into you existing knowledge. Therefore, you have to resort and refer to what you already know to ensure that this learning programme is of value to you

* **Goal Oriented**

Certain goals have to be met to complete the qualification competently. You also have to be goal-directed. Work according to and achieve the learning programme objectives as well as your personal learning objectives. Know what the learning program’s objectives are!

**How to complete this qualification successfully?**

These guidelines have been compiled to assist you to complete the qualification. This programme is a mixture between a self-study programme and a coaching programme to provide you with the tools that you would need to demonstrate to an independent assessor that you have met all the criteria to attain the qualification: National Certificate: Generic Management.

The National Certificate: Generic Management is an Outcomes Based Qualification. This means that you do not necessarily have to sit in a classroom to learn (who can in any case learn how to run a business by only sitting and listening to a lecturer anyway? – you have to get practical experience!). To attain the qualification, you would have to show that you know, and can do, all the things required!

Any learning does however require effort; and the effort that the average person has to put in to learn the skills in this qualification is reflected in the credits associated with each of the unit standards (learning objectives). Experience has shown that the average learner requires about 10 (notional) hours for each credit attained. The whole National Certificate: Generic Management qualification consists of at least 167 credits. This programme is going to be an exciting experience for you since it looks at the world of Generic Management in businesses from a practical viewpoint.

The Student Guidelines and the rest of this book are structured as follows; Each chapter represents a Unit Standard and therefore each has a title that corresponds with a specific Unit Standard, a set of objectives (which corresponds with the Specific Outcomes and Assessment Criteria of that Unit Standard) and a list of the Resource Material that would be of assistance to you to achieve competency.

These guidelines and information will therefore not only assist you to start your own business but will be the guiding principles by which you could attain the Further Education and Training Certificate: Generic Management qualification. It makes absolute sense to obtain the qualification since it will also help you should you ever need to find a job again. Businessmen are known to have to find employment during times of hardship but even subsequent to that, most still return to their own enterprises after a while.

This programme has been designed to meet the outcomes of the Qualification: “Further Education and Training Certificate: Generic Management”. The programme is outcomes based which means that we take the onus of learning away from the facilitator and put it in your hands. The facilitator’s role is to assist you to work through the material and guide you in the activities that will lead you to competence.

# Learner Guide Introduction

**Purpose**

A person acquiring this qualification will be able to manage first line managers in an organisational entity. First line managers may include team leaders, supervisors, junior managers, section heads and foremen.

The focus of this qualification is to enable learners to develop competence in a range of knowledge, skills, attitudes and values including:

* Initiating, developing, implementing and evaluating operational strategies, projects and action plans, and where appropriate, recommending change within teams and/or the unit so as to improve the effectiveness of the unit.
* Monitoring and measuring performance and applying continuous or innovative improvement interventions in the unit in order to attain its desired outcomes, including customer satisfaction, and thereby contributing towards the achievement of the objectives and vision of the entity.
* Leading a team of first line managers, by capitalising on the talents of team members and promoting synergistic interaction between individuals and teams, to enhance individual, team and unit effectiveness in order to achieve the goals of the entity
* Building relationships using communication processes both vertically and horizontally within the unit, with superiors and with stakeholders across the value chain to ensure the achievement of intended outcomes
* Applying the principles of risk, financial and knowledge management and business ethics within internal and external regulatory frameworks in order to ensure the effectiveness and sustainability of the unit
* Enhancing the development of teams and team members through facilitating the acquisition of skills, coaching, providing career direction, and capitalising on diversity in the unit

The skills, knowledge and understanding demonstrated within this qualification are essential for the creation of a talent pool of experienced and effective middle managers that represents the demographics of the South African society. This qualification will create a leadership cadre for the South African society throughout multiple industries and sectors both private and public.

**Rationale:**   
The National Certificate: Generic Management, NQF Level 5 forms part of a learning pathway of management qualifications across various sectors and industries. It is specifically designed to develop management competencies required by learners in any occupation, particularly those who manage first line managers.

The qualification builds on the FETC: Generic Management and further develops the key concepts, principles and practices of management that will enable learners to lead, manage, organise and control first line managers and team leaders.

The learners will typically be managers who have other junior managers or team leaders reporting to them. In smaller organisations or entities, the managers could primarily be responsible for managing the supervisors and staff within their section, division or business unit.   
  
The scope of generic management covers five domains: leadership, managing the environment, managing relations, managing knowledge and the practice of management. This qualification addresses each of these domains with generic competencies, so that it allows learning programmes to be contextualised for specific sectors and industries.

It reflects a similar design to the FETC: Generic Management, in that it provides opportunities for learners to transfer between various specialisations within management. This leads to the strengthening of management competencies and will enable managers at this level to manage successfully systems, processes, resources, managers and teams in their various occupations and contexts.   
  
This qualification is further intended to empower learners to acquire the knowledge, skills, attitudes and values required to operate confidently as individuals in South African communities and to respond to the challenging economic environment and constantly changing world of work.

Ultimately, this qualification is aimed at improving the effectiveness and leadership abilities of middle managers in various occupations in South Africa, in private and public business entities as well as non-governmental organisations. For this reason, the word 'entity' includes a company, business unit, public institution, small business or non-profit organisation.

**It is assumed that learners are competent in:**

* Communication at NQF Level 4
* Mathematical Literacy at NQF Level 4

**Recognition of Prior Learning (RPL):**The qualification can be achieved wholly or in part through recognition of prior learning in terms of the defined Exit Level Outcomes and/or individual unit standards. Evidence can be presented in various ways, including international and/or previous national qualifications, products, reports, testimonials mentioning functions performed, work records, portfolios and/or performance records. All such evidence will be judged in accordance with the general principles of assessment and the requirements for integrated assessment.

**Access to the Qualification:**Access to the qualification is open keeping in mind the Learning Assumed to be in Place.

**Specific Outcomes**

Specific outcomes describe what the learner has to be able to do successfully at the end of this learning experience.

**Assessment Criteria**

The only way to establish whether a learner is competent and has accomplished the specific outcomes is through the assessment process. Assessment involves collecting and interpreting evidence about the learners’ ability to perform a task. This Learning programme includes assessments in the form of self-assessments, group exercises, quizzes, projects and a practical training programme whereby you are required to perform tasks on the job and collect as portfolio of evidence, proof signed by your supervisor that you have successfully performed these tasks.

**To qualify**

To qualify and receive credits towards your qualification, a registered Assessor will conduct an evaluation and assessment of your portfolio of evidence and competency.

**Qualification rules**

**Fundamental Component:**   
The unit standards included in the fundamental component of the qualification total 49 credits. They are compulsory and must be contextualised according to the specialisation or the selected learning programme.   
  
**Core Component:**   
The unit standards in the core component total 78 credits and are compulsory. They must be contextualised according to the specialisation or selected learning programme.   
  
**Elective Component:**   
The elective component of the qualification consists of a number of unit standards, divided into specialisations. The learner must choose a specialisation and complete unit standards totalling a minimum of 35 credits from the unit standards listed under that specialisation.   
  
**General Management (Learning Programme ID 60269):**

* 252030: Analyse compliance to legal requirements and recommend corrective actions, NQF Level 5, 4 credits.
* 252041: Promote a learning culture in an organisation, NQF Level 5, 5 credits.
* 114212: Explain the impact of organisational wellness on a business environment and indicate a strategy for a business unit NQF Level 4, 3 credits.
* 12140: Recruit and select candidates to fill defined positions, NQF Level 5, 9 credits.
* 12761: Demonstrate an understanding of macroeconomic principles as they apply to the South African business environment, NQF Level 4, 8 credits.
* 252024: Evaluate current practices against best practice, NQF Level 5, 4 credits.
* 252033: Develop ways of dealing with the impact of dreaded diseases and in particular HIV/AIDS, NQF Level 5, 8 credits.
* 252039: Develop a plan to combat corruption, NQF Level 5, 5 credits.
* 10048: Identify brand mix elements, NQF Level 5, 8 credits.
* 114226: Interpret and manage conflicts in the workplace, NQF Level 5, 8 credits.
* 252031: Apply the principles and concepts of emotional intelligence to the management of self and others, NQF Level 5, 4 credits.
* 117853: Conduct negotiations to deal with conflict situations, NQF Level 5, 8 credits.
* 15230: Monitor team members and measure effectiveness of performance, Level 5, 4 credits.
* 264408: Manage and improve communication processes in a function, Level 6, 3 credits.

**Generic Manufacturing (Learning Programme ID 60270):**

* 12999: Contribute to the management of cost and the enhancement of value, NQF Level 5, 10 credits.
* 119159: Maintain Manufacturing Efficiencies, NQF Level 5, 12 credits.
* 119166: Optimise Manufacturing processes, NQF Level 5, 24 credits.
* 9897: Manage Inventory, NQF Level 5, 3 credits.

**Fast Moving Consumer Goods (Learning Programme ID 60271):**

* 119801: Demonstrate an understanding of Microbiological principles and its application to a food handling environment, NQF Level 5, 12 credits
* 119800: Optimise product and process quality in food or sensitive consumer product environment, NQF Level 5, 8 credits
* 119796: Monitor and control quality assurance procedures in a food or sensitive consumer product environment, NQF Level 4, 8 credits.
* 252039: Develop a plan to combat corruption, NQF Level 5, 5 credits.
* 10048: Identify brand mix elements, NQF Level 5, 8 credits.
* 252024: Evaluate current practices against best practice, NQF Level 5, 4 credits.

**Cement Manufacturing (Learning Programme ID 60272):**

* 10462: Demonstrate an understanding of cement process technology, NQF Level 4, 22 credits
* 10464: Demonstrate an understanding of lime process technology, NQF Level 4, 16 credits
* 252039: Develop a plan to combat corruption, NQF Level 5, 5 credits
* 252024: Evaluate current practices against best practice, NQF Level 5, 4 credits

**Customer Management (Learning Programme ID 60273):**

* 10045: Identify product features, advantages and benefits to the customer, NQF Level 5, 10 credits
* 10047: Close a deal with a customer, NQF Level 5, 5 credits
* 10070: Develop and implement marketing plan in line with marketing strategy, NQF Level 5, 20 credits
* 10048: Identify brand mix elements, NQF Level 5, 6 credits
* 10052: Monitor handling of customer by frontline customer service, NQF Level 5, 8 credits
* 10053: Manage customer requirements and needs and implement action plans, NQF Level 5, 8 credits
* 10054: Identify and manage areas of customer service impact, NQF Level 5, 6 credits
* 10066: Establish customer needs and relationships, NQF Level 5, 16 credits
* 10067: Develop customer needs and relationships, NQF Level 5, 16 credits

**Disaster Risk Management (Learning Programme ID 60274):**

* 251963: Utilise communication and information management systems, Level 5, 10 credits
* 251965: Create awareness and promote a culture of risk avoidance through advocacy activities, Level 4, 6 credits
* 251964: Develop and implement disaster risk reduction plans, Level5, 10 credits
* 251962: Establish and co-ordinate forums for disaster risk management in a specific environment, Level 5, 6 credits
* 251966: Implement disaster risk management principles in response, recovery, relief and rehabilitation activities, Level 5, 15 credits
* 251967: Conduct disaster risk assessment, Level5, 15 credits
* 251968: Develop and manage funding mechanisms for disaster risk management, Level6, 10 credits
* 251961: Interpret and integrate disaster risk management theory into programmes and activities according to the Disaster Risk Management (DRM) Framework, Level 5, 15 credits

**Financial Management for Sport Federations (Learning Programme ID 60275):**

* 252038: Prepare and manage a budget, Level 5, 5 credits
* 252181: Explain the role of governance structures in sport, Level 5, 5 credits
* 252176: Manage the business components of a sport organisation, Level 5, 6 credits
* 242650: Manage project finances, Level 5, 15 credits
* 252039: Develop a plan to combat corruption, NQF Level 5, 5 credits
* 12761: Demonstrate an understanding of macroeconomic principles as they apply to the South African business environment, NQF Level 4, 8 credits
* 252024: Evaluate current practices against best practice, NQF Level 5, 4 credits.

**Sport Event Management (Learning Programme ID 60276):**

* 252175: Apply principles of marketing to sport, Level 5, 4 credits
* 242650: Manage project finances, Level 5, 15 credits
* 252180: Coordinate the logistics of a sports team on tour, Level 5, 8 credits
* 252179: Manage volunteers in sport, Level 5 , 5 credits
* 243948: Monitor and maintain health, safety and security, Level 5, 4 credits
* 15230: Monitor team members and measure effectiveness of performance, Level 5, 4 credits

**Advanced Sport Management Administration (Learning Programme ID 60277):**

* 252182: Establish sustainable sport organisations structures, Level 5, 6 credits
* 252176: Manage the business components of a sport organisation, Level 5 , 6 credits
* 252181: Explain the role of governance structures in sport, Level 5, 5 credits
* 115855: Create, maintain and update record keeping systems, Level 5, 5 credits
* 242650: Manage project finances, Level 5, 15 credits
* 252179: Manage volunteers in sport, Level 5, 5 credits
* 252177: Manage participants with disability in sport, Level 5 , 8 credits
* 252178: Support sport and fitness participation for people living with HIV/AIDS, Level 5, 4 credits

**Adventure Based Learning (ABL) (Learning Programme ID 60278):**

* 252188: Develop a programme for Adventure Based Learning (ADL) experiences, Level 5, 8 credits
* 252184: Facilitate participation in an adventure-based activity, Level 5, 6 credits
* 252187: Plan and conduct leading and mentoring of participants in outdoor adventure experiences, Level 5, 4 credits
* 252186: Prepare to lead and conduct physical activities, Level 5, 4 credits
* 252185: Promote sustainable use of the environment, Level 5, 3 credits
* 252183: Maintain safety in the conduct of Adventure Based Learning activities, Level 5, 5 credits
* 252189: Deal with substandard performance in a team, Level 5, 5 credits

**Wholesale and Retail Management (Learning Programme ID 63334):**

* 10980: Induct a new employee, Level 4, 6 credits
* 12140: Recruit and select candidates to fill defined positions, Level 5, 9 credits
* 255494: Schedule staff, Level 5, 10 credits
* 255495: Demonstrate an understanding of the sectoral determination for the wholesale and retail sector, Level 5, 8 credits
* 255496: Manage a training intervention, Level 5, 8 credits
* 255497: Manage stock holding procedures in a wholesale and retail unit, Level 5, 6 credits
* 255498: Manage cold chain processes in a wholesale and retail unit, Level 5, 6 credits
* 255499: Manage shrinkage and losses in a wholesale and retail unit, Level 5, 12 credits
* 255500: Manage procedures that increase the net income of a wholesale and retail unit, Level 5, 8 credits
* 255514: Conduct a disciplinary hearing, Level 5, 15 credits

**Mining Management (Learning Programme ID 64869):**

* ID 7863: Manage staff development; Level 5; 6 credits
* 10043: Develop, implement and manage a project/activity plan; Level 5; 5 credits
* 11286: Institute disciplinary action; Level 5; 8 credits
* 12140: Recruit and select candidates to fill defined positions; Level 5; 9 credits
* 12996: Record, analyse and prepare cost information; Level 5; 10 credits
* 12997: Prepare financial reports and returns; Level 5; 8 credits
* 13015: Draft financial statements; Level 5; 12 credits
* 15214: Recognise areas in need of change, make recommendations and implement change in the team, department or division; Level 5; 3 credits
* 252024: Evaluate current practices against best practice; Level 5; 4 credits
* 15223: Implement training needs for teams and individuals to upgrade skills levels; Level 5; 3 credits
* 15226: Implement systems to meet the flow of information in a team, department or division; Level 5; 3 credits
* 15229: Implement codes of conduct in the team, department or division; Level 5; 3 credits
* 15230: Monitor team members and measure effectiveness of performance; Level 5; 4 credits

**Skills Development Management (Learning Programme ID 66069):**

* 11911: Manage individual careers; Level 5; 5 credits
* 15219: Develop and implement a strategy and action plans for a team, department or division; Level 5; 4 credits
* 15220: Set, monitor and measure the achievement of goals and objectives for a team, department or division within an organisation; Level 5; 4 credits
* 15232: Coordinate planned skills development interventions in an organisation; Level 5; 6 credits
* 116926: Implement skills development as workplace learning to support organisational transformation; Level 5; 12 credits
* 252041: Promote a learning culture in an organisation, NQF Level 5, 5 credits

**Service Station Management (Learning Programme ID 66310):**

* 244031: Manage dangerous goods logistics, Level 5, 12 credits
* 114274: Demonstrate and apply an understanding of the Basic Conditions of Employment Act, Level 5, 8 credits
* 255514: Conduct a disciplinary hearing, Level 5, 15 credits
* 114592: Produce business plans for a new venture, Level 4, 8 credits
* 242668: Demonstrate knowledge and application of the Occupational Health and Safety Act, 85 of 1993 (OHSA) (as amended) and the responsibilities of management in terms of the Act, Level 4, 4 credits
* 255500: Manage procedures that increase the net-income of a wholesale and retail unit, Level 5, 8 credits
* 255499: Manage shrinkage and losses in a wholesale and retail unit, Level 5, 12 credits
* 252024: Evaluate current practices against best practice, Level 5, 4 credits
* 252030: Analyse compliance to legal requirements and recommend corrective actions, Level 5, 4 credits.

**Real Estate (Learning Programme ID 71609):**

* 258115: Manage the marketing, selling and leasing of property developments, Level 5, 12 credits
* 258116: Manage community schemes, Level 5, 8 credits
* 258117: Manage a Real Estate franchise business, Level 5, 12 credits
* 258118: Market, sell and lease community schemes, Level 5, 8 credits
* 258119: Manage an auctioneering business or division, Level 5, 12 credits
* 258120: Integrate the principles of Agricultural property ownership into Real Estate sales and marketing functions, Level 5, 12 credits
* 258121: Manage Real Estate business operations, Level 5, 8 credits
* 258122: Manage a business broking business or division, Level 5, 12 credits
* 258123: Demonstrate an understanding of real estate economics in the SA context, Level 5, 8 credits
* 258124: Manage the marketing, selling and leasing of properties, Level 5, 12 credits
* 258125: Integrate the principles of Commercial/Industrial property ownership into Real Estate sales and marketing functions, Level 5, 12 credits
* 258126: Apply facilities management principles, Level 5, 8 credits
* 258135: Develop, implement and control administration of Real Estate systems, policies and procedures, Level 5, 8 credits
* 258136: Perform market assessments, Level 5, 12 credits
* 258137: Collate, interpret and utilise financial information in a Real Estate business, Level 5, 8 credits
* 258138: Implement and maintain legal requirements within a Real Estate business, Level 5, 6 credits

**Security Management (Learning Programme ID 74511):**

* 120480: Demonstrate understanding of crime prevention, Level 5, 6 credits
* 242830: Conduct a security threat assessment in a defined operational area, Level 4, 6 credits
* 13952: Demonstrate basic understanding of the Primary labour legislation that impacts on a business unit, Level 4, 8 credits
* 244315: Assess threat for security installation purposes, Level 5, 7 credits
* 244330: Compile a threat and risk assessment for a close protection operation, Level 5, 5 credits
* 120484: Demonstrate understanding of the principles of common law crimes and statutory law offences, Level 5, 12 credits
* 120303: Apply principles of risk management, Level 5, 8 credits
* 15228: Advise on the establishment and implementation of a quality management system for skills development practices in an organisation, Level 5, 10 credits
* 15221: Provide information and advice regarding skills development and related issues, Level 5, 4 credits
* 15227: Conduct skills development administration in an organisation, Level 4, 4 credits
* 242829: Monitor the level of service to a range of customers, Level 4, 5 credits
* 114925: Manage learner information using an information management system, Level 5, 4 credits

**Strategic Management (Learning Programme ID 74512):**

* 264395: Formulate a strategy and an implementation plan for a function, Level 6, 6 credits
* 264398: Evaluate and plan the role of self as leader in a function, Level 6, 5 credits
* 264400: Apply the principles of corporate governance and ethics in a function, Level 6, 5 credits
* 264403: Apply problem-solving techniques to make decisions on a multi-faceted problem, Level 6, 5 credits
* 264405: Manage relationships with strategic partners to improve the performance of a function, Level 6, 6 credits
* 264406: Manage the information and institutional knowledge within a function, Level 6, 5 credits
* 264407: Analyse the strategy and external environment of the entity in relation to a function, Level 6, 3 credits
* 264408: Manage and improve communication processes in a function, Level 6, 3 credits
* 264409: Use negotiation in multi-faceted situations to achieve the objectives of a function, Level 6, 5 credits
* 264416: Appraise, develop and retain human capital for a function, Level 6, 6 credits

Additional specialisations in Contact Centre Management, Human Resource Management and Public Administration will be added at a later stage.

**Exit level outcomes**

1. Initiate, develop, implement and evaluate operational strategies, projects and action plans so as to improve the effectiveness of the unit.

2. Monitor and measure performance and apply continuous or innovative improvement interventions in the unit.

3. Lead and manage a team of first line managers to enhance individual, team and unit effectiveness.

4. Build relationships with superiors and with stakeholders across the value chain.

5. Apply the principles of risk, financial and knowledge management and business ethics within internal and external regulatory frameworks.

6. Enhance the development of teams and team members.

**Critical Cross-Field Outcomes:**

The learner will be expected to demonstrate the ability to:

* Identify and solve problems and make responsible ethical decisions within own scope of responsibility.
* Work effectively with others as a member of a team, group, organisation or community to achieve unit objectives.
* Organise and manage oneself and one's activities responsibly and effectively to plan, lead, organise and control in order to achieve unit objectives.
* Collect, organise and critically evaluate information in order to manage performance in the unit.
* Communicate effectively using visual, mathematics and language skills in the modes of oral and/or written presentations to lead a team of first line managers.
* The learner will be required to demonstrate an understanding of the world as a set of related systems by managing others in multiple teams within a unit.
* Be culturally and aesthetically sensitive across a range of social contexts in managing and interacting with diverse people in the workplace.
* Use science and technology effectively in researching, recommending and implementing management solutions in the unit, showing responsibility towards the environment and health of others.

**Associated Assessment Criteria**

**Associated Assessment Criteria for Exit Level Outcome 1**:

* Priorities are identified by considering a broad range of factors in solving problems and making decisions on operational strategies.
* The need for and the benefits of change are explained and recommendations are made to achieve intended results.
* The initiatives to be undertaken by the unit are linked to organisational goals and objectives.
* Operational strategies, projects and action plans are initiated and developed.
* Operational strategies, projects and action plans are implemented and evaluated.

**Associated Assessment Criteria for Exit Level Outcome 2:**

* The performance of the teams and the unit is monitored and measured according to entity's systems and procedures.
* Innovative and/or continuous improvement strategies are applied according to generally accepted theory and practice.
* Results are evaluated in relation to intended outcomes.

**Associated Assessment Criteria for Exit Level Outcome 3:**

* The talents of each team member are evaluated according to the needs and operational requirements of the unit.
* The team is provided with direction towards fulfilment of organisational goals.
* Resources are identified and used by the leader to accomplish the objectives of the unit.

**Associated Assessment Criteria for Exit Level Outcome 4:**

* Relationships are built through the provision and solicitation of unit-relevant information.
* Communication processes that contribute towards building relationships are implemented both vertically and horizontally.
* Team effectiveness and desired outcomes are achieved through partnership and information sharing.
* Customer needs are interpreted and distilled through effective communication processes in order to ensure that relationships are sustained.

**Associated Assessment Criteria for Exit Level Outcome 5:**

* Risk in the unit is managed by considering the impact and likelihood of a variety of internal and external factors.
* The intended outcomes of the unit are achieved by applying accepted principles and practices of financial management.
* The intellectual assets of the unit are identified, developed and protected through the application of the principles of knowledge management.
* The desired outcomes of the unit are achieved within an individual ethical framework and according to the value system of the entity.

**Associated Assessment Criteria for Exit Level Outcome 6:**

* The acquisition and enhancement of skills is facilitated through people development processes.
* Direction is given to first line managers on their possible career progression within the entity through coaching and other personal interaction.
* The diversity in the team is recognised and harnessed in order to add value to team effectiveness.

**Integrated Assessment:**

Assessment practices must be fair, transparent, valid and reliable and should ensure that the learner is not disadvantaged in any way. Integrated assessment provides the opportunity for learners to demonstrate that they are able to integrate concepts, actions and ideas achieved across a range of unit standards and contexts. Integrated assessment must evaluate the quality of competence attained by the learner.

The assessment strategies used must ensure that that all Specific Outcomes, Essential Embedded Knowledge and Critical Cross-Field Outcomes are assessed. The assessment of the Critical Cross-Field Outcomes should be integrated with the assessment of the Specific Outcomes.

The learner who has provided the required evidence for all the exit level outcomes of the qualification will be assessed as competent and awarded the qualification. This will ensure that learning and competence are not achieved only in the building blocks of the unit standards but also in the integration and application of the fundamental, core and elective building blocks to a particular context, i.e. the exit level outcomes.

**What is a credit?**

A credit is the formal recognition that you have the necessary knowledge, skills and understanding in a particular field of study. One (1) credit = 10 notional hours of learning. ‘Notional hours’ are time spent on homework, assignments, practicing on the job, classroom time, or any other time spent to become competent in the particular standard or qualification. A total of 167 or more credits are necessary to receive a **National Certificate: Generic Management**at NQF level 5.

**Range of Learning**

This describes the situation and circumstance in which competence must be demonstrated and the parameters in which the learner operates.

**Use of the Learner Guide**

There are six (6) modules in this Learner Guide.

Skills Programme 3: Decision Making

|  |  |  |  |
| --- | --- | --- | --- |
| **U/S number** | **Unit Standard name** | **Level** | **Cr** |
| 252026 | Apply a systems approach to decision making | 5 | 6 |
| 252044 | Apply the principles of knowledge management | 5 | 6 |
| 252020 | Create and manage an environment that promotes innovation | 5 | 6 |
| 252034 | Monitor and evaluate team members against performance standards | 5 | 8 |
| 252025 | Monitor, assess and manage risk | 5 | 8 |
| 252035 | Select and coach first line managers | 5 | 8 |

A specific goal is given for each lecture or theme. You will have to attain a number of objectives to attain the goal of each session. First read the objectives to focus your thoughts on the information that may be relevant to attain the objectives.

Once you have your thoughts focussed, skim or scan the course work prescribed for each theme to orientate you with the material you have to study.

During classes an overview of a theme will be given, after which a number of problems and/or questions will be discussed. You are advised to develop a concept map of each theme that not only represents each theme visually but also relates the different components.

**Learner Support**

Please remember that as the programme is outcomes based – this implies the following:

* You are responsible for your own learning – make sure you manage your study, research and portfolio time responsibly.
* Learning activities are learner driven – make sure you use the Learner Guide and Workbook in the manner intended, and are familiar with the Portfolio Guide requirements.
* The Facilitator is there to reasonably assist you during contact, practical and workplace time of this programme – make sure that you have his/her contact details.

**Responsibility**

The responsibility of learning rest with you, so . . .

* Be proactive and ask questions
* Seek assistance and help from your coach, if required

**Assessment**

**How will I be prepared for assessment?**

During the programme developmental activities will be conducted to assist you in preparing for final assessment. For your own benefit, make sure that you participate fully in all the developmental and formative assessment activities! What will I finally be required to do for assessment? Final assessment will be conducted on the following submission of evidence, e.g.:

* Completed activities in the Learner manual
* Knowledge Questionnaire
* Practical illustration / simulation

**What will be assessed in the above?**

All assessments are conducted strictly in accordance with the unit standard requirements. Assessment is a way of measuring what you know and are able to do. When you have learnt something, you should be able to apply what you have learnt. You may be assessed when you are sure that you are ready to be assessed. If you do not achieve the standard the first time, you can be coached or trained further and then be assessed again later. You will be assessed in a number of ways and at regular intervals.

**When do I start preparing for assessment?**

Right from the start – make sure you are familiar with the Assessment Guide/Portfolio Guide, and start preparing and collecting evidence from the onset of the programme.

**Formative Assessment**

In order to gain credits for this programme you will need to show an assessor that you are competent in each unit standard. The activities in this programme are designed not only to bring about your competence, but also to prove that you have mastered competence.

**Summative assessment**

Not all the specific outcomes will be formatively assessed during the programme or in the workplace. The objective is to create independent and self-sufficient learners. This means that you will also be required to do independent research and assignments outside the training room.

Your assessor and you will conduct a pre assessment meeting to discuss the assessment process and how you will collect evidence of your competence. When you are ready, you will advise your assessor that you are ready for the assessment.

The summative assessment activities are indicated at the end of the learning guide. If your summative assessment is conducted using observation, role plays or verbal assessment, place a signed copy of the checklists, once completed by the assessor / assessment panel, in your Learner manual.

**Duration of program**

The total proposed duration of this programme is as follows:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Unit Standards** | **Theoretical Learning (30%)** | | **Workplace Learning (70%)** | | **Total Credits** |
| **Component** | **Credits** | **Time / Notional Hours** | **Credits** | **Time / Notional Hours** |
| Fundamental / Core / Elective | Allocate credits against total credit value | Anticipated time | Allocate credits against total credit value | Anticipated time |
| Fundamental | 2 | 20 | 4 | 40 | 6 |
| Core | 12 | 120 | 24 | 240 | 36 |
| Elective | - | - | - | -- | - |

**LETTER OF COMMITMENT FROM THE LEARNER**

You have been identified and nominated to be part of  **Insert Organisation Name Here Skills Program 3 – Decision Making (252026, 252044, 252020, 252034, 252025, 252035)** program by means of your organisations’ training committee as well as a Needs Analysis conducted by. To ensure effective training, your commitment to attend training and submit evidence of workplace application as required by the appointed assessor, is of utmost importance. This letter serves to confirm your commitment to the training program offered to you by your organisation.

**Declaration of commitment:**

I undertake to fulfil all the requirements of the assessment practices as specified by the assessor and service provider.

Company: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Full names of learner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Nominated by**:

Name and Surname \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position in company \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

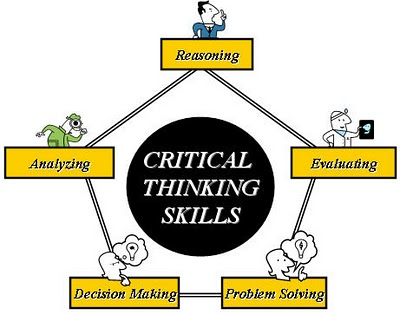
# Learner Information

|  |  |
| --- | --- |
| **Name & Surname** |  |
|  |
| **ID Number** |  |
| **Age** |  |
| **Address** |  |
|  |
|  |
| **Telephone number (Cell)** |  |
| **Telephone number (Other)** |  |
| **Gender** |  |
| **Race** |  |
| **Property** |  |
|  |
| **Geographical Area** |  |
|  |
| **Course** |  |
|  |
| **Mentor/s** |  |
|  |
| **Facilitator/s** |  |
|  |
| **Next of Kin details** |  |
|  |
|  |
| **Commencement Date** |  |
| **Estimated completion date** |  |

# Skills Program Structure

## Apply a systems approach to decision making

## 252026

****

This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them. The qualifying learner is capable of:   
Applying critical and analytical skills to analyse an issue or problem

* Engage with stakeholders in analysing the issue/problem and developing solutions
* Selecting feasible solutions through a systems approach
* Formulating and communicating the decision

**Index**

|  |  |
| --- | --- |
| **Competence Requirements** | **Page** |
| **Unit Standard 252026 alignment index**  Here you will find the different outcomes explained which you need to be proved competent in, in order to complete the Unit Standard 252026. | **28** |
| **Unit Standard 252026** | **30** |
| **Identify, implement and use various thinking techniques and develop solutions** | **37** |
| **Project** | **68** |
| **Self-assessment**  Once you have completed all the questions after being facilitated, you need to check the progress you have made. If you feel that you are competent in the areas mentioned, you may tick the blocks, if however you feel that you require additional knowledge, you need to indicate so in the block below. Show this to your facilitator and make the necessary arrangements to assist you to become competent. | **80** |

# Unit Standard 252026 – Alignment Index

|  |  |
| --- | --- |
| **SPECIFIC OUTCOMES AND RELATED ASSESSMENT CRITERIA** | |
| **SO 1** | **Apply critical and analytical skills to analyse an issue or problem.** |
| **AC 1** | Critical and analytical skills are applied to analyse and define an issue/problem affecting the functioning of a unit. |
| **AC 2** | Critical and analytical skills are applied to determine factors impacting on the issue/problem and other areas in a unit and the entity affected by the issue/problem. |
| **SO 2** | **Engage with stakeholders in analysing the issue/problem and developing solutions.**  (Stakeholders include team members from own unit, managers and staff from other units in the entity, suppliers and customers. ) |
| **AC 1** | The purpose of the consultation is communicated to stakeholders with reference to the aspects of the issue/problem and solutions to be discussed. |
| **AC 2** | The critical and analytical processes for analysing the issue/problem and generating ideas on addressing the issue/problem are explained with examples. |
| **AC 3** | The participation of stakeholders is obtained in analysing the unit's internal and external environment to identify factors relevant to the issue/problem. |
| **AC 4** | The participation of team members is obtained in developing solutions to the issue/problem that would contribute towards the functioning of the unit and the broader system within which it operates. |
| **AC 5** | The different ideas, values and perspectives of team members and stakeholders are recognised and respected in view of the value they add to the solution developed. |
| **SO 3** | **Select feasible solutions through a systems approach.** |
| **AC 1** | The inputs from stakeholders are analysed to identify feasible solutions to the issue/problem that would improve the functioning of the unit and the broader system within which it operates. |
| **AC 2** | The identified solutions are prioritised in terms of their potential outcomes on the various processes/sections in the unit, the wider entity and external stakeholders. |
| **AC 3** | A solution(s) is selected that is most appropriate within a systems context taking into consideration interrelated issues that impact on the solution and areas that will be impacted upon by the implementation of the solution. |
| **SO 4** | **Formulate and communicate the decision.** |
| **AC 1** | The decision on addressing the issue/problem is formulated with reference to the impact of the decision on the unit and the broader system within which it operates. |
| **AC 2** | Actions required to implement the decision in the unit are described with reference to activities, role players, resources and time lines. |
| **AC 3** | Change processes that are required to support the implementation of the decision are described with reference to their impact on the success of the implementation of the decision |
| **AC 4** | The decision is communicated to relevant team members in the unit and other stakeholders who will be involved in its implementation in a user-friendly format. |

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| **CRITICAL CROSS FIELD OUTCOMES** |
| **UNIT STANDARD CCFO IDENTIFYING**  Identify and solve problems using critical and creative thinking processes in order resolve issues, problems and challenges in a unit.  **UNIT STANDARD CCFO WORKING**  Work effectively with others as a member of a team, group, organisation or community to ensure participation by team members in developing solutions to an issue/problem in a unit.  **UNIT STANDARD CCFO ORGANISING**  Organise and manage oneself and one`s activities responsibly in order to proactively address issues, problems and challenges in a unit.  **UNIT STANDARD CCFO COLLECTING**  Collect, analyse, organise and critically evaluate information in order to have all relevant information available for addressing issues, problems and challenges in the unit.  **UNIT STANDARD CCFO COMMUNICATING**  Communicate effectively using visual, mathematical and/or language in the modes of oral and/or written communication in involving team members in critical and analytical thinking processes.  **UNIT STANDARD CCFO SCIENCE**  Use science and technology effectively and critically, showing responsibility to the environment and health of others when developing solutions to issues/problems.  **UNIT STANDARD CCFO DEMONSTRATING**  Demonstrate an understanding of the world as a set of interrelated systems by recognising that problem solving contexts and challenges do not exist in isolation and that a variety of factors need to be taken into account in a systems approach to decision making.  **UNIT STANDARD CCFO CONTRIBUTING**  Participate as responsible citizens in the life of local, national and global communities in applying critical thinking practices within the unit and being culturally and aesthetically sensitive across a range of contexts in applying critical thinking practices within a unit. |

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| **SOUTH AFRICAN QUALIFICATIONS AUTHORITY** |

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| **REGISTERED UNIT STANDARD:** |

|  |
| --- |
| **Apply a systems approach to decision making** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SAQA US ID** | **UNIT STANDARD TITLE** | | | |
| 252026 | Apply a systems approach to decision making | | | |
| **ORIGINATOR** | | **REGISTERING PROVIDER** | | |
| SGB Generic Management | |  | | |
| **QUALITY ASSURING BODY** | | | | |
| - | | | | |
| **FIELD** | | | **SUBFIELD** | |
| Field 03 - Business, Commerce and Management Studies | | | Generic Management | |
| **ABET BAND** | **UNIT STANDARD TYPE** | **OLD NQF LEVEL** | **NEW NQF LEVEL** | **CREDITS** |
| Undefined | Regular | Level 5 | New Level Assignment Pend. | 6 |
| **REGISTRATION STATUS** | | **REGISTRATION START DATE** | **REGISTRATION END DATE** | **SAQA DECISION NUMBER** |
| Registered | | 2007-11-28 | 2010-11-28 | SAQA 0474/07 |
| **LAST DATE FOR ENROLMENT** | | **LAST DATE FOR ACHIEVEMENT** | | |
| 2011-11-28 | | 2014-11-28 | | |

|  |
| --- |
| In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise. |

|  |
| --- |
| This unit standard does not replace any other unit standard and is not replaced by any other unit standard. |

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| **PURPOSE OF THE UNIT STANDARD** |

|  |
| --- |
| This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   The qualifying learner is capable of:   Applying critical and analytical skills to analyse an issue or problem.   Engage with stakeholders in analysing the issue/problem and developing solutions.   Selecting feasible solutions through a systems approach.   Formulating and communicating the decision. |

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| **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING** |

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| --- |
| It is assumed that learners are competent in:   Communication at NQF Level 4.   Mathematical Literacy at NQF Level 4.   Computer Literacy at NQF Level 4. |

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| **UNIT STANDARD RANGE** |

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|  The learner is required to apply the learning in respect of this/her own area of responsibility.   Unit refers to the division, department or business unit in which the learner is responsible for managing and leading staff.   Entity includes, but is not limited to, a company, business unit, public institution, small business, Non-Profit Organisation or Non-Governmental Organisation. |

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| **Specific Outcomes and Assessment Criteria:** |

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| **SPECIFIC OUTCOME 1** |

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| Apply critical and analytical skills to analyse an issue or problem. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| --- |
| Critical and analytical skills are applied to analyse and define an issue/problem affecting the functioning of a unit. |

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| **ASSESSMENT CRITERION 2** |

|  |
| --- |
| Critical and analytical skills are applied to determine factors impacting on the issue/problem and other areas in a unit and the entity affected by the issue/problem. |

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| --- |
| **SPECIFIC OUTCOME 2** |

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| Engage with stakeholders in analysing the issue/problem and developing solutions. |

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| **OUTCOME RANGE** |

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| --- |
| Stakeholders include team members from own unit, managers and staff from other units in the entity, suppliers and customers. |

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| --- |
| **ASSESSMENT CRITERIA** |

|  |
| --- |
| **ASSESSMENT CRITERION 1** |

|  |
| --- |
| The purpose of the consultation is communicated to stakeholders with reference to the aspects of the issue/problem and solutions to be discussed. |

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| --- |
| **ASSESSMENT CRITERION 2** |

|  |
| --- |
| The critical and analytical processes for analysing the issue/problem and generating ideas on addressing the issue/problem are explained with examples. |

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| --- |
| **ASSESSMENT CRITERION 3** |

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| The participation of stakeholders is obtained in analysing the unit's internal and external environment to identify factors relevant to the issue/problem. |

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| --- |
| **ASSESSMENT CRITERION 4** |

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| The participation of team members is obtained in developing solutions to the issue/problem that would contribute towards the functioning of the unit and the broader system within which it operates. |

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| **ASSESSMENT CRITERION 5** |

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| The different ideas, values and perspectives of team members and stakeholders are recognised and respected in view of the value they add to the solution developed. |

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| **SPECIFIC OUTCOME 3** |

|  |
| --- |
| Select feasible solutions through a systems approach. |

|  |
| --- |
| **ASSESSMENT CRITERIA** |

|  |
| --- |
| **ASSESSMENT CRITERION 1** |

|  |
| --- |
| The inputs from stakeholders are analysed to identify feasible solutions to the issue/problem that would improve the functioning of the unit and the broader system within which it operates. |

|  |
| --- |
| **ASSESSMENT CRITERION 2** |

|  |
| --- |
| The identified solutions are prioritised in terms of their potential outcomes on the various processes/sections in the unit, the wider entity and external stakeholders. |

|  |
| --- |
| **ASSESSMENT CRITERION 3** |

|  |
| --- |
| A solution(s) is selected that is most appropriate within a systems context taking into consideration interrelated issues that impact on the solution and areas that will be impacted upon by the implementation of the solution. |

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| **SPECIFIC OUTCOME 4** |

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| --- |
| Formulate and communicate the decision. |

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| --- |
| **ASSESSMENT CRITERIA** |

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| --- |
| **ASSESSMENT CRITERION 1** |

|  |
| --- |
| The decision on addressing the issue/problem is formulated with reference to the impact of the decision on the unit and the broader system within which it operates. |

|  |
| --- |
| **ASSESSMENT CRITERION 2** |

|  |
| --- |
| Actions required to implement the decision in the unit are described with reference to activities, role players, resources and time lines. |

|  |
| --- |
| **ASSESSMENT CRITERION 3** |

|  |
| --- |
| Change processes that are required to support the implementation of the decision are described with reference to their impact on the success of the implementation of the decision. |

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| --- |
| **ASSESSMENT CRITERION 4** |

|  |
| --- |
| The decision is communicated to relevant team members in the unit and other stakeholders who will be involved in its implementation in a user-friendly format. |

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| **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS** |

|  |
| --- |
|  Anyone assessing a candidate against this Unit Standard must be registered as an assessor with the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Any institution offering learning that will enable achievement of this Unit Standard must be accredited as a provider through the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures. |

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| **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE** |

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| --- |
|  The systems approach as applied to decision making and problem solving.   Critical and analytical thinking techniques.   Techniques for analysing and defining problems. |

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| **UNIT STANDARD DEVELOPMENTAL OUTCOME** |

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| N/A |

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| --- |
| **UNIT STANDARD LINKAGES** |

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| --- |
| N/A |

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| --- |
| **Critical Cross-field Outcomes (CCFO):** |

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| --- |
| **UNIT STANDARD CCFO IDENTIFYING** |

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| --- |
| Identify and solve problems using critical and creative thinking processes in order resolve issues, problems and challenges in a unit. |

|  |
| --- |
| **UNIT STANDARD CCFO WORKING** |

|  |
| --- |
| Work effectively with others as a member of a team, group, organisation or community to ensure participation by team members in developing solutions to an issue/problem in a unit. |

|  |
| --- |
| **UNIT STANDARD CCFO ORGANISING** |

|  |
| --- |
| Organise and manage oneself and one`s activities responsibly in order to proactively address issues, problems and challenges in a unit. |

|  |
| --- |
| **UNIT STANDARD CCFO COLLECTING** |

|  |
| --- |
| Collect, analyse, organise and critically evaluate information in order to have all relevant information available for addressing issues, problems and challenges in the unit. |

|  |
| --- |
| **UNIT STANDARD CCFO COMMUNICATING** |

|  |
| --- |
| Communicate effectively using visual, mathematical and/or language in the modes of oral and/or written communication in involving team members in critical and analytical thinking processes. |

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| --- |
| **UNIT STANDARD CCFO SCIENCE** |

|  |
| --- |
| Use science and technology effectively and critically, showing responsibility to the environment and health of others when developing solutions to issues/problems. |

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| --- |
| **UNIT STANDARD CCFO DEMONSTRATING** |

|  |
| --- |
| Demonstrate an understanding of the world as a set of interrelated systems by recognising that problem solving contexts and challenges do not exist in isolation and that a variety of factors need to be taken into account in a systems approach to decision making. |

|  |
| --- |
| **UNIT STANDARD CCFO CONTRIBUTING** |

|  |
| --- |
| Participate as responsible citizens in the life of local, national and global communities in applying critical thinking practices within the unit and being culturally and aesthetically sensitive across a range of contexts in applying critical thinking practices within a unit. |

|  |
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| **QUALIFICATIONS UTILISING THIS UNIT STANDARD:** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **ID** | **QUALIFICATION TITLE** | **OLD LEVEL** | **NEW LEVEL** | **STATUS** | **END DATE** |
| Core | [63769](http://allqs.saqa.org.za/showQualification.php?id=63769) | National Certificate: Business Analysis Support Practice | Level 5 | New Level Assignment Pend. | Registered | 2011-10-22 |
| Fundamental | [59201](http://allqs.saqa.org.za/showQualification.php?id=59201) | National Certificate: Generic Management | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Fundamental | [60070](http://allqs.saqa.org.za/showQualification.php?id=60070) | National Certificate: Inspection and Assessment (Non-Metallics) | Level 5 | New Level Assignment Pend. | Registered | 2011-03-12 |
| Fundamental | [63529](http://allqs.saqa.org.za/showQualification.php?id=63529) | National Certificate: Railway Signalling Technology | Level 5 | New Level Assignment Pend. | Registered | 2011-10-22 |
| Elective | [71969](http://allqs.saqa.org.za/showQualification.php?id=71969) | National Certificate: Automotive Components: Manufacturing and Assembly | Level 5 | New Level Assignment Pend. | Registered | 2012-09-09 |
| Elective | [66789](http://allqs.saqa.org.za/showQualification.php?id=66789) | National Certificate: Environmental Management | Level 5 | New Level Assignment Pend. | Registered | 2012-06-17 |
| Elective | [59258](http://allqs.saqa.org.za/showQualification.php?id=59258) | National Certificate: Polygraphy | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Elective | [63369](http://allqs.saqa.org.za/showQualification.php?id=63369) | National Diploma: Trade Union Practice | Level 5 | New Level Assignment Pend. | Registered | 2011-11-26 |

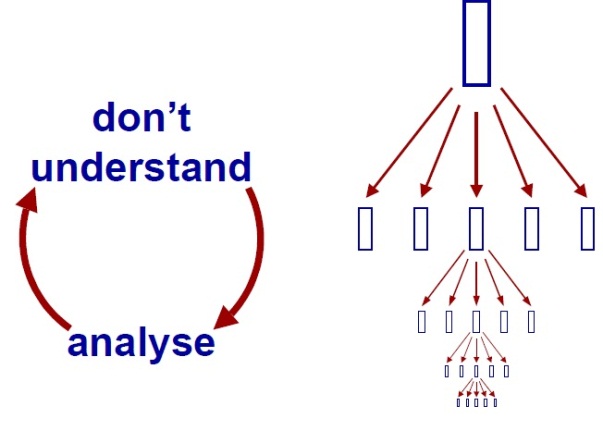
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***I***

n this section we will deal with analytical thinking skills from two perspectives. The first is the consideration of analytical thinking as a cognitive process and its relation to four main perceptions, synthetical, systemic, critical and creative thinking. The second viewpoint is the approach to analytical thinking as a style, and explaining its’ main characteristics.

Let’s continue with the definition of analytical thinking; analytical thinking can be defined as:

***A powerful thinking tool; for understanding the parts within the situation. Furthermore, it can be defined as; the ability to scrutinise and break facts and thoughts down into their strengths and weaknesses as well as the development of the capacity to think in a thoughtful, discerning way, to solve problems, analyse data and recall and use information.***



***A***

***nalytical thinking vs. Synthetical thinking***

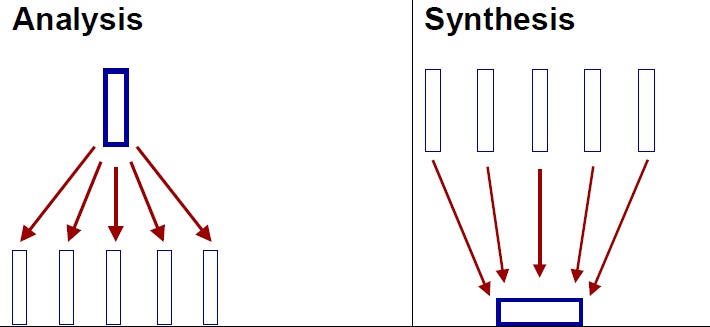
Analysis is a powerful thinking tool, for the understanding of the parts of a situation. It doesn’t really assist with the understanding of how the various parts of the situation work together. When we break things down into smaller components, we often tend to lose sight of the interactions they have between them.

For example: When the only tool that you have is a hammer, every problem which you face begins to look like a nail. We therefore end up with the analysis paralysis. This is when a vicious cycle is set up, as shown in the figure above.

Analysis makes the interactions less visible, so insight diminishes, we analyse things further and things go from bad to worse. What we need is a critical thinking tool designed specifically for making sense of interactions; a thinking tool for making sense of how things work together. That tool is called synthesis; seeing how things work together. Synthesis is more than putting things back together again after you have taken them apart, it is the understanding of how they work together.

***Differences between analytical and synthetical thinking***

The differentiation between analytical and synthetical thinking can be described as follow:

1. Analytical thinking enables us to understand parts of the situation. Synthetical thinking enables us to understand how they work together.
2. Analytical thinking breaks things down into their component parts whereas synthetical thinking finds the patterns across those component parts
3. Analysis is about the identification of differences whereas synthesis is about the identification of similarities.
4. Analytical thinking is the easy part; we have been doing this from birth. Synthetical thinking is much harder because we are not taught to do it deliberately. However, we do it continuously, yet unconsciously all the time. We would not progress very far if we did not do it, simply because everything is systemic and needs to be approached systematically.
5. Synthetical thinking is a lot harder than analytical thinking simply because the interactions are much more intricate to deal with as well as the fact that they are dynamic rather than static.
6. Synthetical thinking is the deliberate finding of repeated patterns across a situation. Although analytical thinking enables us to find those repeating patterns and common themes too, it does not do so directly or as effectively purely because the analysis is more focussed on identifying differences than similarities.

In summation, we need both analysis and synthesis. Each component, on their own, carries only limited value without the other; this is in a systemic world. Systemic thinking is nothing more than a combination of analytical and synthetical thinking.

***A***

***nalytical thinking as a component of systematic thinking***

***Systematic thinking and its importance***

Systematic thinking is a simple thinking technique which is used for gaining systematic insights into complex situations and problems. It puts benefits of systematic thinking.

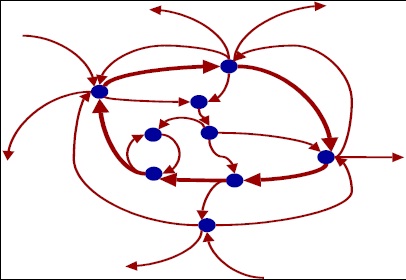
Systematic thinking enables us to deal with the elements of a situation in concert rather than in isolation and its power lie in its simplicity and effectiveness. It offers the potential to find systematic focus in any situation. It enables us to secure the dramatic benefits promised by the systems’ thinking revolution.

***Distinctions of systemic thinking***

Systemic thinking differs from both systematic – and systems thinking, the differences are shown in the table below:

|  |  |  |
| --- | --- | --- |
| **Systematic thinking** | **Systems thinking** | **Systemic thinking** |
| Thinking methodically | Thinking about how things interact with one another | A simple technique for finding system-wide focus. |

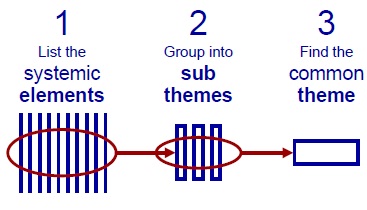
***Fundamental assumption of systemic thinking***

Systemic thinking is based on the fundamental assumption that everything is systemic.

In other words, everything interacts with the things around it (they affect and are affected).

Everything in which we can’t deal with the parts of a situation in isolation, we have to deal with them in concert.

We have to deal with both the elements of the situation and how they interact with one another. Systemic thinking is as much about troubleshooting our own mental paradigms as it is about the situations we face.

***The systemic thinking process***

This process is very simple: ***Step one*** is to list as many system elements in as you can think of (problems, solutions, ideas, opportunities, desired outcomes etc.) ***Step two*** is to group similar elements together and describe what each group has in common. ***Step three*** is to find the common theme across the group descriptions, as show in the figure on the right. A common theme is the systemic pattern across the entire situation; the genius level insight into the entire situation.

***Barrier to systemic thinking***

The basic concept of systemic thinking is the opposite of analytical thinking. Analytical thinking breaks things up into stages, whereby systemic thinking groups them together in their respective stages. This grouping of things is the first part of dealing with the greatest barrier to systemic thinking; the cognitive dissonance from the conditioned belief that there is not pattern. The second part is to realise that the message from your brain saying “there is no theme and its pointless searching for it” is really nothing more than an indication that your brain hasn’t found the theme yet.

A third is to develop a library of systemic solutions, they all follow a similar pattern, so once you’ve seen or developed a few, and it gets a lot easier. Lastly, it’s not worth anything to say that progress is better than perfection with systemic thinking. The benefit of the feedback generated when you try a solution, is enormous.

***Systemic thinking as a combination of analytical thinking and synthetical thinking***

The basic idea in systemic thinking is to list as may different elements as what you can think of; then look at the similarities between them. Conventional analytical thinking is different, as seen in the figure on the right. The basic idea in analytical thinking techniques is to list a handful of elements, compare and rank them and then select the most valuable one and discard the remainder. This is all very well unless the rest of the elements have specific value that the selected one does not have, as seen on the right.

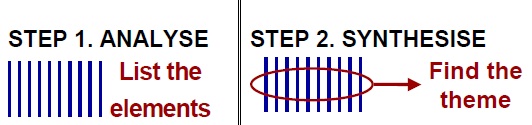


**Synthesis needs analysis** – how can you find the similarities across different things if you haven’t listed these things yet?

**Analysis needs synthesis** – understanding how things behave in isolation is pointless, we have to understand how they behave in harmony in order to intervene intelligently.

**Analysis** in the context of systemic thinking is different from analysis outside of that context.

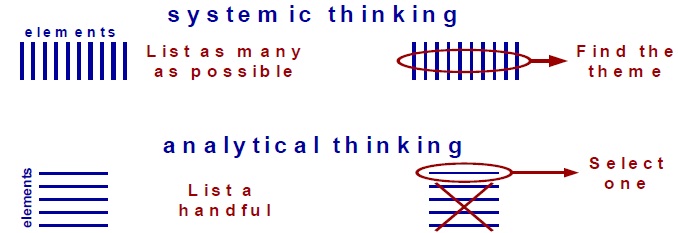
Outside the systemic thinking context, the tendency is only to list a manageable handful of elements, in order to reduce the workload. Within the systemic thinking context, it’s desirable to list as may different elements as possible, in order to ensure the most representative pattern possible.



Systemic thinking combines analytical thinking and synthetical thinking, as shown in the figure on the right. The first step is analytical, listing as many elements as you can think of. The second step is synthetical, finding the common theme repeating pattern across those elements.

***Comparing systemic and analytical thinking***

Systemic thinking is the reverse of analytical thinking; analytical thinking breaks things apart in stages and systemic thinking groups things together in stages. The key differences of the two thinking techniques are:

* Systemic thinking lists as many elements as possible, while analytical thinking lists only a handful of elements to make the workload manageable.
* Systemic thinking finds and focusses on the theme across the elements while analytical thinking selects and focusses on the most attractive or promising element.

***A***

***nalytical thinking as a component of critical thinking***

***Defining critical thinking***

The definition of critical thinking has changed somewhat over the last decade. Originally the dominion of cognitive psychologists and philosophers, behaviourally orientated psychologists and content specialists has recently joined the discussion.

The following are examples of attempts to define critical thinking that include analytical thinking as a component:

* Critical thinking is the ability to analyse facts, generate and organise ideas, defend opinions, make comparisons, draw inferences, evaluate arguments and solve problems.
* It is the intellectually disciplined process of actively and skilfully conceptualising, applying, analysing, synthesizing and/or evaluating information gathered from or generated by observation, experience, reflection, reasoning or communication, as a guide to belief and action.
* Involving analytical thinking for the purpose of evaluating what is read.

***Assumption of critical thinking and its importance***

Critical thinking itself is based on assumption. This assumption states that there is logic to what you are trying to think about, that it can be figured out and reasoned through. Thus there are some instances where critical thinking may not be appropriate.

For example; is there logic to romance? Is there logic to matters of personal taste or preference? It may not be appropriate to spend a great deal of effort analysing why one likes certain colours, architectural styles, music and so forth; but if a situation or decision needs to be figured out, or thought through, then a critical thinking approach is needed.

Critical thinking allows us to listen to our emotions, without being controlled by them. “Got feelings” and intuition are often valuable in our decision making processes. In fact, recent research indicates that some elements of intuition that escape rational analysis may be very important in visual memory and in establishing individual tastes and personal preferences.

However, emotions can also mislead us, making us feel that we are right, even when we are not. Critical thinkers do not suppress their feelings, nor are they overly influenced by them. The natural response of emotions and feelings can be constructively tempered with critical thinking. Critical thinking provides a way for us to sort through our feelings and emotions to evaluate and identify those most appropriate for a given situation. Thus, critical thinking is not a cold and unfeeling analytical process, but involves emotions and passions, in a positive way.

***A***

***nalytical thinking and Creative thinking***

***Definition of Creative Thinking***

Creative thinking is relating/creating of things or ideas which were previously unrelated.

***Analytical thinking assists creativity***

It is a mistake to see the introduction of systematic thinking as the death of creativity. Certainly, there is a danger in the simplicity and elegance of a system becoming more important than actually organising the event. The analytic approach outlined here is an aid to creative thinking.

It is often thought that those who have to think on their feet are the creative thinkers. When there is not a well thought out system to assist decision making, then the event management will be continually solving problems, putting out the grass fires.

Problem solving in a state of panic requires a certain amount of creative thinking. However, satisfying this may be when it all works out, it is not a substitute for creatively thinking in an ordered and calm environment. Knowing that most problems have been solved before they occur is a wonderful way to focus on the creative process.

***Differences between analytical and creative thinking***

Analytical thinking is logic and leads to unique or very little answers, which can be implemented. Creative thinking requires imagination, and leads to many possible answers or ideas. While the two sorts of thinking are different, they are linked because one sort complements the other.

This is evident in creative thinking, where the many ideas must later be analysed to sort out the few that can be implemented. Analytical thinking consolidated ideas and practices and must be followed by creative leaps of progress is to be made.

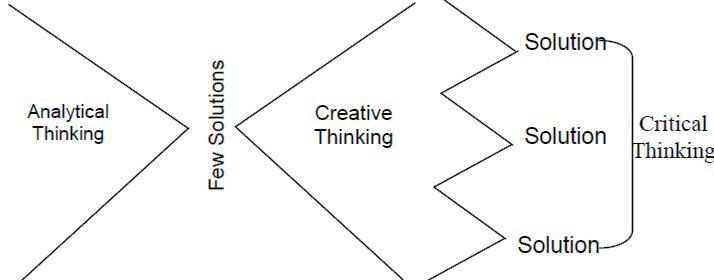
Analytical thinking is convergent, narrowing down to unique answers or a small number of ideas which can be further analysed and implemented. Creative thinking is divergent, starting from the description of the problem and diverging to give many ideas for solving it, or possible answers to it.

In effect, analytical thinking produces ideas. Large numbers of them from which the solution can be selected. ***Convergent*** and ***Divergent*** are appearing more frequently in the literature of creative thinking and in the articles in management papers. The two words are more colourful than analytical and creative and they do convey a mental picture of the process being followed.

The other two words “**vertical and lateral**” are lesser known but are equally applicable in the context of analytical and creative thinking. Tackling a problem in the analytical way requires deep, and possibly narrow, probing to identify all aspects – hence vertical thinking.

On the other hand, creative thinking requires a wide-ranging examination of all the options, including those which might be considered to be wild or foolish, or those which appear to be outside and not linked at all with the problem – hence lateral thinking.

In the figure on the right, convergent (analytical) and divergent (creative) thinking are illustrated with few solutions and many ideas. The process can be continued indefinitely, where creative thinking is again used on a solution to generate more ideas. The figure has two misleading features.



The perspectives of analytical and creative suggest that people are better at creative thinking than analytical. As we shall see, the reverse is true. Secondly, there is deliberate separation of analytical and creative, and this is not representative of real life. Everybody has a creative ability.

Unfortunately it is buried within analytical thinking and this tends to kills the creative ideas too quickly. “That’s silly” we say, and the idea is discarded. Conscious and deliberate separation is required. Let’s look at an example:

***Explaining two types of thinking***

Example 1: Consider the following problem: a Scotsman was celebrating his golden wedding anniversary with a family reunion. He had arranged a dinner party in a private room in a local hotel with a piper to welcome his guests on the bagpipes. Shortly after the party started, he looked around the family and noticed that there were present:

1 Grandfather, 1 Grandmother, 2 fathers, 2 mothers, 4 children, 3 grandchildren, 1 brother, 2 sisters, 2 sons, 2 daughters, 1 father-in-law, 1 mother-in-law and 1 daughter-in-law.

Being a canny Scotsman, he budgeted carefully and had the exact money to pay for the party in his wallet. Assuming the piper was included in the cost of R100 per head, how much money did the Scotsman have in his wallet?

A swift glance at the list of guests and adding up the numbers would lead to the figure of R2300. Not believing that the Scotsman would be so rash to spend R2300 on a dinner for his relatives, a second and possibly more suspicious look at the family leads to the realisation that some members of the party may have dual roles; i.e. a father and a son. This leads to a reconsideration of the family and saves the Scotsman a considerable amount of cash.

Apart from a slight feeling of being led up the garden path, or being fooled, the solution to this problem requires logical thinking or counting and it leads to a unique answer. Because logical thinking or counting is involved, let us define the problem as an analytical problem.

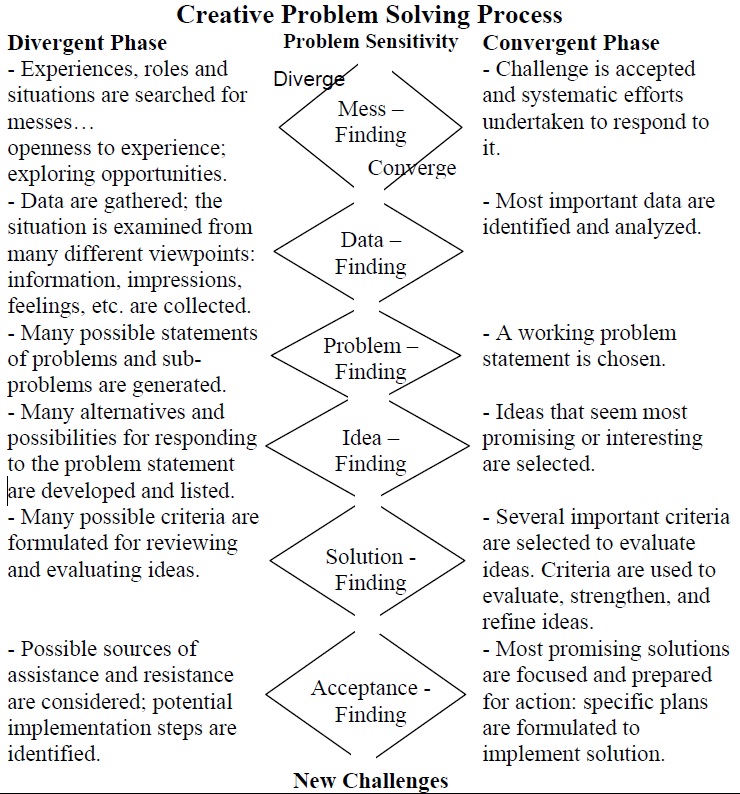
**Example 2:** Suppose you were invited to join a government department on secondment from your organisation. You find that the team of civil servants and yourself are considering the problem; “How to persuade families to take their holidays in Egypt this year”. This is a different sort of problem which the Scotsman had in the previous problem.

Not just one answer, there are many possible ways of persuading people to take their holidays in Egypt. It does, however, need a certain amount of imagination to overcome the image confronted with glossy brochures showing seaside places in Europe. As imagination is involved, let us define this as a creative problem.

**Example 3:** imagine you have a piece of ply board, which has three holes cut in it. The holes are triangular, circular and square in shape. You are asked to describe a solid wooden object which will go through each hole, right through and pull clear at the back. When the object is in any hole, it is a tight fit, i.e. the wooden surfaces touches the ply board at all points of the hole. At first thought, it seems an impossible object. It is easy to get two out of three.

For example a wooden cone satisfies the circle and triangle, and a pyramid satisfies the triangle and square, but all three seem quite impossible. One non-solution is a rod, machined circular at one end,, triangular in the centre and square at the other end. Unfortunately this object will not pass completely through the board. The solution requires both creative and analytical thinking: creative in seeing the solid wooden object (in your mind); analytical in being able to describe it in simple words.

Imagine the object as follow: a tent shaped wedge on a circular base is one description. An even simpler way to describe it is, a cylinder of wood from which the circle and square has been cut off. Scribe a line across the diameter and cut to this line from opposite edges to form a wedge. Notice that the wedge must be tent shaped and that two cuts are required.

Once cut from one corner to the opposite corner gives a wrong sort of triangle, and will not give a square at all. This is an example of both creative and analytical thinking working together. It is of course possible to arrive at the shape by analytical thinking only, as most engineers would confirm.

***Analytical thinking as a component of creative problem solving***

The systematic combination of techniques directed creatively and techniques for analysis continues as a strong theme in several models. Let’s take a look at CPS (Creative Problem Solving):

***A***

***nalytical thinking as a style***

***Characteristics of Analytical style***

There are general styles of behaviour common to individuals and understanding them maximises your ability to achieve results with others. One such style is that of approaching the world with an analytical slant. Some of the typical characteristics of the Analytical style include the following:

* Deliberate, controlled, logical
* Independent of others and non-aggressive
* One who weighs all alternatives, remaining steadfast in purpose
* Unemotional, business-like and persistent
* Disciplined, lets others take the social initiative

***Analytical persons***

* Approach problems based on facts and logic rather than emotions
* See you performing best in highly organised situations where they have a handle on the whole picture thus minimising the risk of being wrong
* Tend to do well when the nature of the task is problem solving, especially when they are knowledgeable in the area of concern
* Probably approach other people with caution, not revealing your inner self until comfortable
* Have a productive competence in working out a problem and getting the task completed correctly, as one of their key strengths as analytical people
* May also have some tendencies with bother their co-workers; because they are quiet, unemotional and business-like
* Some people may feel that they are cold or uncommunicative, remaining aloof from interpersonal relationships
* Although they seek accuracy and precision, their deliberateness may be interrupted at times as slowness to act or as indecisiveness. Sometimes the non-emotiveness of their styles are seen by others as a lack of caring, being concerned only about facts and figures.
* Tend to take a problem solving approach to most situations
* Oriented more towards ideas and data than relationships or feelings, they tend to prefer study and contemplation to immediate action
* Have a steadying influence in a group as restrained and unassuming ways
* Typically take an orderly, systematic approach to the task at hand
* Like things to be rational and well organised
* Is likely to hesitate until the task is clear and then work at it persistently and conscientiously
* Want to collect many facts and opinions before making a decision and are good at buyers remorse because they continue to gather data even after a decision is made
* Tend not seek personal recognition, preferring to work in the background in a problem-solving capacity
* Uses their ability as problem-solvers for information holders as the basis for relationships and don’t easily take risks or trust others
* Are often unaware of their emotions, though they tend not to initiate relationships they are loyal after forming an emotional bond
* Usually wait for others to come to them before they share their ideas, they want to be sure of their ground before giving their opinions
* Hate to be wrong and will avoid it at all costs; this is especially true in stressful situations, when they are more likely to avoid confrontation and interpersonal conflict
* Appear unemotional, they can be tough and arbitrary when they believe they are right
* Could probably be more effective if they learned to be less serious and enjoy work more
* Can create an environment where their methodical efforts are more effective, because they seldom throve on competition, they are more comfortable with advisory roles because they may become tense or stuck when confronted with chaos and ambiguity, well-established rules and procedures
* Will often cause others to look to them for counsel, precision and data-orientated expertise for their steady and quiet manner
* May also be seen as boring, perfectionist, uncommunicative and incapable of making a decision

On the other hand, let’s look at some important qualities of analytical thinkers:

* Analysts have a theory about almost everything
* They analyse and judge things within a broad framework that will help to explain things and arrive at conclusions
* They are most fond of the scientific method, expert information and proof. In constant search of the truth; they dig in and may be accused of tunnel vision
* They feel a pull between a natural inclination towards privacy and systematic thought and a deep connection to and feeling for others
* They feel like an oak and willow at the same time and seem to experience trivial things with many nuances and meaning
* They have a deeply engaged community of friends who share similar interest simultaneously feel at one with and responsible for the world.
* They approach life form a gathering-of-multiple-information-parts-to-whole perspective that sees the world as a logical system that can be understood through careful analysis and unfailing study.

***Characteristics of critical style***

Characteristics that distinguish critical thinkers are:

* They demonstrate critical and analytical thinking through active challenges and engagement in courses throughout the curriculum
* They are able to analyse arguments and generate insight into interpretations in ways that display creative, cohesive and convincing reasoning patterns
* They are able to apply multiple, sometimes divergent criteria in critical analysis
* They recognise and evaluate assumptions and biases influencing their own positions and those of others
* They are able to identify logical flaws, methodological flaws and unwarranted inferences in arguments presented to them
* They learn to apply personal judgements and interpretations, recognising that there are elements of uncertainty and self-regulation in critical thinking

On the other side, a number of researchers describe the critical thinker as:

* Asks significant and pertinent questions and states hypothesis, inquiry, analysis and interpretation
* Assesses statements, insights and arguments according to the knowledge and skills provided by formal and informal logic
* Formulates propositions for judgement in terms of clearly defined sets of criteria
* Strives to acquire knowledge of the various disciplines knowing that such knowledge is a necessary, though not sufficient, condition for critical thinking
* Understands the different modes of thought appropriate to the various disciplines and can apply these modes of thought to other disciplines and life
* Is aware of the context or setting in which judgements are made, and of the practical consequences and values involved
* Thinks about the world through theories, assessing these theories and their contexts to determine the validity of their claims
* Seeks and expects to find different meanings simultaneously present in a work context
* Recognises and accepts contradiction and ambiguity understanding that they are an integral part of thought and creativity
* Constructs and interprets reality with a holistic and dialectical perspective
* Tolerates ambiguity, yet can assume a committed position
* Is aware of the limitations of knowledge and exhibits epistemological humility

***A***

***nalytical techniques***

Analytical thinking, like everything else, requires practice. The more you do it, the better you will become at it. You gradually develop the ability to educate yourself. There are a number of analytical techniques, such as:

***Decomposable matrices***

The method of using decomposable matrices to analyse problems has been drawn from the work of Herbert Simon, who has extensively studies human problem-solving processes. Simon believes that complexity in the world has evolved from simple structures organised into progressively formal hierarchic systems.

The human body, for example, consists of relatively simple, single cells organised into increasingly more complex patterns of functioning. The concept of a decomposable matrix is derived from Simon’s view that hierarchic systems consists of successive, semi-independent subsystems, each of which is less complex than the preceding one (a box within a box).

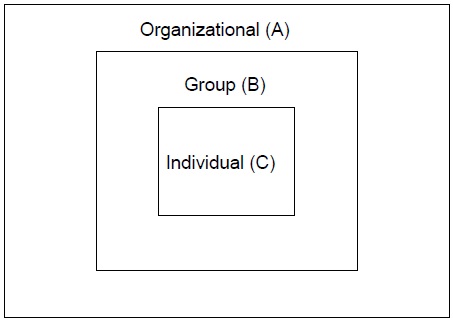
To understand complexity, complex hierarchic systems can be analysed using a basic property of their structure: near decomposability. The concept of near decomposability refers to the fact that the subsystems of some hierarchic systems maintain some, although not total, interdependence upon their subsystems.

For instance; in an informal organisation, there generally will be less interaction between persons of different departments than between persons within the same department. In a totally decomposable system in contrast, there will be no significant interaction among subsystems.

Simon’s thinking in this area can also be extended to analyse complex, ill structured problems. Problems that can be viewed as complex, hierarchic systems can be analysed by breaking them down into their respective subsystems.

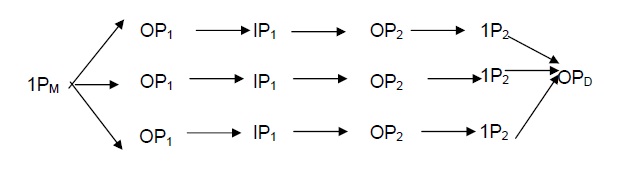
The following steps are used for this process:

* Determine if the problem is analysable subsystems
* List the major subsystems and the components of each
* Construct a matrix of the subsystems and their components
* Using a 1-5 point scale, weight the degree of relationship for each of the interactions between and within the subsystems
* Select the highest weighted interactions for further analysis or generation of ideas

To apply this technique, consider a problem of how to improve employee satisfaction within an organisation. Since most organisations generally are viewed as complex social systems with hierarchic structures, this problem can be broken down into different subsystems.

The major subsystems related to this problem are show in the figure on the right and labelled respectively, Organisational (A), Group (B) and Individual (C).

The components of each subsystem next are listed and arranges within a matrix as show in the following figure.



Weights are then assigned to each of the interactions, with higher numbers indicating greater frequencies of interaction or greater importance of the interactions.

Based upon this matrix, the problem solver might want to concentrate on all of the interactions with subsystems, but pay particular attention to the interactions occurring between the group and individual subsystems, due to the higher weightings given these interactions.

Relationships between specific components could then be selected as the focus for the generation of problem solutions or for further analysis.

***E***

***valuation***

This technique is similar to relevance systems, in that there is a descending order of problem element. The major difference is in the assignment of values and the consideration given to interactions between and within the subsystems, both of which are not part of the relevance systems.

There are, however, several factors that must be considered when using the decomposable matrices approach.

* ***First,*** not all problems can be analysed into subsystem components or their scope might just not justify such a breakdown.
* ***Second,*** the effectiveness of this technique will depend upon the problem solvers’ ability to correctly identify all the relevant subsystems and components and to accurately evaluate the strength or value of all their interactions.
* ***Third,*** the ratings are entirely subjective and should be interpreted cautiously.
* ***Finally,*** if there are a large number of interactions, problems of coordination might be created.

On the other hand, decomposable matrices should be especially useful for highly system based problems, such as those encountered in engineering as well as social- and biological sciences. Because this technique forces identification of problem subsystems, their components, and how they interact, it can cause a clearer picture of important problem elements to emerge as shown in the table below:

**A decomposable matrix of organisational subsystems and components**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Organisational** | | | **Group** | | | **Individual** | | |
|  | A1 | A2 | A3 | B1 | B2 | B3 | C1 | C2 | C3 |
| A1 – System design |  | 5 | 3 | 2 | 4 | 1 | 1 | 1 | 1 |
| A2 – Organisational goals |  |  | 4 | 3 | 2 | 1 | 1 | 1 | 1 |
| A3 – Power |  |  |  | 3 | 2 | 3 | 1 | 1 | 1 |
| B1 – Leadership |  |  |  |  | 4 | 5 | 3 | 2 | 4 |
| B2 – Communication |  |  |  |  |  | 4 | 3 | 2 | 4 |
| B3 – Cohesiveness |  |  |  |  |  |  | 4 | 1 | 4 |
| C1 – Needs |  |  |  |  |  |  |  | 5 | 5 |
| C2 – Values |  |  |  |  |  |  |  |  | 5 |
| C3 – Expectations |  |  |  |  |  |  |  |  |  |

***D***

***imensional Analysis***

An analytical method is designed to clarify and explore the dimensions and limits of a problem, which has been designed by Jensen. The technique, which will be referred to as Dimensional Analysis, examines five elements of a problem:

1. Substantive dimension
2. Spatial dimension
3. Temporal dimension
4. Quantitative dimension
5. Qualitative dimension

Each of these dimensions is directed answering respectively five fundamental questions: What?, Where?, When?, How much? How serious? As shown in the table below, the dimensions are then further analysed by responding to a series of specific questions.

Dimension analysis can be used as follow:

1. State the problem
2. Briefly write down separate descriptions of the problem in terms of What?, Where?, When?, How much? How serious?
3. Using these descriptions, answer the questions listed for each of the dimensions as shown in the table below
4. Evaluate the answers to these questions by considering the implications of each for the solution of the problem
5. Select those areas most applicable to the problem for further analysis.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Substantive** | **Spatial** | **Temporal** | **Quantitative** | **Qualitative** |
| 1. Commission or Omission | 1. Local or distant | 1. Longstanding or recent | 1. Singular or multiple | 1. Philosophical or surface |
| 1. Attitude or deed | 1. Particular location within a location | 1. Present or impending | 1. Many or few people | 1. Survival or enrichment |
| 1. Ends or means | 1. Isolated or widespread | 1. Constant or ebb-and-flow | 1. General or specific | 1. Primary or secondary |
| 1. Active or passive |  |  | 1. Simple or complex | 1. What values are being violated |
| 1. Visible or invisible |  |  | 1. Affluence or scarcity | 1. To what degree are the values violated |
|  |  |  |  | 1. Proper or improper values |

# Evaluation

One difficulty in using dimensional analysis stems from Jensen’s definition of a problem as a violation of values. While it might be true that some problems involve value violations, the definition might have to be stretched a bit to accommodate all problem situations. Thus, a problem of how to redesign a toaster to be more efficient would seem to be quite different from a problem of how to reduce racial prejudice. Although the inefficiency of a toaster involves a value, a broader definition of a problem would seem to be more useful .

***On the other hand***

Jensen’s emphasis upon human relations problems represents an area often neglected in many problem solving techniques. Because of this focus on social and psychological problems, some will need to be selectively exercised by using dimensional analysis to analyse technical problems. In the area of new product development, for example, the question of attitude or deed would need to be modified.

Another difficulty is that there is little guidance provided on how to use the technique to analyse a problem. Jensen does not refer to Dimensional Analysis as a technique. Rather, he has attempted to descirbe 5 areas to explore when analysing a problem.

Nevertheless, the description will be more helpful is a systematic analysis procedure had been included. In particular, it would have been helpful to know why Jense considders the diferent questions to be important and how he suggests that they would be used. The step-by-step procedure described earlier should be of some assistance in using his approach.

Aside form the lack of systematic procedure, the technique should be useful in forcing aproblem solver to considder the mamny implications associated when various problems are selcted. Problem solving activity may proceed more smoothly than if no analysis was performed. The trick of course, is knowing what dimensions and and questions are relevant. Of the questions described, the table below seem to have the broadest applicability.

|  |  |
| --- | --- |
| **Substantive dimension** | Ends or means? Active or passive? |
| **Spatial dimension** | Local or distant “particular location/s within a location. Isolated or widespread? |
| **Temporal dimension** | Present or impending? Constant or eb-and-flow? |
| **Quantitative dimension** | Singular or multiple? General or specific? Simple or complex? |
| **Qualitative dimension** | Philosophical or surface? Primary or secondary? What values are being violated? To what degree are the values being violated? |

In addition to problem analysis, dimensional analysis also might be useful for evaluating alternative solutions for pre-problem-solving. After a problem has been analysed and redefined, and alternatives have been generated, the implication derived from the questions, could help to bring forth possible problem areas associated with different alternatives. Perhaps the best use of the technique would be as a checklist for use during pre-problem-solving activity or as a general guideline preceding the use of some other analytical method. Such a checklist should help to provide a general perspective during the later stages of the problem-solving process.

***I***

***nput-Output***

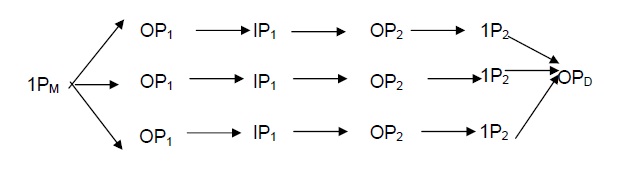
The input-output technique was developed at the General Electric company to aid in solving dynamic system-design problems, involving various forms of energy. It was intended to assist in the design of physical devices that are functionally dependent upon different energy forms.

As a problem analysis technique, it should prove useful for specifying connections between the elements of a variety of complex, dynamic problems. Therefore it should be suitable for such problems in areas like social planning, human relations, biology and engineering.



The basic procedure for using the input-output method involves the following steps:

1. Establish the desired output (OPD)
2. Establish the major output (IPM) affecting the output
3. Establish any limiting specifications (LS) that the output must meet
4. Examine the connections between the inputs and the outputs and determine how the inputs can be best used to achieve the desired output.

At its simplest level, the process can be represented as:

Unfortunately, most problems do not lend themselves to such a simple analysis. Because many problems involve combinations of inputs and outputs, a slightly more complex version of the procedure is often required. An example of a more complex model is show in the figure on the right.

In this case, the major input (IPM) can produce multiple outputs (OP!) that function as first-order inputs (IP1) producing outputs (OP2) that functions a second-order inputs (1P2), one of which might produce the desired output (OPD). It should be apparent that more complex models could be developed with multiple input-output steps, each of which could branch out into progressively larger numbers of inputs and outputs.

It should be apparent that the steps used in implementing the basic input-output model will not be adequate for dealing with more complex models as show in the figure above.

Steps will need to be added to sort out the different input-output transformations and to determine which branches will most likely lead to the desired output. A general procedure for more complex analyses might be described as follow:

1. Establish the desired output (OP**D**)
2. Establish the major input (1P**M**) affecting the output
3. Establish any limiting specifications that the output must meet
4. Determine which outputs (OP**1**) are produced directly from the major input
5. Consider the first-order outputs (OP**1**) as inputs (1P**1**), determine which outputs (OP**2**) might be produced by each input (1P**1**)
6. Considering the second order outputs (OP**2**), as inputs (1P**2**), continue transforming inputs and outputs until the desired output (OP**D**) is achieved

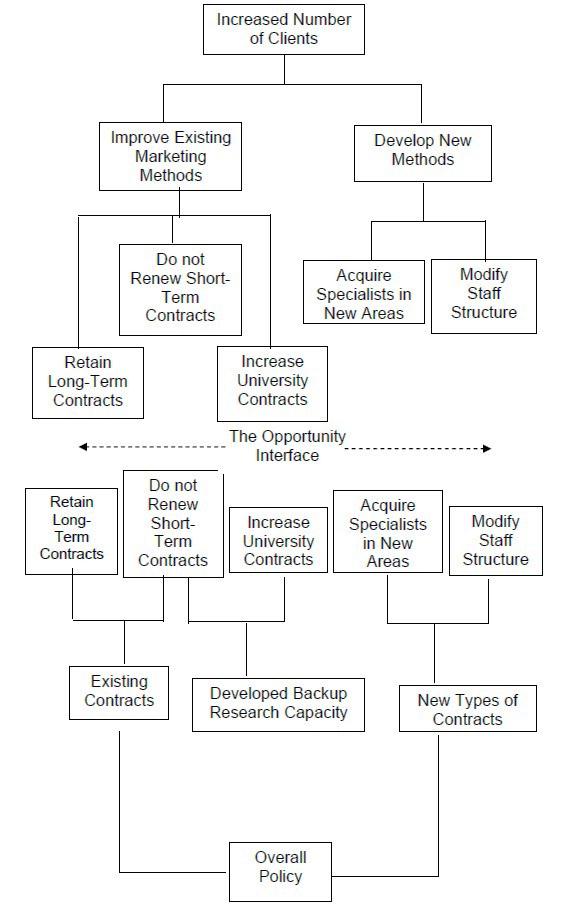
An example described by Whiting may help with the clarification of this procedure. He describes a problem of how to develop a mechanical device capable of providing a warning in the event of a fire. In this case, the desired output (OP**D**) is the warning device, fire is the major input (1P**M**) and the special requirements of the device are such factors as size, cost and sensitivity levels. The outputs (OP**1**) associated with fire are: heat, light, various gasses arising from combustion and smoke (first order inputs).

By redefining these outputs as inputs (1P**1**) (see figure on the following page), we can create new outputs (OP**2**), such as the expansion of metal subjected to heat, or chemical reactions caused by light and smoke. The task then is to select the outputs (OP**2**), transformed into inputs (1P**2**) that seem to be most capable of functioning as a fire-warning device (OP**D**). For example; a smoke sensitive chemical or metal that melts below the boiling point of water, could be used to trip a circuit that would activate an alarm.

***Evaluation***

This technique is similar to the redefinition procedures since the transformations between inputs and outputs represent progressive redefinition of the inputs. It was classified as an analytical procedure because of the required breakdown of problem sub-processes. Analysing a problem through the use of various input-output relationships can be a valuable exercise, especially for problems that involve some type of energy transformation.

Furthermore, when multiple input-output steps are used, such breakdown of problem aspects can help coordinate and clarify the idea generation process. A major weakness of this method is that the analysis of problems involving large number inputs and outputs can be time consuming and often a confusing task. Therefore the input-output method will be most suitable for only moderately complex problems that are considered to be important enough to justify using the procedures involved.



***O***

***rganised random search***

One method for systematically analysing a problem is the Organised Random Search developed by Frank William. Instead of randomly searching for ideas, Williams proposes that it is better to first break down the problem into its different sub-divisions or parts. These can then be used to provide a direction for the generation of ideas. The steps are as follow:

1. Inspect the problem for possible subdivisions or ways of categorising parts of the problem
2. Write down the different sub-divisions or parts and use them to generate ideas

Williams provides an example of a problem involving recall of the names of the Unit States’ 52 different states. If total random recall was used, it might be difficult to recall all the names except for the more popular ones or ones with some personal meaning attached to them. If the search process was organised using geographical areas, the number of states recalled should substantially increase.

Thus the states should be clustered to include east and west coasts, central states and so forth, and the names then recalled from within each area, rather than from the entire country. With such an analysis, the search for ideas will still be somewhat random, but at least it will be organised. Another example, actually used by engineers in one company, was a problem of how to keep current in the problems and solutions within the areas of their responsibility. Before attempting to generate ideas to solve the problem, the engineers broke it down into two areas: People and Things.

These areas were then further sub-divided into internal and external aspects. The internal people-area contained items such as superiors, subordinates and staff while the external area listed customers, suppliers and competitors. Each of these breakdowns was then used as the starting point for idea generation.

***Evaluation***

This method is similar in concept to Decomposable Matrices, Morphological Analysis and Relevance Systems; all of which involve factoring a problem into its major elements to stimulate and clarify the idea generation process. These techniques are somewhat more structured and systematic than the organised random search method.

In particular, decomposable matrices and relevance systems, contain a degree of sophistication not present in the basic analytical procedures or morphological analysis and organised random search. The use of binary systems, opportunity interfaces and matrix weightings are an elaboration that significantly increases the usefulness of these methods especially for more complex problems.

***R***

***elevance systems***

Relevance systems represent a method of organising information about a problem through successive refinements of major problem elements. As each element is listed, other elements are identified and connected with the preceding ones until a pyramid-like structure results.

A common example of relevance systems in the formal organisation chart; top-level managers are listed at the top and then connected by lines to progressively greater numbers of people at lower organisational-levels.

This particular type of relevance system is comparatively easy to construct since the problem is essentially well-structured. It is more difficult to construct a relevance system for ill-structured problems due to the often unknown qualities f problem elements and constraints.

According to Rickards, there are two types of relevance systems: single and binary. A single system consists of all the elements related to a single problem; a binary system is comprised of two single systems that interact across the lower levels of the two systems. Thus binary systems can be used to identify relationships between, as well as, within systems. Relevance systems can be constructed in two different ways:

* Starting with the higher order elements and sequentially connecting elements in a downward direction
* Starting with clusters of lower-level elements and working upwards to the highest level

Although either method will produce a workable relevance system, better results will generally be produced if both methods are used. By working downward and upward, the validity of the elements can be included and their relationship to one another will be easier to assess. The following basic steps are involved in constructing Relevance systems:

1. Write down the highest-order element of the problem (first level element)
2. List the sub-elements that can be derived from the first level (the second level elements)
3. Continue listing lower-level elements until all possible levels have been exhausted and the lowest level has been achieved. Achievement of the lowest level can usually be determined by looking for elements that answer the question: How? Higher level elements in contrast, usually answer the question, why?
4. After completing these systems, assess the systems’ validity by working upward for the lower-level elements.
5. Use the lower level elements to suggest possible problem solutions
6. If the problem overlaps with another area and need to be integrated with it, extend the system by constructing a second system so that its lower-level elements interface with those of the first system. The result will be a binary relevance system.
7. Examine the interface to determine points of singular or mutual influence and/or consider possible constraining factors that might affect the objectives expressed with either system.

An example of how binary system could be used to improve a company’s marketing strategy has been described by Rickards. As shown in the figure on page 31, a single system is constructed with the highest order element being increasing in the number of clients. Two lower-level elements are developed next (still asking the question Why?), followed by the lowest level of elements which can be orientated towards the question, How?

Then if it is determined that the marketing strategy should be integrated with the overall policy decisions of the company, a second system could be constructed (which is also shown in the figure on page 31). The resulting binary system allows both policy makers and marketing personnel to analyse and possible constraints that might influence potential problem solutions. For example: changing the company image could conflict with a policy alternative of increasing university contracts.

***Evaluation***

Because of its emphasis on identifying connections among problem elements, the Relevance system method is very similar to Progressive Abstractions. Both techniques rely upon progressive breakdowns of problem elements and development of new problem definition. The techniques differ slightly in their use of problem elements.

For Progressive Abstractions, increasingly abstract problem definitions are developed by synthesising preceding problem solutions; for Relevance Systems, a problem is broken down so that all of its major elements and their connections can be examined. For some problems, the distinctions between the two techniques might be made more on the basis of personal interference than any advantage of one technique over the other.

Relevance systems, however, are distinguished by taking into account the possible need to integrate one system with another. In addition to suggesting problem solutions that might not be considered with the Progressive Abstractions method, opportunity interfaces are an important strength of Relevance Systems.

Because a problem solver is forced to consider potential solution constraints, the likelihood of solution revisions should be reduced considerably. Another advantage of Relevance Systems over Progressive Abstractions is suggested by Rickards, who indicates that the possible overlap of lower-level elements will increase the richness of the problem solutions. When different combinations of problem elements are forced together, more unique solutions should be produced.

***I***

n using the various techniques which we have discussed in the previous section, one can apply these to a variety of situations. However, it is the initial situation to which one applies it, that is the most daunting due to the insecurity people have in their own abilities. Let’s take a look at some of the most basic, as well as common problems found in workplaces, in South Africa; Communication.

Communication problems in the workplace can cost your company productivity and money. Without efficient communication, your company is unable to exchange information essential to daily operations and create a communication network to carry new product data.

Understanding examples of workplace communication issues can help you to create policies that will address problems and create an efficient communication network in the office.

***Language Barriers***

A diverse workplace has several benefits to a business, such as a variety of solutions to company issues and insight into international markets during expansion. But the language barrier that can sometimes occur in a diverse workplace, or any workplace, may become a communication problem.

There might be language barriers between people of different ethnic backgrounds, people of different ages and people with different levels of industry experience. Any language barrier is going to slow communication or create misunderstandings that make communication ineffective.

***Personal Issues***

Effective communication in a workplace is based on professional correspondence designed to assist in the daily operation of the company or the continued growth of the organization. When employees allow personal issues to affect company communication, a communication problem develops that could take a long time to track down and resolve.

People who refuse to communicate based on a personal disagreement are damaging the company's ability to do business and slowing the growth of the organization.

***Lack of Feedback***

One-way communication can become an ineffective way to exchange information throughout the company. Employees and managerial staff should provide feedback at all times to improve the quality of information disseminated and the manner in which the information is delivered.

For example, if a department tends to send out information in a format confusing to other people in the company, then that department needs to be informed of its communication problems immediately or else the information coming from that group will always pose a communication challenge.

***New Hires***

When new employees are brought into the organization, they need to receive a comprehensive introduction into the proper ways to communicate throughout the organization. Companies that do not include communication training in their new-hire orientation programs will be forced to struggle with new hires who are forced to learn proper communication procedures by a process of hit and miss.

**Now let’s take a look at some examples of these:**

Communication skills are crucial for everyone in a small business, especially for managers and owners. Some people are naturally gifted in interpersonal skills, but those who aren't can study and practice effective communication skills to increase their value to their employers.

Twenty-first century communications technology has created numerous opportunities to communicate with co-workers in the same office and their international counterparts. Each communication medium, however, introduces a new range of potential communication errors.

***Email Communication***

Email communication provides limited means by which to convey messages, and employees must fully understand how to communicate within the limitations of email to be most effective. Email communication does not include voice tone or body language, two vital elements of communication.

Without these elements, a sarcastic joke can be interpreted as lashing out in anger, and things like a hint of urgency or annoyance may not be understood. To avoid communication errors in email, always use straightforward language and literal phrasing.

***Body Language Miscommunications***

Body language conveys a wealth of information in face-to-face communication. Employees who fail to pick up on body language clues can miss the true meanings of messages they hear. Also, using body language inappropriately can send mixed signals to those who know how to pick up on these nuances.

An employee who does not understand body language, for example, may not notice a client's slightly raised eyebrows and wandering eyes during a meeting, which would cause him to miss the fact that the client is uncomfortable, wary or distant. As another example, crossing your arms when someone is speaking to you can send the signal that your mind is closed to what they are saying, regardless of whether that is actually the case.

***Poor Listening Skills***

Communication is a two-way street, and listening can often be more important than speaking in a workplace conversation. Listening skills are not genetically inherited characteristics; listening, more than any other communication skill, must be studied and practiced to be effective. It can be easy to misinterpret facts without solid listening skills or to miss important instructions or advice given by supervisors. Poor listening skills can also reduce managers' ability to delegate work tasks and mediate conflicts.

***Phone Communication***

Like email communication, telephone communication carries the weakness of not including all vital elements of communication. Like email, phone conversations cannot relay body language clues. Phone conversations also occur in real time, eliminating the possibility of editing and fine-tuning messages, as can be done in email or written correspondence.

Certain unique forms of speaking, such as dry humour and sarcasm, can be highly ineffective and misinterpreted when not accompanied by facial expressions. Consider the simple sarcastic phrase, “sure, you know that will happen.” When accompanied by rolling eyes and a smile, the speaker clearly intends the opposite of the literal meaning. When interpreted through voice alone, however, that phrase could be interpreted literally, causing a misunderstanding.

***International Colloquialisms***

The pace of globalisation in business continues to pick up momentum, creating new opportunities for cross-cultural business communications. Cross-cultural communication introduces a new world of problems and potential communication errors, such as the use of domestic colloquialisms. If a South African businessperson tells a partner in Japan that a certain gathering was like a “braai,” for example, the Japanese businessperson may have no idea what the South African is talking about.

1. **In order to identify the issues we need to:**

* Apply critical and analytical skills to analyse and define an issue affecting the functioning of a unit
* Apply critical and analytical skills to determine factors impacting on the issue and other areas in a unit and the entity affected by the issue

1. **Then the engagement needs to happen (this is usually between stakeholders such as team members from own unit, managers and staff from other units in the entity, suppliers and customers), where:**

* Purpose of the consultation is communicated referencing aspects of the issue and solutions discussed.
* An explanation of addressing the critical and analytical processes for analysing the issue/problem and generating ideas on their solution/s
* The participation of stakeholders is obtained in analysing the unit's internal and external environment to identify factors relevant to the issue/problem.
* The participation of team members is obtained in developing solutions to the issue/problem that would contribute towards the functioning of the unit and the broader system within which it operates.
* The different ideas, values and perspectives of team members and stakeholders are recognised and respected in view of the value they add to the solution developed.

1. **Feasible solutions are then derived from such meetings/gathering, by making use of systems approaches; this is done through:**

* Inputs from stakeholders are analysed to identify feasible solutions to the issue/problem that would improve the functioning of the unit and the broader system within which it operates.
* Identified solutions must be prioritised in terms of their potential outcomes on the various processes/sections in the unit, the wider entity and external stakeholders.
* An appropriate solution is selected within a systems context taking into consideration interrelated issues that impact on the solution and areas that will be impacted upon by the implementation thereof.

1. **Finally, the chosen solution must be formulated and communicated to the relevant parties by:**

* Formulating it referencing the impact of the decision on the unit and the system in which it operates.
* Describing actions required to implement the decision in the unit with reference to activities, role players, resources and time lines.
* Change processes that are required to support the implementation of the decision are described with reference to their impact on the success of the implementation of the decision
* The decision is communicated to relevant team members in the unit and other stakeholders who will be involved in its implementation in a user-friendly format.

***A***

***ctivity – In your groups***

For this activity, as a group, you will define a problem which a workplace is faced with, or has faced in the past. Your aim here is to find an amicable solution to the problem, by applying the skills which you have been given in the first part of this manual.

Start by writing a short essay, describing the problem, outlining the underpinning issues which you have identified as the causes to the problem. Remember to get the input of all the members of the group to ensure your viewpoint is unbiased. Use the following space to complete your description:

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On the previous page, we outlined the four steps in which the solution to the problem will be completed. Using each of the numbered stages as a guide, explain the ways in which your team has come to a conclusion for the solution to the problem. Where necessary, attach actual communications used, or drafted by your team to substantiate your evidence.

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**You are now ready to go through a check list. Be honest with yourself.**

# Tick the box with either a √ or an X to indicate your response.

# I am able to apply critical and analytical skills to analyse an issue or problem.

# I am able to engage with stakeholders in analysing the issue/problem and developing solutions.

# I am able to select feasible solutions through a systems approach.

# I am able to formulate and communicating the decision.

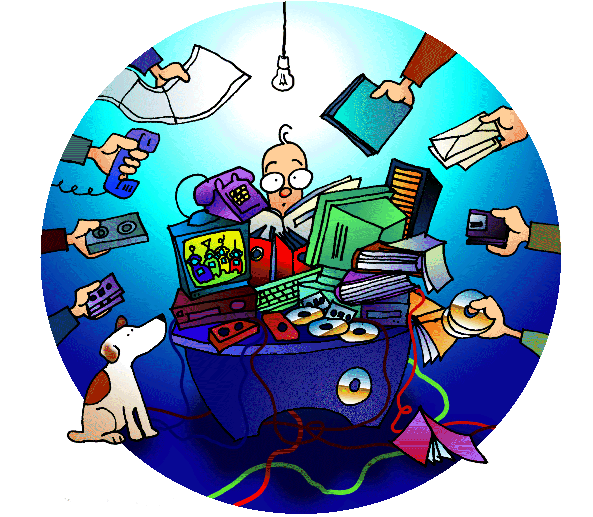


# You must think about any point you could not tick. Write this down as a goal.

# Decide on a plan of action to achieve these goals. Regularly review these goals.

## Apply the principles of knowledge management

## 252044

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This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them. The qualifying learner is capable of:

* Demonstrate knowledge and understanding of the concepts and components of knowledge management
* Analyse a unit according the entity's knowledge management policies and procedures
* Develop a knowledge management implementation plan for a unit

**Index**

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| **Competence Requirements** | **Page** |
| **Unit Standard 252044 ALIGNMENT index**  Here you will find the different outcomes explained which you need to be proved competent in, in order to complete the Unit Standard 252044. | **83** |
| **Unit Standard 252044** | **85** |
| **Demonstrate knowledge and understanding of the concepts and components of knowledge management** | **91** |
| **Analyse a unit ACCORDING TO the entity's knowledge management policies and procedures** | **98** |
| **Develop a knowledge management implementation plan for a unit** | **105** |
| **Self-assessment**  Once you have completed all the questions after being facilitated, you need to check the progress you have made. If you feel that you are competent in the areas mentioned, you may tick the blocks, if however, you feel that you require additional knowledge, you need to indicate so in the block below. Show this to your facilitator and make the necessary arrangements to assist you to become competent. | **113** |

# Unit Standard 252044 – Alignment Index

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| **SPECIFIC OUTCOMES AND RELATED ASSESSMENT CRITERIA** | |
| **SO 1** | **Demonstrate knowledge and understanding of the concepts and components of knowledge management.**  (The concept 'knowledge management' includes the knowledge economy, tacit and codified, knowledge assets, knowledge workers, information management, intellectual property, intellectual capital, information management, the learning organisation and knowledge creation, sharing and transfer.) |
| **AC 1** | The driving forces of the knowledge economy are explained with examples. |
| **AC 2** | The components of a system for institutionalising knowledge management are described according to accepted knowledge management theory and practice.  (Components of a knowledge management system could include mechanisms, strategies, policies and structures) |
| **AC 3** | The importance of knowledge management in managing the knowledge assets for achieving competitive advantage is explained in relation to an entity. |
| **AC 4** | The results of managing knowledge are explained in relation to an entity. |
| **SO 2** | **Analyse a unit according the entity's knowledge management policies and procedures.** |
| **AC 1** | Analyse the current practices in a unit in relation to the knowledge management policies and procedures of an entity. |
| **AC 2** | Compare the knowledge management practices of a unit to those of other units in an entity. |
| **AC 3** | Interpret the findings of the analysis to identify strengths and weaknesses. |
| **AC 4** | Consolidate the findings in a report with recommendations on improvements within a unit and an entity. |
| **SO 3** | **Develop a knowledge management implementation plan for a unit.** |
| **AC 1** | The role of the unit manager in implementing the knowledge management plan is described in relation to other role players in the entity. |
| **AC 2** | An operational plan is developed for managing knowledge in a unit in relation to the policies and procedures of an entity.  (The operational plan includes activities, role players, time-scale, measurements, costs, benefits and potential risks.) |
| **AC 3** | The operational plan is promoted within a unit and an entity in order to encourage commitment.  (The promotion of the plan could include explaining the principles of knowledge management to team members, acting as a change agent for knowledge management, and creating an enabling environment for the creation, transfer and sharing of knowledge within a unit and an entity.) |
| **AC 4** | The implementation of the plan is described in accordance generally accepted knowledge management theory and practice. |

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| **CRITICAL CROSS FIELD OUTCOMES** |
| UNIT STANDARD CCFO IDENTIFYING  The learner is able to identify and solve problems in which responses show that responsible decisions using critical and creative thinking have been made in relation to managing knowledge in a unit.  UNIT STANDARD CCFO WORKING  The learner is able to work as a member of a team in promoting sound knowledge management practices in a unit.  UNIT STANDARD CCFO ORGANISING  The learner is able to organise and manage him/herself and his/her activities responsibly in managing the knowledge in a unit.  UNIT STANDARD CCFO COLLECTING  The learner is able to collect, organise and critically evaluate information and applying this in managing the knowledge in a unit.  UNIT STANDARD CCFO COMMUNICATING  The learner is able to communicate effectively using visual, mathematics and language skills in the modes of oral and/or written presentations in communicating with team members in relation to managing the knowledge in the unit.  UNIT STANDARD CCFO DEMONSTRATING  The learner is able to demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation in applying knowledge of and insight into the complexity of managing knowledge. |

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| **SOUTH AFRICAN QUALIFICATIONS AUTHORITY** |

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| **REGISTERED UNIT STANDARD:** |

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| **Apply the principles of knowledge management** |

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| **SAQA US ID** | **UNIT STANDARD TITLE** | | | |
| 252044 | Apply the principles of knowledge management | | | |
| **ORIGINATOR** | | **REGISTERING PROVIDER** | | |
| SGB Generic Management | |  | | |
| **QUALITY ASSURING BODY** | | | | |
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| **FIELD** | | | **SUBFIELD** | |
| Field 03 - Business, Commerce and Management Studies | | | Generic Management | |
| **ABET BAND** | **UNIT STANDARD TYPE** | **OLD NQF LEVEL** | **NEW NQF LEVEL** | **CREDITS** |
| Undefined | Regular | Level 5 | New Level Assignment Pend. | 6 |
| **REGISTRATION STATUS** | | **REGISTRATION START DATE** | **REGISTRATION END DATE** | **SAQA DECISION NUMBER** |
| Registered | | 2007-11-28 | 2010-11-28 | SAQA 0474/07 |
| **LAST DATE FOR ENROLMENT** | | **LAST DATE FOR ACHIEVEMENT** | | |
| 2011-11-28 | | 2014-11-28 | | |

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| In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise. |

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| This unit standard does not replace any other unit standard and is not replaced by any other unit standard. |

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| **PURPOSE OF THE UNIT STANDARD** |

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| This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   The qualifying learner is capable of:   Demonstrate knowledge and understanding of the concepts and components of knowledge management.   Analyse a unit according the entity's knowledge management policies and procedures.   Develop a knowledge management implementation plan for a unit. |

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| **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING** |

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| It is assumed that learners are competent in:   Communication at NQF Level 4.   Mathematical Literacy at NQF Level 4.   Computer Literacy at NQF Level 4. |

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| **UNIT STANDARD RANGE** |

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|  The learner is required to apply the learning in respect of his/her own area of responsibility.   Unit refers to the division, department or business unit in which the learner is responsible for managing and leading staff.   Entity includes, but is not limited to, a company, business unit, public institution, small business, Non-Profit Organisation or Non-Governmental Organisation. |

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| **Specific Outcomes and Assessment Criteria:** |

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| **SPECIFIC OUTCOME 1** |

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| Demonstrate knowledge and understanding of the concepts and components of knowledge management. |

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| **OUTCOME RANGE** |

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| The concept 'knowledge management' includes the knowledge economy, tacit and codified, knowledge assets, knowledge workers, information management, intellectual property, intellectual capital, information management, the learning organisation and knowledge creation, sharing and transfer. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| The driving forces of the knowledge economy are explained with examples. |

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| **ASSESSMENT CRITERION 2** |

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| The components of a system for institutionalising knowledge management are described according to accepted knowledge management theory and practice. |

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| **ASSESSMENT CRITERION RANGE** |

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| Components of a knowledge management system could include mechanisms, strategies, policies and structures. |

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| **ASSESSMENT CRITERION 3** |

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| The importance of knowledge management in managing the knowledge assets for achieving competitive advantage is explained in relation to an entity. |

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| **ASSESSMENT CRITERION 4** |

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| The results of managing knowledge are explained in relation to an entity. |

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| **SPECIFIC OUTCOME 2** |

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| Analyse a unit according the entity's knowledge management policies and procedures. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Analyse the current practices in a unit in relation to the knowledge management policies and procedures of an entity. |

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| **ASSESSMENT CRITERION 2** |

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| Compare the knowledge management practices of a unit to those of other units in an entity. |

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| **ASSESSMENT CRITERION 3** |

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| Interpret the findings of the analysis to identify strengths and weaknesses. |

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| **ASSESSMENT CRITERION 4** |

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| Consolidate the findings in a report with recommendations on improvements within a unit and an entity. |

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| **SPECIFIC OUTCOME 3** |

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| Develop a knowledge management implementation plan for a unit. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| The role of the unit manager in implementing the knowledge management plan is described in relation to other role players in the entity. |

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| **ASSESSMENT CRITERION 2** |

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| An operational plan is developed for managing knowledge in a unit in relation to the policies and procedures of an entity. |

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| **ASSESSMENT CRITERION RANGE** |

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| The operational plan includes activities, role players, time-scale, measurements, costs, benefits and potential risks. |

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| **ASSESSMENT CRITERION 3** |

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| The operational plan is promoted within a unit and an entity in order to encourage commitment. |

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| **ASSESSMENT CRITERION RANGE** |

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| The promotion of the plan could include explaining the principles of knowledge management to team members, acting as a change agent for knowledge management, and creating an enabling environment for the creation, transfer and sharing of knowledge within a unit and an entity. |

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| **ASSESSMENT CRITERION 4** |

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| The implementation of the plan is described in accordance generally accepted knowledge management theory and practice. |

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| **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE** |

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|  Theory and principles of knowledge management.   Intellectual property.   Intellectual capital.   Knowledge economy.   Organisational learning.   Learning organisation.   Creation, sharing and storage on knowledge. |

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| **Critical Cross-field Outcomes (CCFO):** |

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| **UNIT STANDARD CCFO IDENTIFYING** |

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| The learner is able to identify and solve problems in which responses show that responsible decisions using critical and creative thinking have been made in relation to managing knowledge in a unit. |

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| **UNIT STANDARD CCFO WORKING** |

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| The learner is able to work as a member of a team in promoting sound knowledge management practices in a unit. |

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| **UNIT STANDARD CCFO ORGANISING** |

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| The learner is able to organise and manage him/herself and his/her activities responsibly in managing the knowledge in a unit. |

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| **UNIT STANDARD CCFO COLLECTING** |

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| The learner is able to collect, organise and critically evaluate information and applying this in managing the knowledge in a unit. |

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| **UNIT STANDARD CCFO COMMUNICATING** |

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| The learner is able to communicate effectively using visual, mathematics and language skills in the modes of oral and/or written presentations in communicating with team members in relation to managing the knowledge in the unit. |

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| **UNIT STANDARD CCFO DEMONSTRATING** |

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| The learner is able to demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation in applying knowledge of and insight into the complexity of managing knowledge. |

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| **QUALIFICATIONS UTILISING THIS UNIT STANDARD:** |

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| --- | --- | --- | --- | --- | --- | --- |
|  | **ID** | **QUALIFICATION TITLE** | **OLD LEVEL** | **NEW LEVEL** | **STATUS** | **END DATE** |
| Core | [59201](http://allqs.saqa.org.za/showQualification.php?id=59201) | National Certificate: Generic Management | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Fundamental | [73129](http://allqs.saqa.org.za/showQualification.php?id=73129) | National Diploma: Public Relations Practice | Level 5 | New Level Assignment Pend. | Registered | 2012-09-09 |
| Elective | [63369](http://allqs.saqa.org.za/showQualification.php?id=63369) | National Diploma: Trade Union Practice | Level 5 | New Level Assignment Pend. | Registered | 2011-11-26 |

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|  | *All qualifications and unit standards registered on the National Qualifications Framework are public property. Thus the only payment that can be made for them is for service and reproduction. It is illegal to sell this material for profit. If the material is reproduced or quoted, the South African Qualifications Authority (SAQA) should be acknowledged as the source.* |

***What is knowledge Management?***

******In practice, knowledge management often encompasses identifying and mapping intellectual assets within the organization, generating new knowledge for competitive advantage within the organisation, making vast amounts of corporate information accessible, sharing of best practices, and technology that enables all of the above, including groupware and intranets. That covers a lot of ground. And it should, because applying knowledge to work is integral to most business activities.

Knowledge Management (KM) is a discipline that improves the ability of organisations to solve problems better, adapt, evolve to meet changing business requirements, and survive disruptive changes such as staff turnover. Knowledge Management recognises that organisations are a complex system made up of both the people that work for the organisation, and the processes, procedures and information systems that drive our actions.

The revolution in communications over the past 50 years (email, internet, telephone and fax) now allows people to talk directly to each other without the use of intermediaries such as managers or team leaders. This allows organisations to be more efficient by bringing together needed expertise and knowledge on demand.

However, with this new approach, knowledge gained and lessons learned are not always shared across the organisation. In other words, some people may know the solution to a particular problem, but the organisation as a whole may not be aware. This can lead to loss of critical knowledge when staff leaves, and for inefficient practices to remain despite better solutions being available.

Modern organisations need to build a new culture that promotes knowledge sharing and constant learning while preserving and recording appropriate information. This is essential in order for corporate knowledge to be effectively retained and enhanced.

The key objective of Knowledge Management is to enhance knowledge processing. Organisations will have realised this objective when they:

* Correctly identify problems that need solving as they occur
* Have robust information location and retrieval channels to enhance individual decision making
* Embrace effective knowledge creation processes
* Ensure that created knowledge is shared with and integrated across the whole of the organisation

Methods that can help to achieve these goals include:

* Making better use of collaboration and communication tools
* Creating and promoting internal communities of practice
* Fostering the identity of virtual teams
* Using KM techniques such as Before Action Reviews (BAR), After Actions Reviews (AAR), pre-mortems, and retrospect during change activities
* Encouraging the use of a common language (eg corporate glossary, classification and/or taxonomies)

Benefits of implementing effective Knowledge Management include:

* Fully and accurately informed employees, clients, and stakeholders
* Improved team effectiveness and delivery of outcomes
* An organisational culture devoted to continuous improvement
* An organisation that is resilient and adaptable in the face of change

***Knowledge management draws from a wide range of disciplines and technologies, such as:***

***Cognitive science***

Insights from how we learn and know will certainly improve tools and techniques for gathering and transferring knowledge.

***Expert systems, artificial intelligence and knowledge base management systems (KBMS)***

AI and related technologies have acquired an undeserved reputation of having failed to meet their own, and the marketplace’s high expectations. In fact, these technologies continue to be applied widely, and the lessons practitioners have learned are directly applicable to knowledge management.

***Computer-supported collaborative work (groupware)***

In some areas of the world knowledge management is almost synonymous with groupware and therefore with Lotus Notes. Sharing and collaboration are clearly vital to organisational knowledge management, with or without supporting technology.

***Library and information science***

We take it for granted that card catalogues in libraries will help us find the right book when we need it. The body of research and practice in classification and knowledge organisation that makes libraries work will be even more vital as we are inundated by information in business. Tools for thesaurus construction and controlled vocabularies are already helping us manage knowledge.

***Technical writing***

Also under-appreciated and even sneered at, as a professional activity, technical writing (often referred to by its practitioners as technical communication) forms a body of theory and practice that is directly relevant to effective representation and transfer of knowledge.

***Document management***

Originally concerned primarily with managing the accessibility of images, document management has moved on to making content accessible and re-usable at the component level. Early recognition of the need to associate "meta-information" with each document object prefigures document management technology’s growing role in knowledge management activities.

***Decision support systems***

According to Daniel J. Power, "Researchers working on Decision Support Systems have brought together insights from the fields of cognitive sciences, management sciences, computer sciences, operations research, and systems engineering in order to produce both computerised artefacts for helping knowledge workers in their performance of cognitive tasks, and to integrate such artefacts within the decision-making processes of modern organisations."

That already sounds a lot like knowledge management, but in practice the emphasis has been on quantitative analysis rather than qualitative analysis, and on tools for managers rather than everyone in the organisation.

***Semantic networks***

Semantic networks are formed from ideas and typed relationships among them — sort of "hypertext without the content," but with far more systematic structure according to meaning. Often applied in such arcane tasks as textual analysis, semantic nets are now in use in mainstream professional applications, including medicine, to represent domain knowledge in an explicit way that can be shared.

***Relational and object databases***

Although relational databases are currently used primarily as tools for managing "structured" data — and object-oriented databases are considered more appropriate for "unstructured" content — we have only begun to apply the models on which they are founded to representing and managing knowledge resources.

***Simulation***

Knowledge Management expert Karl-Erik Sveiby suggests "simulation" as a component technology of knowledge management, referring to "computer simulations, manual simulations as well as role plays and micro arenas for testing out skills." That’s only a partial list.

Other technologies include: object-oriented information modelling; electronic publishing technology, hypertext, and the World Wide Web; help-desk technology; full-text search and retrieval; and performance support systems.

***Categorisation of knowledge management approaches***

The term "knowledge management" is now in widespread use, having appeared in the titles of many new books about knowledge management as a business strategy, as well as in articles in many business publications. There are, of course, many ways to slice up the multi-faceted world of knowledge management. However, it’s often useful to categorize them.

***Management of Information***

***To researchers in this track, according to Sveiby, "… knowledge = Objects that can be identified and handled in information systems."***

***Management of People***

***For researchers and practitioners in this field, knowledge consists of "… processes, a complex set of dynamic skills, know-how, etc., that is constantly changing."***

***Why is Knowledge Management so important?***

Today’s business environment is characterised by continuous, often radical change. Such a volatile climate demands a new attitude and approach within organisations—actions must be anticipatory, adaptive, and based on a faster cycle of knowledge creation.

Some of the current challenges which businesses face include:

* A growing emphasis on creating customer value and improving customer service
* An increasingly competitive marketplace with a rising rate of innovation
* Reduced cycle times and shortened product development times
* A need for organizational adaptation because of changing business rules and assumptions
* A requirement to operate with a shrinking number of assets (people, inventory, and facilities)
* A reduction in the amount of time employees are given to acquire new knowledge
* Changes in strategic directions and workforce mobility that lead to knowledge loss

New products and innovations are increasing at a faster rate than ever before, along with evolutions in customer preference and need. Managers must no longer investigate their customers superficially; they must dig more deeply than surveys and feedback forms.

As organizations have become more complex and information more readily accessible, forward thinking managers have grown concerned with how to allow knowledge to flow freely and how to control and manage this vital flow of information and technology at the same time.

All of these factors make knowledge management a necessity rather than a luxury. Organisations must have a clear handle on how knowledge is discovered, created, dispersed, and put to use. In some ways, knowledge management is more essential to agency success than capital or labour, yet often it is the most overlooked.

The supply chain, for example, relies upon knowledge from diverse areas including planning, manufacturing, warehousing, and distribution. Today’s volatile business environment demands a new attitude and approach within organizations—actions must be anticipatory, adaptive, and based on a faster cycle of knowledge creation.

***Knowledge Management: Human Potential***

Knowledge management is so important to public sector organizations in part because of the prospective loss of employees due to an aging workforce. A recent report indicated that a substantial portion of the workforce would become eligible to retire or will retire over the next five to 10 years.

That workforce planning is critical to ensure that agencies have sufficient and appropriate staff to account for these retirements. In addition, high staff turnover, lack of adequate training, and a tendency to maintain the status quo, further impact and impede the success of knowledge retention and growth. Oftentimes, when people leave an organisation, they take a wealth of knowledge about their jobs with them.

Knowledge management attempts to secure and replenish the learning experiences, as well as the work products, of the individuals who comprise an organisation.

***The Benefits of Knowledge Management***

Whenever you decide on investing in a new strategy, program, process, or project, you need to make sure that it is really worth investing and value-adding. You also need to analyse the cost-benefits of such an investment and the return or value that you get out of that investment.

These are some issues that need to be considered before going in for knowledge management initiatives. Today's increasingly difficult economic times pose the need for cost-effective initiatives such as knowledge management programs and practices.

Organisation heads always need a clear understanding of the bottom line Knowledge management benefits before they invest in such initiatives. The Knowledge management benefits can be categorized into three which include:

* Knowledge benefits
* Intermediate benefits
* Organisational benefits

Whether to minimise loss and risk, to improve organisational efficiency, or embrace innovation, knowledge management efforts and initiatives add great value to an organisation.

Some of the benefits of knowledge management include:

* Facilitates better, more informed decisions;
* Contributes to the intellectual capital of an organisation;
* Encourages the free flow of ideas which leads to insight and innovation;
* Eliminates redundant processes, streamlines operations, and enhances employee retention rates;
* Improves customer service and efficiency; and
* Leads to greater productivity

A good knowledge management system has the right combination of different learning technologies and training methodologies to meet the specific learning needs of an individual or organization and help achieve their goals. This combination can include self-paced and live learning experiences over the Web or other electronic media, traditional instructor-led training, and other forms of instruction.

The key defining criteria for knowledge products and services is the needs of the end-user. Some basic issues and principles for developing learning products have looked at the user as a partner in the learning process, and not just a passive receiver. This is done by providing ample opportunity for feedback; opportunities for the user to network and find new people, organizations and institutions, and resources; opportunities to also contribute to the contents of the e-learning packages, etc.

This kind of user's needs analysis is an important pre-requisite for the development of a good knowledge system. The table below outlines some of the issues to be considered:

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| ***Aspect*** | ***Issues*** |
| **Target Identification** | * Who is the eventual end-user? * What level does the end-user operate? * What is the scope of activities of the end-user? * What networks bring the end-users together? * What local institutions/organizations work with the end-user? * What does the organisation's mandate and other guiding documents say of the end-user? |
| **Needs Assessment** | Besides the above points,   * What are the end-users' targets? * What are the end-user's objectives and goals? * What will be included in a needs-assessment questionnaire (keeping in mind that these assessment change depending on the end-users' targets, on the time scale, and scope/level of operation)? |

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| **Packaging Information** | * How can existing projects be 'redesigned' to generate info for e-learning products? * How will the above needs assessment exercise help in identifying the format of the e-learning package? * How can different information packages be developed from the same block of data/information of a project? * How can the information format be matched with the differing needs of the end-user? * How can the subsidiary of information be maintained - delivering the right info at the right time to the right level and the right end-user? |
| **Marketing** | * How can the info on knowledge products be delivered to the end-user? * What events (external and internal to the organization) can be used to disseminate knowledge meta-info, both online and offline? * How can effective networking by the organization's staff serve the timely delivery of knowledge products? |
| **Delivery Modalities** | * What appropriate information infrastructure needs to be developed for knowledge management: online and offline? * What components of knowledge products need to be on-line and what components need to be offline (electronic and hardcopy)? * Depending on the target end-user, what will be the frequency, format and mode of delivery of the knowledge products? |
| **Support Systems** | * Besides the main knowledge product, what kinds of support systems need to be put in place: ongoing - during the course of learning; and follow-up - as a continuous learning exercise? * What kinds of value-added resources need to be delivered to the main e-learning product in order to make it more relevant to different end-users - 'individualized' or 'regionalized'? * How will queries and comments/suggestions etc. from users be processed? How will it be used to enhance the quality of knowledge products/processes? |
| **Monitoring and Evaluation** | * What will be the components of a M&E system?   + Monitoring the end-user's use of the knowledge product itself   + Monitoring the end-user's use of knowledge gained   + Assessment of the quality/quantity of information/knowledge provided in the knowledge package |

***In Pairs***

You are required to investigate your organisation’s current knowledge management system and then suggest alterations where required. Make use of the following criteria to base your investigation on:

***Section 1***

Complete the following table based on your findings:

|  |  |  |
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| ***Aspect*** | ***Issues*** | ***Your Comments*** |
| **Target Identification** | * Who is the eventual end-user? |  |
| * What level does the end-user operate? |  |
| * What is the scope of activities of the end-user? |  |
| * What networks bring the end-users together? |  |
| * What local institutions/organizations work with the end-user? |  |
| * What does the organisation's mandate and other guiding documents say of the end-user? |  |
| **Needs Assessment** | * What are the end-users' targets? |  |
| * What are the end-user's objectives and goals? |  |
| * What will be included in a needs-assessment questionnaire (keeping in mind that these assessment change depending on the end-users' targets, on the time scale, and scope/level of operation)? |  |

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| **Packaging Information** | * How can existing projects be 'redesigned' to generate info for e-learning products? |  |
| * How will the above needs assessment exercise help in identifying the format of the e-learning package? |  |
| * How can different information packages be developed from the same block of data/information of a project? |  |
| * How can the information format be matched with the differing needs of the end-user? |  |
| * How can the subsidiary of information be maintained - delivering the right info at the right time to the right level and the right end-user? |  |
| **Marketing** | * How can the info on knowledge products be delivered to the end-user? |  |
| * What events (external and internal to the organization) can be used to disseminate knowledge meta-info, both online and offline? |  |
| * How can effective networking by the organization's staff serve the timely delivery of knowledge products? |  |
| **Delivery Modalities** | * What appropriate information infrastructure needs to be developed for knowledge management: online and offline? |  |
| * What components of knowledge products need to be on-line and what components need to be offline (electronic and hardcopy)? |  |
| * Depending on the target end-user, what will be the frequency, format and mode of delivery of the knowledge products? |  |

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| **Support Systems** | * Besides the main knowledge product, what kinds of support systems need to be put in place: ongoing - during the course of learning; and follow-up - as a continuous learning exercise? |  |
| * What kinds of value-added resources need to be delivered to the main e-learning product in order to make it more relevant to different end-users - 'individualized' or 'regionalized'? |  |
| * How will queries and comments/suggestions etc. from users be processed? How will it be used to enhance the quality of knowledge products/processes? |  |

***Section 2***

How does the knowledge management of the department you investigated compare to those of another department within the same organisation? Write a short paragraph, motivating your answer.

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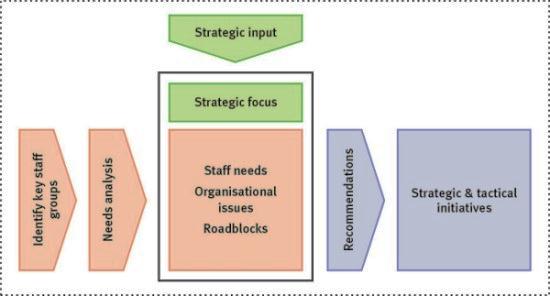
***Section 3***

What are the strengths and weaknesses of the knowledge management system in the department you investigated?

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| **Strengths** | **Weaknesses** |
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***Section 4***

Write a short report on your findings of the knowledge management system which you investigated exploring possible alterations/amendments to it to ensure it is enhanced. Attach this report to this manual.

There are many approaches for developing a knowledge management strategy, each supported by a holistic model of KM processes.

*Developing a knowledge management strategy*

These can be classified into two main approaches:

***Top-down***

The overall strategic direction of the organisation is used to identify the focus of the knowledge management initiative. This is reflected in a series of activities designed to meet this broad goal.

***Bottom-up***

Research is conducted into the activities of staff involved in key business processes. The findings of this research highlights key staff needs and issues, which are then tackled through a range of knowledge management initiatives.

Each of these approaches has its strengths, and in practice, a success KM programme must encompass both. This section presents a model that focuses strongly on the needs analysis activities with staff, to drive a primarily bottom-up strategy, as follows:

1. Identify the key staff groups within the organisation. These groups deliver the greatest business value, or are involved in the most important business activities.
2. Conduct comprehensive and holistic needs analysis activities with selected staff groups, to identify key needs and issues.
3. Supplement this research with input from senior management and organisational strategy documents, to determine an overall strategic focus.
4. Based on these findings, develop recommendations for addressing the issues and needs identified.
5. Implement a series of strategic and tactical initiatives, based on the recommendations. These will select suitable knowledge management techniques and approaches.

***Benefits of this approach***

Historically, many knowledge management strategies have focused solely on the top-down approach, identifying high-level objectives such as ‘become a knowledge-enabled organisation’. With little understanding, of the key issues and needs of staff throughout the organisation, these initiatives found it difficult to engage staff in the required cultural and process changes.

As a result, many of these initiatives had little long-term impact on the organisation, despite initial efforts. Recognising these issues, this approach focuses much more strongly on the initial needs analysis activities. The approach to developing a KM strategy outlined in this article provides a number of major benefits:

***Holistic***

The focus on needs analysis will identify a wide range of issues and requirements. Some will be organisation-wide, while others will be specific to individual business units or job roles. The use of a range of needs analysis techniques will identify:

* Cultural issues
* Key business needs
* Duplication of effort
* Inconsistencies in practices
* Inefficiencies in business processes
* Opportunities for improved policies or procedures
* Major business risks

***Solution-independent***

The approach used to develop the knowledge management strategy makes no assumptions about the solutions that might be implemented. As such, the approach is independent of any technologies implemented, or knowledge management techniques applied. Instead, the approach is to identify the need, and then determine the solution.

Talking with staff is always enlightening

***Simple***

The use of well-tested needs analysis techniques gives confidence that the true issues in the organisation will be identified. In practice, these simply ‘fall out’ of the research activities, with the key strategic and tactical recommendations becoming obvious in most cases. This simplicity makes the process easy to implement, and ensures that the findings and recommendations are well-understood throughout the organisation.

***Efficient***

A modest amount of initial research will be sufficient to identify the most crucial problems within the organisation. These can then be tackled with suitable activities and initiatives. Once this first round of projects have delivered tangible business benefits, additional targeted research can be used to identify further issues to be addressed. This ‘iterative’ approach can then be repeated, ensuring that business improvements are seen even as the next round of research is initiated.

***Targets resources***

There are many ‘good ideas’ that can be drawn from the field of knowledge management. The challenge is to identify those approaches that will have the greatest impact upon the organisation. By starting with the needs analysis, approaches can be targeted to address the most critical issues, or to deliver the greatest business benefits.

***Target the critical issues with the KM strategy***

***Identifying key staff groups***

The first step in the process is to identify the key staff groups in the organisation. The key staff are typically those directly involved in the most important business activities. In general, the key staff groups are more likely to be those at the front-line, rather than managers or administrative staff.

This will, of course, depend on the nature and structure of the organisation.

Common staff groups involve:

* Front-line staff
* Call centre staff
* Field workers
* Researchers
* Clinical staff
* Production workers
* Administrative and support staff
* Managers (senior, line)
* IT staff

Each of these groups will have specific needs and issues, as well as those in common with the organisation as a whole. By targeting the key staff groups, the extent to which the needs vary across the organisation can be identified, and the KM strategy developed accordingly.

***Needs analysis techniques are drawn from many fields***

***Needs analysis techniques***

There are a wide range of need analysis techniques, drawn from fields such as knowledge management, user-centred design, ethnography and anthropology.

Techniques include:

* Facilitated discussions
* Focus groups
* Surveys
* Staff interviews
* Workplace observation
* Contextual inquiry
* Task analysis

In practice, more than one technique should be used with a selected group of staff, to ensure that a complete picture is built up. Each of the techniques are briefly described in the sections below.

***Facilitated discussions***

There are a wide range of facilitated discussion techniques that can be used to explore issues with targeted staff groups. These are most commonly used with management, consultants, and other staff comfortable with these types of meetings. Techniques such as ‘affinity diagrams’ can be used to provide structure to the discussions, and to capture the issues identified. In many cases, facilitated discussions are used as the primary mechanism for gaining the strategic input required for the development of the KM strategy.

***Focus groups***

These are a specific, and widely-used, form of facilitated discussions that focus on exploring a topic within a group setting. Often used as a way of gathering input from larger numbers of stakeholders, focus groups must be run carefully if they are to generate meaningful results. Focus group are best used to explore current issues and problems, rather than to discuss future ‘wish-lists’ of knowledge management approaches. Focus groups should always be used in conjunction with techniques such as staff interviews and contextual inquiry, to ensure that the results are meaningful.

***Surveys***

The use of surveys is widespread, and they are a very efficient way of gaining input from a large number of staff throughout an organisation. In practice, surveys are best used to gather staff opinions, rather than specific information on which to base decisions. Care must also be taken when developing the survey questions, and analysing the results. Survey results must always be supported with the use of other techniques, to provide confidence in the findings. Interviews are very effective at identifying staff needs

***Staff interviews***

One-on-one interviews are one of the most effective and often used techniques for identifying staff needs and issues.

***Workplace observation***

This involves going ‘out into the field’ to observe the activities of staff, and the environment in which they work. Workplace observation is particularly effective in environments such as call centres, manufacturing areas, field working, or on-the-road staff. It is a very holistic technique that will identify patterns of work and environment issues that are impossible to gather using techniques such as surveys or focus groups.

***Contextual inquiry***

This is a combination of staff interviews and workplace observation that involves exploring issues with a staff person, while situated within their normal working environment. By conducting the interview ‘in context’, it becomes possible to see the resources used by staff when conducting work activities. The interviewer can also ask the staff person to show them how they complete specific activities, for example, showing how they find a piece of information on the intranet. This technique is very effective at identifying issues with currently available information sources and tools.

***Task analysis***

Not all activities within an organisation are of equal value. Key business tasks should be identified, and investigated to gain an understanding of the steps involved, and the knowledge required at each step. The existing sources of the knowledge can then be identified, along with the key issues and roadblocks impacting upon the effectiveness and efficiency of the task. This type of research will identify mechanisms for both improving the task itself, as well as indicating how to improve the provision of knowledge to those involved in completing the task. Supplement the needs analysis with a strategic focus

***Strategic input***

While the needs analysis activities focused on the ‘bottom-up’ aspects of the KM project, the overall strategic focus must also be identified. This strategic focus then guides the knowledge management strategy, providing a framework for the selection and prioritisation of individual projects and activities. In this way, both the bottom-up and top-down aspects of the knowledge management strategy are addressed.

There are a number of sources of input that can be drawn upon when determining the strategic focus, including:

* Senior management involvement, via interviews, facilitated discussions, or other interactions.
* Organisational strategy documents, such as the corporate plan or annual report.
* Results of other strategic research projects, such as ’staff satisfaction surveys’.
* External market research.
* Industry ‘best practices’, and other reports drawn from relevant industry or sector bodies.
* These inputs can then be synthesised into a strategic focus for the knowledge management initiatives.
* Use corporate documents as a key strategic input

***Common findings***

The needs analysis and strategic input will highlight a broad range of issues and needs throughout the organisation. In past projects, we have identified issues such as:

* Difficulty in finding key corporate information
* Inconsistent and unstructured approach to information management
* Ineffective dissemination of corporate and regional news
* Reliance on ‘rumour’ and ‘gossip’ as the key sources of organisational news
* Lack of knowledge sharing between related business units
* Difficulties in determining and disseminating ‘best practices’
* Inconsistency in advice given by call centre and front-line staff
* Over reliance on long-service members of staff as sources of knowledge
* Cultural barriers between head office and regional staff
* Duplication of effort between regions
* Roadblocks between policy development and programme implementation

These are just a small sampling of possible findings, to provide an idea of the types of issues that will often drive the implementation of a knowledge management strategy.

***Acting on the findings***

With an in-depth understanding of the problems, issues and needs within the organisation, it is then possible to meaningfully determine appropriate strategies for addressing them. This will undoubtedly include a range of both strategic (long-term) and tactical (short-term) initiatives. Depending on the issues identified, these might include:

* Improving the corporate intranet
* Formalising communities of practice
* Implementing coaching and mentoring programmes
* Improving document and records management
* Facilitating skills transfer from retiring staff
* Capturing staff knowledge in a documented form
* Improving policies and procedures
* Implementing new learning approaches, including e-learning
* Enhancing the corporate staff directory
* Implementing team collaboration tools and processes
* Establishing after-action review processes
* Formalising the role of ‘knowledge brokers’ within the organisation

These are just a small cross-section of the many possible approaches that can be taken to knowledge management. As highlighted throughout this article, only the needs analysis activities allow a meaningful selection to be made between these different approaches. In practice, each organisation will apply a unique mix of short-term ‘quick wins’ and longer-term projects to meet knowledge management needs.

***Conclusion***

Developing a knowledge management strategy provides a unique opportunity to gain a greater understanding of the way the organisation operates, and the challenges that confront it. By focusing on identifying staff needs and issues, activities and initiatives can be recommended with the confidence that these will have a clear and measurable impact upon the organisation. Supplementing this ‘bottom-up’ research with a strategic focus then ensures that the KM initiative is aligned with broader organisational directions.

Taking this approach to the development of a KM strategy allows limited resources to be targeted to the key needs within the organisation, delivering the greatest business benefits while positioning the organisation for long-term growth and stability.

**You are now ready to go through a check list. Be honest with yourself.**

# Tick the box with either a √ or an X to indicate your response.

* **I am able to demonstrate and understanding of the concepts and components of knowledge management.**
* **I am able to analyse a unit according the entity's knowledge management policies and procedures.**
* **I am able to develop a knowledge management implementation plan for a unit.**

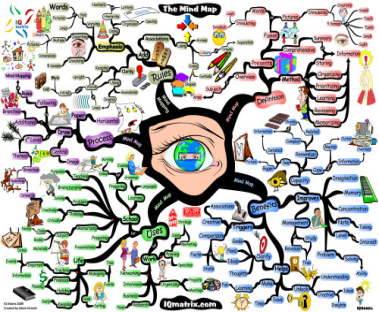


# You must think about any point you could not tick. Write this down as a goal.

# Decide on a plan of action to achieve these goals. Regularly review these goals.

## Create and manage an environment that promotes innovation

## 252020

****

This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them. The qualifying learner is capable of:

* Analysing own unit in terms of opportunities for innovation
* Demonstrating understanding of the techniques that promote creativity
* Developing a plan for creating an environment conducive to innovation
* Leading a team through a creative thinking process

**Index**

|  |  |
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| **Competence Requirements** | **Page** |
| **Unit Standard 252020 alignment index**  Here you will find the different outcomes explained which you need to be proved competent in, in order to complete the Unit Standard 252020. | **116** |
| **Unit Standard 252020** | **118** |
| **Analyse own unit in terms of opportunities for innovation** | **125** |
| **Demonstrate understanding of the techniques for promoting creativity** | **131** |
| **Develop a plan for creating an environment conducive to innovation** | **137** |
| **Lead a team through a creative thinking process** | **146** |
| **Self-assessment**  Once you have completed all the questions after being facilitated, you need to check the progress you have made. If you feel that you are competent in the areas mentioned, you may tick the blocks, if however you feel that you require additional knowledge, you need to indicate so in the block below. Show this to your facilitator and make the necessary arrangements to assist you to become competent. | **150** |

# Unit Standard 252020 – Alignment Index

|  |  |
| --- | --- |
| **SPECIFIC OUTCOMES AND RELATED ASSESSMENT CRITERIA** | |
| **SO 1** | **Analyse own unit in terms of opportunities for innovation** |
| **AC 1** | Identify features of an environment that promotes innovation.  (The features of an environment conducive to innovation include openness, creative thinking, questioning, encouragement of risk-taking, rewards for innovation, as well as a culture of enquiry, challenging the status quo and learning from mistakes.) |
| **AC 2** | Analyse own unit in relation to the features of an environment conducive to innovation. |
| **AC 3** | The findings of the analysis are interpreted to determine whether the current environment promotes innovation. |
| **AC 4** | Areas for improvement are identified on the basis of the analysis conducted. |
| **SO 2** | **Demonstrate understanding of the techniques for promoting creativity** |
| **AC 1** | Creativity and innovation techniques are identified in terms of generally accepted theory and practice. |
| **AC 2** | Three techniques for promoting creativity are explained with practical examples. |
| **SO 3** | **Develop a plan for creating an environment conducive to innovation** |
| **AC 1** | The role of the unit manager in creating an environment conducive to innovation is described with reference to continuous improvement and innovation of the unit. |
| **AC 2** | The processes, actions and approaches necessary to create an environment conducive to innovation are recorded in the plan. (The plan could include the activities, techniques, approaches, processes, role players, reward systems, measurement, potential risks and benefits, and skills development of the unit manager and team members.) |
| **AC 3** | The implementation of the plan is described with reference to the environment and availability of resources. |
| **AC 4** | The plan is promoted within the unit in order to encourage commitment. |
| **SO 4** | **Lead a team through a creative thinking process** |
| **AC 1** | Techniques for promoting innovation and creativity are applied to generate ideas for a new or improved process, project or product. |
| **AC 2** | A number of alternative solutions are generated in relation to the process, project or product. |
| **AC 3** | The best alternative is selected from the solutions generated on the basis of evaluation criteria. |
| **AC 4** | A concept is developed for implementation in accordance with the entity's policies and procedures |
| **AC 5** | The concept is recorded and communicated for implementation. |

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| **CRITICAL CROSS FIELD OUTCOMES** |
| ***UNIT STANDARD CCFO IDENTIFYING***  Identify and solve problems in order to generate innovative solutions.  ***UNIT STANDARD CCFO WORKING***  Work effectively with others when generating new ideas.  ***UNIT STANDARD CCFO ORGANISING***  Organise and manage oneself and one’s activities when participating in creative and innovative processes.  ***UNIT STANDARD CCFO COLLECTING***  Collect, evaluate, organise and critically evaluate information when generating ideas.  ***UNIT STANDARD CCFO COMMUNICATING***  Communicate effectively with stakeholders on innovative ideas generated.  ***UNIT STANDARD CCFO SCIENCE***  Use science and technology to assist with idea generation and to record ideas.  ***UNIT STANDARD CCFO DEMONSTRATING***  Demonstrate an understanding of the world as a set of related systems and how innovations in one area could impact on another.  ***UNIT STANDARD CCFO CONTRIBUTING***  In order to contribute to the full personal development of each learner and the social and economic development of society at large, it must be the intention underlying any programme of learning to make an individual aware of the importance of:  Participating as responsible citizens in the life of local, national and global communities.  Developing entrepreneurial opportunities. |

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| **SOUTH AFRICAN QUALIFICATIONS AUTHORITY** |

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| **REGISTERED UNIT STANDARD:** |

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| **Create and manage an environment that promotes innovation** |

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| **SAQA US ID** | **UNIT STANDARD TITLE** | | | |
| 252020 | Create and manage an environment that promotes innovation | | | |
| **ORIGINATOR** | | **REGISTERING PROVIDER** | | |
| SGB Generic Management | |  | | |
| **QUALITY ASSURING BODY** | | | | |
| - | | | | |
| **FIELD** | | | **SUBFIELD** | |
| Field 03 - Business, Commerce and Management Studies | | | Generic Management | |
| **ABET BAND** | **UNIT STANDARD TYPE** | **OLD NQF LEVEL** | **NEW NQF LEVEL** | **CREDITS** |
| Undefined | Regular | Level 5 | New Level Assignment Pend. | 6 |
| **REGISTRATION STATUS** | | **REGISTRATION START DATE** | **REGISTRATION END DATE** | **SAQA DECISION NUMBER** |
| Registered | | 2007-11-28 | 2010-11-28 | SAQA 0474/07 |
| **LAST DATE FOR ENROLMENT** | | **LAST DATE FOR ACHIEVEMENT** | | |
| 2011-11-28 | | 2014-11-28 | | |

|  |
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| In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise. |

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| This unit standard replaces: |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **US ID** | **Unit Standard Title** | **Old NQF Level** | **New NQF Level** | **Credits** | **Replacement Status** |
| 15216 | Create opportunities for innovation and lead projects to meet innovative ideas | Level 5 | New Level Assignment Pend. | 4 | Complete |

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| **PURPOSE OF THE UNIT STANDARD** |

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| This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   The qualifying learner is capable of:   Analysing own unit in terms of opportunities for innovation.   Demonstrating understanding of the techniques that promote creativity.   Developing a plan for creating an environment conducive to innovation.   Leading a team through a creative thinking process. |

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| **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING** |

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| It is assumed that learners are competent in:   Communication at NQF Level 4.   Mathematical Literacy at NQF Level 4.   Computer Literacy at NQF Level 4. |

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| **UNIT STANDARD RANGE** |

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|  The learner is required to apply the learning in respect of this/her own area of responsibility.   Unit refers to the division, department or business unit in which the learner is responsible for managing and leading staff.   Entity includes, but is not limited to, a company, business unit, public institution, small business, Non-Profit Organisation or Non-Governmental Organisation.   Innovation is the bringing into being of something that did not exist before, i.e. a product, process or idea. Innovation happens when two or more ideas merge, that have never been merged before.   Techniques for encouraging creativity include brainstorming, mind mapping, lateral thinking and problem solving techniques.   Steps for solving problems include defining and analysing the problem, generating solutions, analysing solutions, selecting the best solution and developing an action plan.   Stakeholders include team members, managers, customers, suppliers and interest groups. |

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| **Specific Outcomes and Assessment Criteria:** |

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| **SPECIFIC OUTCOME 1** |

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| Analyse own unit in terms of opportunities for innovation. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Identify features of an environment that promotes innovation. |

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| **ASSESSMENT CRITERION RANGE** |

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| The features of an environment conducive to innovation include openness, creative thinking, questioning, encouragement of risk-taking, rewards for innovation, as well as a culture of enquiry, challenging the status quo and learning from mistakes. |

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| **ASSESSMENT CRITERION 2** |

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| Analyse own unit in relation to the features of an environment conducive to innovation. |

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| **ASSESSMENT CRITERION 3** |

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| The findings of the analysis are interpreted to determine whether the current environment promotes innovation. |

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| **ASSESSMENT CRITERION 4** |

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| Areas for improvement are identified on the basis of the analysis conducted. |

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| **SPECIFIC OUTCOME 2** |

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| Demonstrate understanding of the techniques for promoting creativity. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Creativity and innovation techniques are identified in terms of generally accepted theory and practice. |

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| **ASSESSMENT CRITERION 2** |

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| Three techniques for promoting creativity are explained with practical examples. |

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| **SPECIFIC OUTCOME 3** |

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| Develop a plan for creating an environment conducive to innovation. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| The role of the unit manager in creating an environment conducive to innovation is described with reference to continuous improvement and innovation of the unit. |

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| **ASSESSMENT CRITERION 2** |

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| The processes, actions and approaches necessary to create an environment conducive to innovation are recorded in the plan. |

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| **ASSESSMENT CRITERION RANGE** |

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| --- |
| The plan could include the activities, techniques, approaches, processes, role players, reward systems, measurement, potential risks and benefits, and skills development of the unit manager and team members. |

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| **ASSESSMENT CRITERION 3** |

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| The implementation of the plan is described with reference to the environment and availability of resources. |

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| **ASSESSMENT CRITERION 4** |

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| The plan is promoted within the unit in order to encourage commitment. |

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| **SPECIFIC OUTCOME 4** |

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| Lead a team through a creative thinking process. |

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| --- |
| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Techniques for promoting innovation and creativity are applied to generate ideas for a new or improved process, project or product. |

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| **ASSESSMENT CRITERION 2** |

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| A number of alternative solutions are generated in relation to the process, project or product. |

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| **ASSESSMENT CRITERION 3** |

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| The best alternative is selected from the solutions generated on the basis of evaluation criteria. |

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| **ASSESSMENT CRITERION 4** |

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| A concept is developed for implementation in accordance with the entity's policies and procedures. |

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| **ASSESSMENT CRITERION 5** |

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| The concept is recorded and communicated for implementation. |

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| **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS** |

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|  Anyone assessing a candidate against this Unit Standard must be registered as an assessor with the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Any institution offering learning that will enable achievement of this Unit Standard must be accredited as a provider through the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures. |

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| **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE** |

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|  Features of an environment conducive to creativity and innovation.   Features of a culture of enquiry and risk taking.   Creative thinking techniques.   Problem solving techniques.   Management practices that inhibit creativity, risk taking and innovation. |

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| **UNIT STANDARD DEVELOPMENTAL OUTCOME** |

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| N/A |

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| **UNIT STANDARD LINKAGES** |

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| N/A |

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| **Critical Cross-field Outcomes (CCFO):** |

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| **UNIT STANDARD CCFO IDENTIFYING** |

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| Identify and solve problems in order to generate innovative solutions. |

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| **UNIT STANDARD CCFO WORKING** |

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| Work effectively with others when generating new ideas. |

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| **UNIT STANDARD CCFO ORGANISING** |

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| Organise and manage oneself and one`s activities when participating in creative and innovative processes. |

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| **UNIT STANDARD CCFO COLLECTING** |

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| Collect, evaluate, organise and critically evaluate information when generating ideas. |

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| **UNIT STANDARD CCFO COMMUNICATING** |

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| Communicate effectively with stakeholders on innovative ideas generated. |

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| **UNIT STANDARD CCFO SCIENCE** |

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| --- |
| Use science and technology to assist with idea generation and to record ideas. |

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| **UNIT STANDARD CCFO DEMONSTRATING** |

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| --- |
| Demonstrate an understanding of the world as a set of related systems and how innovations in one area could impact on another. |

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| **UNIT STANDARD CCFO CONTRIBUTING** |

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| In order to contribute to the full personal development of each learner and the social and economic development of society at large, it must be the intention underlying any programme of learning to make an individual aware of the importance of:   Participating as responsible citizens in the life of local, national and global communities.   Developing entrepreneurial opportunities. |

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| **QUALIFICATIONS UTILISING THIS UNIT STANDARD:** |

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| --- | --- | --- | --- | --- | --- | --- |
|  | **ID** | **QUALIFICATION TITLE** | **OLD LEVEL** | **NEW LEVEL** | **STATUS** | **END DATE** |
| Core | [59201](http://allqs.saqa.org.za/showQualification.php?id=59201) | National Certificate: Generic Management | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Elective | [65030](http://allqs.saqa.org.za/showQualification.php?id=65030) | National Certificate: Arts and Culture Development Management | Level 5 | New Level Assignment Pend. | Registered | 2012-03-12 |
| Elective | [63769](http://allqs.saqa.org.za/showQualification.php?id=63769) | National Certificate: Business Analysis Support Practice | Level 5 | New Level Assignment Pend. | Registered | 2011-10-22 |
| Elective | [65050](http://allqs.saqa.org.za/showQualification.php?id=65050) | National Certificate: Music | Level 5 | New Level Assignment Pend. | Registered | 2012-03-12 |

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***There is no doubt that creativity is the most important human resource of all. Without creativity, there would be no progress, and we would be forever repeating the same patterns.***

The need for innovation permeates every organisation from top to bottom, but not every organisation is adept at generating creative solutions to its problems. As a senior executive, what can you do to promote innovation and creativity that is manageable and measurable at every level of the company, including:

* Small improvements whose cumulative effect adds up to big savings in day-to-day processes
* Major changes that revolutionize jobs, products and services
* Breakthroughs in strategic thinking that could redefine the nature of the organization?

As depicted in the diagram below, creativity arises through the confluence of the following three components:

***Knowledge*** – all the relevant understanding an individual brings to bear on a creative effort.

***Creative Thinking*** – Relates to how people approach problems and depends on personality and thinking/working style

***Motivation*** – Motivation is generally accepted as the key to creative production, and the most important motivators are intrinsic passion and interest in the work itself.

***The Components of Creativity***

Individual differences in creative productivity account for more variance in output in a given career period, than does age, so that truly prolific creators in their final years may be more productive than less notable contributors at their career peaks.

***What makes an environment creatively conducive?***

***Openness*** – when an environment is “open” it does not refer to the space which flows through it, but rather to the allowance of ideas and innovation to pass through the environment. Picturing the 1950’s and 1960’s office environments, one seldom recall these being open-plan and conducive to interaction between the employees. By allowing an office environment to be “open”, you welcome the input and ideas from everyone within the office; from the head designer, to the cleaner who passes by making a comment which could be the solution to the problem, which experts overlooked.

***Creative thinking*** – by thinking creatively you allow the chain of thought to wonder freely and not stick to the conventional ideas and concepts. Being creative or rather, educing creativity and creative thoughts form employees plants the seed that their input and creativity is embroidered within the organisation, which, in turn, spurs them on to the creative side of their thoughts.

***Questioning*** – when you question creativity, it must be done in a manner where the person is required to pronounce their creative flair to the rest of the employees, rather than being afraid of the question, thinking they have done something wrong. By asking questions, people evoke thoughts which must be nurtured to be creative.

***Encouragement of risk-taking*** – while there is nothing wrong with being conservative and safe, creativity requires risk taking to advance with new ideas and concepts. While most employees will shrug off any risk taking for the sake of being sure that something will work, encouragement of risk taking will assist in their thought advancement.

***Rewards for innovation*** – praising employees when they have achieved innovative outcomes to specific problems, will entice them to continue with the current chain of thought. Rewards can range from praising their outcomes in public (within the organisation/department), to incentives (financial) and even advancing through the ranks of the company.

***Culture of enquiry*** – querying, asking, requiring information and the search of the ever illusive “what if” will spur the employees on to ask and enquire what will happen if... why can this not work... how will this work. Without asking, there will be no advances in technology because everyone will be happy with the status quo and refrain from advancement in any type of industry.

***Challenging the status quo*** – before the status quo has been outlived, there must be challenges to it to ensure that the world continues on its path of evolution. If we accepted what we had and never challenged the status quo, we would still be making fire by rubbing pieces of wood together and would never think that millions of tons of steel can actually float. Such challenging theories and thoughts is what drive us to explore what was thought never achievable; the first step however, is the thought of challenge.

***Learning from mistakes*** – trial and error is one of the best learning curves that anyone can have; and it must be one of the most common. By making a mistake and learning form it, new ways forward can be identified, as tried and tested methods which do not work are eradicated. Once a mistake is understood, it will not be made again and the lessons learned can be applied to new ideas.

***On Your Own***

Take a critical look at your department/section, and complete the following:

Which areas in your department/section can benefit from new procedures and innovation?

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How will the innovation benefit the department/section?

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Listed above is 8 ways of ensuring that innovation is applied by employees in an organisation. Which of these do you think are relevant to your department/section? Motivate your answer.

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What stumbling blocks do you foresee with innovation in your department?

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What plan can you implement to motivate the employees to be more innovative?

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***Assessing the Psychological Environment for Creativity***

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| **Dimension** | **Rating** | | |
| **Adequate** | **A**  **Strength** | **Needs**  **Improvement** |
| Are group guidelines already in place? Are they articulated and disseminated? |  |  |  |
| Do you, as the manager, encourage risk taking? |  |  |  |
| Are people allowed to take intelligent risks, and fail, without being penalized? |  |  |  |
| When someone fails, do you help him/her and the group identify the learning in the failure? |  |  |  |
| Do you distinguish between intelligent failures (something risky, but promising) and mistakes (something clearly avoidable)? |  |  |  |
| Do your current rewards motivate group members to be creative? |  |  |  |
| Do you currently have rewards for creative ideas and suggestions? |  |  |  |
| Do you have both extrinsic (for example, money) and intrinsic (for example, providing a sense of accomplishment) rewards in your current reward system? |  |  |  |
| Do you recognize group members who successfully work outside their preferred thinking style or area of expertise? |  |  |  |
| Do you support intellectual conflict within your group? |  |  |  |
| Do you encourage people to point out unacknowledged and taboo subjects that are holding the group back? |  |  |  |
| Do you reward collaboration? |  |  |  |
| Do individuals have freedom to choose their projects or to determine how they reach their agreed-upon goals? |  |  |  |
| Are you, as a manager, alert to individuals who may be burning out? |  |  |  |
| Do you celebrate small successes? |  |  |  |
| Do you encourage the group to stop and review how much progress it has made? |  |  |  |

***Ideas for Improvement***

Based on your answers, what refinements would you make to your group’s norms?

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What would you do to your reward structure and to your own management style?

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***For the Employer:***

***How to Increase Employees' Creative Potential***

***The Good News about Creativity:***

* Creativity just happens. No one can predict or control who will be creative, what the next creative act will be, or when it will happen. The best thing your company can do is to prepare for creativity to happen.
* You do not need to go out and hire creative people. Your present employees are very capable of being creative.
* You do not need to hire expensive consultants to teach your employees how to be creative.
* Creativity does not depend on age, length of employment, or the type of work the employee performs.
* Creative acts come in all sorts of sizes and shapes. A creative act can be simple as well as complex.
* You do not need to pay people more money to be creative; in fact, it may make them less creative if you do.

***The Bad News about Creativity:***

Creative ideas usually cannot compete with a company's political and bureaucratic structure.

One person's creative idea is another person's bad idea. A good creative act can often threaten your co-workers.

Unfortunately it is all too easy for a company to create an atmosphere that discourages creative ideas from developing.

***Steps to enhancing your company's ability to benefit from creative ideas:***

***1.) Develop a suggestion system and throw out the suggestion box.***

This means that a company should have a system in place that carefully considers each creative idea. This suggestion system should reach every employee in every location that the company operates. It should also be easy to use, and not be composed of forms and red tape. After the system is in place, a team composed of employees from each department meet once month to review all new ideas and to report back on the development of past creative ideas. The team should also be empowered to reward those employees that develop creative ideas that make a positive impact.

***2.) Develop a company atmosphere that endorses creativity as a valuable commodity.***

Just as the employee’s computer is a company asset, the employee’s brain should also be considered a company asset. This can be easily accomplished by setting up a suggestion system, and by having upper management give their permission for employees to work on the development of new ideas and products.

***3.) Move people around and develop communication patterns that don’t put your employees to sleep.***

If possible, allow employees to observe other employees doing their work, and arrange for company retreats were employees can meet each other informally and share information. Interaction and communication are important because creative acts do not develop in a vacuum, but instead take a great deal of team work.

***4.) Do not monetarily reward the quantity of new creative ideas you receive from employees.***

For example, do not impose a creative quota where every employee must turn in “x” number of creative ideas per month in order to get a bonus. Do monetarily reward successful creative ideas and good attempts at being creative. Allow employees to take their creative ideas to other companies if your company does not have the ability to develop it.

***For the Employee:***

***How to Increase Your Creative Potential***

***The Good News about Creativity:***

* You do not need a Ph.D. in creativity to be creative. In addition, you do not need to attend seminars on how to be creative.
* Creativity does not depend on how old you are, your level of experience/education, or the type of work you do. You can be a creative auto mechanic as well as a creative sales person.
* You do not need to think big when it comes to creativity. A small idea can be very valuable and cost effective when it is measured over time.
* Creativity can be very self-rewarding. In fact, it can be so rewarding that you could spend hours, weeks, or even years in turning the dream into reality.
* No one can know for sure who will have the next creative idea, when it will occur, or what it will be. So, it could be you!

***The Bad News about Creativity:***

* Unless your company is set up to receive and accurately evaluate creative ideas, it is liable to be rejected. Western companies adopt about 38% of all creative ideas presented to them, as compared to Oriental companies who adopt about 90%.
* Your creative idea may threaten your co-workers' jobs, or even put you out of a job.
* Your creative idea is not likely to make you rich.
* You are likely to feel very frustrated if you are working in a company that does not appreciate creative thinking.

***Steps to enhancing your ability to develop creative ideas:***

***1.) Do not work in a vacuum.***

Being creative requires diverse stimuli and connections with other people. Make sure you know what your company's other departments are up to, and how their work might connect to your creative idea.

***2.) Align with your company’s goals and directions.***

If your company just started developing a new education software product, they might not be opened for your new idea about developing a video game. But they might if you can show them how your video game could improve their educational software.

***3.) Bring your lucky rabbit’s foot to work.***

In other words, do not underestimate the power that serendipity plays in creativity. If you are involved in an unusual occurrence, do not overlook it--but analyze its possibilities. Many of the most financially successful ideas were developed only after an accident led to their discovery.

***4.) Plan to work after hours and on some weekends to fine tune your creative idea.***

Get permission to use your company’s computer, supplies, and other resources that might help you to develop and explore the potential of your new idea. Just remember, if you use company material to develop your new idea, it more than likely will belong to them and not you.

***5.) Explore external sources.***

Go to seminars on topics related or loosely related to ideas or in areas that you hope to develop creative ideas. Attending outside seminars is a good method of gaining diverse stimuli.

***6.) Remain positive.***

Do not listen to the "nay-says," but do listen to constructive feedback.

*The key question isn’t “What fosters creativity?” but it is why in God’s name isn’t everyone creative? Where was the human potential lost? How was it crippled? I think therefore a good question might be not why do people create? But why do people not create or innovate? We have got to abandon that sense of amazement in the face of creativity, as if it were a miracle if anybody created anything.*  ***Abraham Maslow***

***On Your Own***

Complete the following table to assess your workplace’s friendliness to creativity and innovation

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **Rating** | | |
| **Adequate** | **A**  **Strength** | **Needs**  **Improvement** |
| **Your Leadership Style** | | | |
| I can describe my own preferred style of thinking and working |  |  |  |
| I have talked with members of my group about their preferred modes of problem solving |  |  |  |
| I encourage intellectual conflict within my group |  |  |  |
| When group members disagree, I help them determine the source of their differences |  |  |  |
| When communicating with others, I take into consideration their preferred thinking style |  |  |  |
| **Diversity of Styles** | | | |
| I am aware of the creative value of diverse thinking styles, and try to incorporate this diversity in teams |  |  |  |
| I actively seek out or hire people with diverse backgrounds and thinking styles |  |  |  |
| Our group recognizes the conflict that creative abrasion can cause, but also appreciates its value |  |  |  |
| We take formal diagnostic tests to identify thinking/learning styles, and discuss the results of these assessments |  |  |  |
| **Your Work Group** | | | |
| The majority never ignores the minority opinions in my work group |  |  |  |
| I have added someone to my work group specifically because he or she brings a fresh perspective |  |  |  |
| Our work environment supports those who think differently from the majority |  |  |  |
| The thinking styles, skills, and experiences of my work group's members are diverse and balanced |  |  |  |
| I actively look for group members whose thinking styles differ from my own |  |  |  |
| I help my group establish and agree upon a clear project goal at the start of each project |  |  |  |
| My group has formally agreed-upon behaviour guidelines for how they should work together and treat each other. |  |  |  |
| **The Psychological Environment** | | | |
| I support people taking intelligent risks, and do not penalize them when they fail |  |  |  |
| There are opportunities for people to take on assignments that involve risk and stretch their potential |  |  |  |
| We openly discuss risk-taking, assess the risk potential of projects, and make contingency plans or identify risk management strategies |  |  |  |
| Rewards and/or recognition are given for creative ideas |  |  |  |
| As long as they show learning from the experience, group members are not penalized for experimentation and risk taking |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Dimension** | **Rating** | | |
| **Adequate** | **A**  **Strength** | **Needs**  **Improvement** |
| **The Physical Workspace** | | | |
| Our workspace includes stimulating objects such as journals, art, and other items that are not directly related to our business |  |  |  |
| I have made changes to our physical workspace to improve communication and creative interaction |  |  |  |
| I provide group members with a wide variety of traditional and non-traditional communication tools (e-mail, whiteboards, crayons and paper, etc.) |  |  |  |
| Group members are encouraged to make their workspaces reflect their individuality |  |  |  |
| Our workspace includes both areas for boisterous interaction and areas for quiet reflection |  |  |  |
| **Bringing in Outsiders or Alternative Perspectives** | | | |
| Our group makes visits to people outside the division or organization in order to find different perspectives and ideas |  |  |  |
| Our group has observed clients actually using our products or services in their own environment |  |  |  |
| Our group has observed our clients' customers using our products or services in their own environment |  |  |  |
| I have arranged for speakers from other industries to come to talk to or work with my group |  |  |  |
| Our group has observed people using competitors' products or services |  |  |  |
| Our group has benchmarked the functions and characteristics of our products, services, or processes against an industry other than our own. |  |  |  |
| **Promoting Group Convergence** | | | |
| I encourage group members to bring up and discuss non work-related subjects when they interfere with work |  |  |  |
| When a project has been completed, I hold a debrief meeting to determine specifically what to do differently (or the same) the next time |  |  |  |
| When I hold a debrief meeting, I always make sure that all members can be present |  |  |  |
| When my group is stuck on a problem, I make sure they get "down time" or time off to step back, relax, and allow their subconscious minds to work |  |  |  |
| At the end of a project, I provide a way for my group to celebrate and rejuvenate |  |  |  |
| Project schedules allow enough time for group brainstorming and discussion of ideas. |  |  |  |

Creativity is the mental and social process—fuelled by conscious or unconscious insight—of generating ideas, concepts, and associations. Innovation is the successful exploitation of new ideas: it is a profitable outcome of the creative process, which involves generating and applying in a specific context products, services, procedures, and processes that are desirable and viable. Naturally, people who create and people who innovate can have different attributes and perspectives.

It follows, then, that innovation begins with creativity. In the world of organizations, be they private or public, lack of either leads to stagnation, and leaves an organization unable to perform or meet change.

However, creative thinking cannot be turned on and off at the flick of a switch. And innovation does not occur in a vacuum; it requires effective strategies and frameworks, among which incentives are paramount.

Creativity flourishes in organizations that support open ideas: these organizations create environments that inspire personnel and maintain innovative workplaces; those that fail are large organizations that stifle creativity with rules and provide no slack for change.

There is a role for management in the creative process: but it is not to manage it; it is to manage for it. Why? Simply because creativity does not happen exclusively and tacitly in a person’s head but in interaction with a social context wherein it may be codified.

For any organization, operating in an external environment, an inter-actionist model of creativity and innovation needs to encompass organizational context, organizational knowledge, and inter- and intra-organizational relationships, not forgetting the (increasingly multicultural) creative makeup of the individuals (antecedent conditions, cognitive style, ability, intrinsic motivation, knowledge, personality) and teams (group composition, characteristics, and processes) who operate in it.

Table below reveals just how much focus can shift perception even at a simple, generic level.

|  |  |
| --- | --- |
| **Which Best Demonstrates Creativity? (1 = most popular choice)** | **Business / Employers** |
| Problem identification or articulation | 1 |
| Ability to identify new patterns of behaviour or new combination of actions | 2 |
| Integration of knowledge across different disciplines | 3 |
| Ability to originate new ideas | 4 |
| Comfort with the notion of “no right answer” | 5 |
| Fundamental curiosity | 6 |
| Originality and inventiveness in work | 7 |
| Problem solving | 8 |
| Ability to take risks | 9 |
| Tolerance of ambiguity | 9 |
| Ability to communicate new ideas to others | 11 |

***So what are the Types and Sources of Innovation?***

The main types of innovation are divided into product innovations, service innovations, and organizational (procedural or process) innovations. The ten most common are market-led or market-push innovation; others are technology-led innovations (for which markets must be developed). All can be classified depending on the degree of their impact, viz., incremental, radical, or systemic.

There are seven identified sources of innovation:

1. unexpected occurrences,
2. incongruities of various kinds
3. process needs
4. changes in an industry or market
5. demographic changes
6. changes in perceptions
7. new knowledge

These seven sources overlap, and the potential for innovation may lie in more than one area at a time. Purposeful, systematic innovation begins with the analysis of the sources of new opportunities. However, he emphasized that in seeking opportunities, innovative organizations need to look for simple, focused solutions to real problems. That takes diligence, persistence, ingenuity, and knowledge.

***Leveraging Enterprise***

Creativity in products, services, procedures, and processes is now more important than ever. It is needed equally in the established enterprise, the public sector organization, and the new venture. Why is it then that many organizations unwittingly carry out managerial practices that destroy it? With exceptions, most managers do not stifle creativity on purpose. Yet, in the pursuit of productivity, efficiency, and control, they often undermine it.

The figure below shows that creative-thinking skills are one part of creativity but that expertise and motivation are also essential

Managers can influence the first two, but doing so is costly and takes time. They can make a more effective difference by boosting the intrinsic motivation of personnel.

To manage for creativity and innovation in ways that keep clients, audiences, and partners satisfied, they have five levers:

1. The amount of challenge they give to personnel to stimulate minds,
2. The degree of freedom they grant around procedures and processes to minimize hassle
3. The way they design work groups to tap ideas from all ranks
4. The encouragement and incentives they give, which should include rewards and recognition
5. The nature of organizational support. Needless to say, managers must themselves be motivated

***Opening Doors to Diverse Perspectives***

Before World War II, closed innovation was the operating paradigm for most companies. Innovating enterprises kept their discoveries secret and made no attempt to assimilate information from outside their own research and development laboratories. Collaboration need not be bounded by the wall of the organization.

In recent years, the world has seen major advances in technology and organization assisting the diffusion of information. Not least of these are electronic communication systems, including the internet.

Today, data and information can be transferred so swiftly that it seems impossible to prevent movement (should one want to). Since organizations cannot stop this phenomenon, they must learn to take advantage of it.

Communities and networks of practice are fertile venues that provide intellectual challenge, allow people to pursue their passions, foster mutual trust, organize a setting for “noble” work, and gather appreciative audiences. The table below underscores that open innovation requires mind-sets and organizational cultures different from those of traditional (closed) innovation.

***Closed and Open Innovation***

|  |  |
| --- | --- |
| **Closed Innovation Principles** | **Open Innovation Principles** |
| The smart people in our field work for us. | Not all the smart people work for us. We need to work with smart people inside and outside our company |
| To profit from research and development, we must discover it, develop it, and ship it ourselves. | External research and development can create significant value; internal research and development is needed to claim some portion of that value. |
| If we discover it ourselves, we will get it to market first | We do not have to originate the research to profit from it. |
| The company that gets an innovation to market first will win. | Building a better business model is better than getting to market first |
| If we create the most and the best ideas in the industry, we will win. | If we make the best use of internal and external ideas, we will win. |
| We should control our innovation process, so that our competitors do not profit from our ideas. | We should profit from others' use of our innovation process, and we should buy others' intellectual property whenever it advances our own business model. |

***Components of Innovation Systems***

There is no simple universal formula for successful innovation: it is nonlinear, works at many levels, and is too complex to be pinned down in that way. It is uniquely human and cannot be done by machines. Nevertheless, innovations are not random: they occur in relation to the past, present, and future conditions of an organization.

The characteristics of innovation systems are that they recruit and retain highly skilled and trained personnel, give them access to knowledge, and then encourage and enable them to think and act innovatively. Components of an effective innovation system include:

* Clarity in mission statements and goals, which invariably feature a commitment from senior managers to assume responsibility for the risk of failure
* An organizational culture that values innovation, where there is encouragement for personnel to think differently, take calculated risks, and challenge the status quo. Major forces such as leadership, attitudes to risk, budgeting, audit, performance measurement, recruitment, and open innovation are aligned in support.
* A systems approach to management that understands innovation as one part of a wider context, appreciates interconnections, and can conduct systematic analyses of how a problem interacts with other problems, parts of the organization, projects, etc.
* Management fosters coordination across these interconnections and stresses integration rather than compartmentalization.
* The adequate resourcing of innovation in line with strategy
* The placing of responsibility for innovation on all staff
* Understanding that creativity is desirable but insufficient; innovation ambassadors must still take responsibility for follow-though.
* An enriched physical workplace that enhances creativity by providing accessible, casual meeting spots; physical stimuli; space for quite reflection; a variety of communication tools, e.g., white boards, bulletin boards; contact space for clients, audiences, and partners; and room for individual expression, among others.
* Human resource systems that ensure staff have diverse thinking (or learning) styles, giving them a variety of perspectives on single problems.
* Team setups that avoid groupthink and balance the beginner’s mind with experience, freedom with discipline, play with professionalism, and improvisation with planning. Teams embody divergent and convergent thinking, diverse thinking styles, and diversity of skills; and handle conflict.
* High levels of decentralization and functional differentiation and a range of specialized areas within the organization
* Honed knowledge management systems and processes that constantly bring new ideas, concepts, data, information, and knowledge into the organization
* Numerous and empowered members of relevant communities and networks of practice
* Processes and methodologies that identify and share good practice
* A performance measurement system that measures the innovative pulse of the organization; ensures monitoring and evaluation of inputs, activities, outputs, outcomes, and impacts; and feeds lessons back to the system
* The instigation of incentives and rewards for innovative individuals and teams
* Plentiful space for creative thinking and reflective practice, e.g., away-days, brainstorming sessions, peer assists, after-action reviews and retrospect, problem-solving groups, discussion groups and forums.
* Linkages with the marketing function, in ways that involve stakeholders and seek regular feedback
* Effective dissemination systems
* Dedication information systems that ensure positive coverage and publicize success
* Structured intellectual property management systems that identify, protect, value, manage, and audit the organization’s intellectual property

***Planning for Innovation***

|  |  |  |  |
| --- | --- | --- | --- |
| Idea | Generated by | | Date |
| **Innovation** (What form will the idea take?) | | | |
|  | | | |
|  | | | |
| **Sources of Support?** (What sources of assistance or support will be needed to carry out the innovation?) | | | |
| Who | Why | | What |
|  |  | |  |
|  |  | |  |
|  |  | |  |
| In which ways can you gain and strengthen support? | | | |
|  | | | |
|  | | | |
| **Sources of Resistance?** (What are the sources of resistance, e.g., people, policies, procedures, that might impede the process of innovation?) | | | |
| Who | What | | Why |
|  |  | |  |
|  |  | |  |
| What are the Ways to Overcome or Minimize Resistance? | | | |
|  | | | |
|  | | | |
| **Impact, Outcome, Outputs, and Activities Planned** | | | |
| Impact/Outcome/Outputs/Activities | Assumptions and Risks | | Completion Date |
|  |  | |  |
|  |  | |  |
|  |  | |  |
|  |  | |  |
| **Performance Targets and Indicators** | | | |
|  | |  | |
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In part 1 you assessed your organizations’ psychological environment for creativity; in part 2 you assessed your workplace’s friendliness to creativity and innovation; part 3 guided you to complete a plan for implementing such a creative and innovative plan. Now you are required to identify one of your organisations’ current projects and then develop a plan to lead the group/department of people though the plan, which you are going to develop. Make use of the step-by-step process, as indicated below and then draw up your plan.

Steps

1 – Identify one project in your organisation which is current, which will benefit from an innovative plan; then explain why this plan requires creativity and how innovation can enhance it.

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2 – Identify alternatives to the current methodologies used by your organisation, which will enhance the project. Explore the various alternatives and then decide on which of them will be most suited, motivating your answer.

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3 – Make use of the planning template, given below to show how your plan will be implemented.

|  |  |  |  |
| --- | --- | --- | --- |
| Idea | Generated by | | Date |
| **Innovation** (What form will the idea take?) | | | |
|  | | | |
|  | | | |
| **Sources of Support?** (What sources of assistance or support will be needed to carry out the innovation?) | | | |
| Who | Why | | What |
|  |  | |  |
|  |  | |  |
|  |  | |  |
| In which ways can you gain and strengthen support? | | | |
|  | | | |
|  | | | |
| **Sources of Resistance?** (What are the sources of resistance, e.g., people, policies, procedures, that might impede the process of innovation?) | | | |
| Who | What | | Why |
|  |  | |  |
|  |  | |  |
| What are the Ways to Overcome or Minimize Resistance? | | | |
|  | | | |
|  | | | |
| **Impact, Outcome, Outputs, and Activities Planned** | | | |
| Impact/Outcome/Outputs/Activities | Assumptions and Risks | | Completion Date |
|  |  | |  |
|  |  | |  |
|  |  | |  |
|  |  | |  |
| **Performance Targets and Indicators** | | | |
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4 – Write a short introduction on how the plan will be implemented and how the outcome can enhance the current outcome of the plan.

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**You are now ready to go through a check list. Be honest with yourself.**

# Tick the box with either a √ or an X to indicate your response.

# I am able to analyse my own unit in terms of opportunities for innovation

# I am able to portray an understanding of the techniques that promote creativity

# I am able to develop a plan for creating an environment conducive to innovation

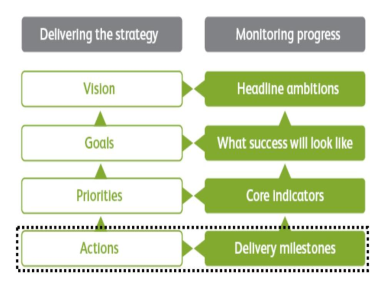
# I am able to lead a team through a creative thinking process



# You must think about any point you could not tick. Write this down as a goal.

# Decide on a plan of action to achieve these goals. Regularly review these goals.

## Monitor and evaluate team members against performance standards 252034

****

This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them. The qualifying learner is capable of:

* Formulating performance standards for team members in a unit
* Establishing systems for monitoring performance of team members
* Preparing for a performance review of a team member
* Conducting performance review interview

**Index**

|  |  |
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| **Competence Requirements** | **Page** |
| **Unit Standard 252034 alignment index**  Here you will find the different outcomes explained which you need to be proved competent in, in order to complete the Unit Standard 252034. | **153** |
| **Unit Standard 252034** | **155** |
| **Formulate performance standards for team members in a unit** | **162** |
| **Establish systems for monitoring performance** | **172** |
| **Conduct performance review interview** | **189** |
| **Self-assessment**  Once you have completed all the questions after being facilitated, you need to check the progress you have made. If you feel that you are competent in the areas mentioned, you may tick the blocks, if however you feel that you require additional knowledge, you need to indicate so in the block below. Show this to your facilitator and make the necessary arrangements to assist you to become competent. | **192** |

**Unit Standard 252034 – Alignment Index**

|  |  |
| --- | --- |
| **SPECIFIC OUTCOMES AND RELATED ASSESSMENT CRITERIA** | |
| **SO 1** | **Formulate performance standards for team members in a unit** |
| **AC 1** | Performance standards to be achieved by team members are formulated in relation to the unit's goals, objectives and deliverables |
| **AC 2** | Performance standards are clear and concise and specify the activities to be performed and the standards to which they are to be performed. |
| **AC 3** | Feedback from team members is incorporated into the performance standards to promote the buy-in of team members in a unit. |
| **AC 4** | Performance standards are recorded and documented according to the entity's policies and procedures. |
| **SO 2** | **Establish systems for monitoring performance** |
| **AC 1** | A variety of performance monitoring systems are identified and reviewed for possible use in a unit. |
| **AC 2** | The performance monitoring system selected is in line with the entity's policies and procedures for performance assessment. |
| **AC 3** | The performance monitoring system is communicated to team members to promote buy-in. |
| **AC 4** | The system for monitoring performance against standards is set up in accordance with the entity's policy and procedures. |
| **SO 3** | **Prepare for a performance review of a team member** |
| **AC 1** | The arrangements for the performance review are agreed with team member, including the time, place and nature of the review. |
| **AC 2** | Preliminary assessment of performance against the agreed standards is conducted using monitoring systems |
| **AC 3** | Information gathered during the preliminary assessment is documented to be available for future reference. |
| **AC 4** | Methods for giving constructive feedback are identified that make provision for reporting positive and negative findings. |
| **AC 5** | Documents to be used during the review are prepared in accordance with the entity's policies and procedures |
| **SO 4** | **Conduct performance review interview** |
| **AC 1** | The review is conducted in accordance with the arrangements previously agreed with the team member. |
| **AC 2** | Feedback provided to the team member is relevant and fair and communicated in a constructive and supportive manner. |
| **AC 3** | Findings on positive and negative aspects of the member's performance are recorded accurately, fairly and honestly for report back and follow-up. |
| **AC 4** | An action plan to address performance gaps and build on positive performance is agreed upon with the employee. |
| **AC 5** | Agreed actions are documented and signed by both parties. |

|  |
| --- |
| **CRITICAL CROSS FIELD OUTCOMES** |
| UNIT STANDARD CCFO IDENTIFYING  The learner is able to identify and solve problems in which responses show that responsible decisions using critical and creative thinking have been made in relation to monitoring the performance of team members.  UNIT STANDARD CCFO WORKING  The learner is able to work as a member of a team in planning, promoting and managing the implementation of a performance monitoring system.  UNIT STANDARD CCFO ORGANISING  The learner is able to organise and manage him/herself and his/her activities responsibly and effectively in planning and implementing a performance monitoring system.  UNIT STANDARD CCFO COLLECTING  The learner is able to collect, organise and critically evaluate information and applying this in relation to the monitoring and measuring of the performance of team member.  UNIT STANDARD CCFO COMMUNICATING  The learner is able to communicate effectively using visual, mathematics and language skills in the modes of oral and/or written presentations in communicating with all team members in relation to their performance.  UNIT STANDARD CCFO DEMONSTRATING  The learner is able to demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation in applying knowledge of and insight into the managing of the performance of team members. |

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| **SOUTH AFRICAN QUALIFICATIONS AUTHORITY** |

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| **REGISTERED UNIT STANDARD:** |

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| --- |
| **Monitor and evaluate team members against performance standards** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SAQA US ID** | **UNIT STANDARD TITLE** | | | |
| 252034 | Monitor and evaluate team members against performance standards | | | |
| **ORIGINATOR** | | **REGISTERING PROVIDER** | | |
| SGB Generic Management | |  | | |
| **QUALITY ASSURING BODY** | | | | |
| - | | | | |
| **FIELD** | | | **SUBFIELD** | |
| Field 03 - Business, Commerce and Management Studies | | | Generic Management | |
| **ABET BAND** | **UNIT STANDARD TYPE** | **OLD NQF LEVEL** | **NEW NQF LEVEL** | **CREDITS** |
| Undefined | Regular | Level 5 | New Level Assignment Pend. | 8 |
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| 2011-11-28 | | 2014-11-28 | | |

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| In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise. |

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| This unit standard replaces: |

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| --- | --- | --- | --- | --- | --- |
| **US ID** | **Unit Standard Title** | **Old NQF Level** | **New NQF Level** | **Credits** | **Replacement Status** |
| 15230 | Monitor team members and measure effectiveness of performance | Level 5 | New Level Assignment Pend. | 4 | Complete |

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| **PURPOSE OF THE UNIT STANDARD** |

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| This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   The qualifying learner is capable of:   Formulating performance standards for team members in a unit.   Establishing systems for monitoring performance of team members.   Preparing for a performance review of a team member.   Conducting performance review interview. |

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| **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING** |

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| It is assumed that learners are competent in:   Communication at NQF Level 4.   Mathematical Literacy at NQF Level 4.   Computer Literacy at NQF Level 4. |

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| **UNIT STANDARD RANGE** |

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|  The learner is required to apply the learning in respect of this/her own area of responsibility.   This Unit Standard relates to once-off projects and events that have to be planned and implemented in a unit.   Unit refers to the division, department or business unit in which the learner is responsible for managing and leading staff.   Entity includes, but is not limited to, a company, business unit, public institution, small business, Non-Profit Organisation or Non-Governmental Organisation. |

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| **Specific Outcomes and Assessment Criteria:** |

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| **SPECIFIC OUTCOME 1** |

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| Formulate performance standards for team members in a unit. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Performance standards to be achieved by team members are formulated in relation to the unit's goals, objectives and deliverables. |

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| **ASSESSMENT CRITERION 2** |

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| Performance standards are clear and concise and specify the activities to be performed and the standards to which they are to be performed. |

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| **ASSESSMENT CRITERION 3** |

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| Feedback from team members is incorporated into the performance standards to promote the buy-in of team members in a unit. |

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| **ASSESSMENT CRITERION 4** |

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| Performance standards are recorded and documented according to the entity's policies and procedures. |

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| **SPECIFIC OUTCOME 2** |

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| Establish systems for monitoring performance. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| A variety of performance monitoring systems are identified and reviewed for possible use in a unit. |

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| **ASSESSMENT CRITERION 2** |

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| The performance monitoring system selected is in line with the entity's policies and procedures for performance assessment. |

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| **ASSESSMENT CRITERION 3** |

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| The performance monitoring system is communicated to team members to promote buy-in. |

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| **ASSESSMENT CRITERION 4** |

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| The system for monitoring performance against standards is set up in accordance with the entity's policy and procedures. |

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| **SPECIFIC OUTCOME 3** |

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| Prepare for a performance review of a team member. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| The arrangements for the performance review are agreed with team member, including the time, place and nature of the review. |

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| **ASSESSMENT CRITERION 2** |

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| Preliminary assessment of performance against the agreed standards is conducted using monitoring systems. |

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| **ASSESSMENT CRITERION 3** |

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| Information gathered during the preliminary assessment is documented to be available for future reference. |

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| **ASSESSMENT CRITERION 4** |

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| Methods for giving constructive feedback are identified that make provision for reporting positive and negative findings. |

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| **ASSESSMENT CRITERION 5** |

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| Documents to be used during the review are prepared in accordance with the entity's policies and procedures. |

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| **SPECIFIC OUTCOME 4** |

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| Conduct performance review interview. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| The review is conducted in accordance with the arrangements previously agreed with the team member. |

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| **ASSESSMENT CRITERION 2** |

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| Feedback provided to the team member is relevant and fair and communicated in a constructive and supportive manner. |

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| **ASSESSMENT CRITERION 3** |

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| Findings on positive and negative aspects of the member's performance are recorded accurately, fairly and honestly for report back and follow-up. |

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| **ASSESSMENT CRITERION 4** |

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| An action plan to address performance gaps and build on positive performance is agreed upon with the employee. |

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| **ASSESSMENT CRITERION 5** |

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| Agreed actions are documented and signed by both parties. |

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| **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS** |

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|  Anyone assessing a candidate against this Unit Standard must be registered as an assessor with the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Any institution offering learning that will enable achievement of this Unit Standard must be accredited as a provider through the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures. |

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| **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE** |

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|  Methods for formulating key result areas and performance standards.   Types of systems for monitoring performance.   Process for conducting performance reviews.   Methods of giving constructive feedback. |

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| **UNIT STANDARD DEVELOPMENTAL OUTCOME** |

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| N/A |

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| **UNIT STANDARD LINKAGES** |

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| N/A |

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| **Critical Cross-field Outcomes (CCFO):** |

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| **UNIT STANDARD CCFO IDENTIFYING** |

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| The learner is able to identify and solve problems in which responses show that responsible decisions using critical and creative thinking have been made in relation to monitoring the performance of team members. |

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| **UNIT STANDARD CCFO WORKING** |

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| The learner is able to work as a member of a team in planning, promoting and managing the implementation of a performance monitoring system. |

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| **UNIT STANDARD CCFO ORGANISING** |

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| The learner is able to organise and manage him/herself and his/her activities responsibly and effectively in planning and implementing a performance monitoring system. |

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| **UNIT STANDARD CCFO COLLECTING** |

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| The learner is able to collect, organise and critically evaluate information and applying this in relation to the monitoring and measuring of the performance of team member. |

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| **UNIT STANDARD CCFO COMMUNICATING** |

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| The learner is able to communicate effectively using visual, mathematics and language skills in the modes of oral and/or written presentations in communicating with all team members in relation to their performance. |

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| **UNIT STANDARD CCFO DEMONSTRATING** |

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| The learner is able to demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation in applying knowledge of and insight into the managing of the performance of team members. |

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| **QUALIFICATIONS UTILISING THIS UNIT STANDARD:** |

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| --- | --- | --- | --- | --- | --- | --- |
|  | **ID** | **QUALIFICATION TITLE** | **OLD LEVEL** | **NEW LEVEL** | **STATUS** | **END DATE** |
| Core | [59201](http://allqs.saqa.org.za/showQualification.php?id=59201) | National Certificate: Generic Management | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Elective | [66149](http://allqs.saqa.org.za/showQualification.php?id=66149) | Further Education and Training Certificate: Fisheries Resource Compliance | Level 4 | NQF Level 04 | Registered | 2012-05-13 |
| Elective | [65030](http://allqs.saqa.org.za/showQualification.php?id=65030) | National Certificate: Arts and Culture Development Management | Level 5 | New Level Assignment Pend. | Registered | 2012-03-12 |
| Elective | [59325](http://allqs.saqa.org.za/showQualification.php?id=59325) | National Certificate: Environmental Noise Control | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Elective | [65050](http://allqs.saqa.org.za/showQualification.php?id=65050) | National Certificate: Music | Level 5 | New Level Assignment Pend. | Registered | 2012-03-12 |
| Elective | [60309](http://allqs.saqa.org.za/showQualification.php?id=60309) | National Certificate: Sport Management | Level 5 | New Level Assignment Pend. | Registered | 2011-03-12 |
| Elective | [61489](http://allqs.saqa.org.za/showQualification.php?id=61489) | National Certificate: Transport Operations | Level 5 | New Level Assignment Pend. | Registered | 2011-09-17 |

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|  | *All qualifications and unit standards registered on the National Qualifications Framework are public property. Thus the only payment that can be made for them is for service and reproduction. It is illegal to sell this material for profit. If the material is reproduced or quoted, the South African Qualifications Authority (SAQA) should be acknowledged as the source.* |

***S***

***etting Job Performance Standards***

The success of your business is directly related to the commitment and productivity of the people who work in your business. And yet it is generally recognized that 60% of employees, or more, are underutilized in their roles at work.

***So what are the factors that contribute to low performance standards and expectations?***

Communication, or miscommunication, is one of the major sources of low productivity. The messages that move between the owner, employees, managers and even customers are not understood in the same way. One classic example is that business owners tend to assume that employees and managers see things the same way they do.

Managers tend to lower their expectations (unconsciously) so that they will not have to confront employees. Most people dislike discussing declining performance with their employees, and so actively avoid having to do so by reducing their expectations of what's required.

Employees have a tendency to protect themselves from possible failure by pushing back on what is expected. They will often negotiate/bargain the job down to a more comfortable level.

Business owners often have difficulty separating what they want done from how they want it done. Telling employees exactly how to achieve a certain goal leaves no room for the employee to think or use their own initiative. Consequently they often stop trying to contribute and become "sheep" - just doing what they are told.

In this catch-22 situation, the owner is forced into a position where they must constantly be telling everyone exactly what to do. Some owners may not understand the concept of person/job matching, and so have the wrong people in the wrong positions. This situation can be extremely demotivating for the employee.

***So how do you go about setting performance standards and expectations?***

***The owner and employee must collaborate together***

They must work together on the fact that the role the employee is performing can be improved in a way where everybody wins - the employee, the owner, and the business. When you teach the owner to collaborate with the employee, not only does the performance go up, but so does the morale.

***Short term goals, or wins, must be established. 90-days is the ideal***

Set specific goals for the employee in 90-day increments so that there will be ample opportunity to monitor systems and progress, as well as to experience wins on a routine basis. Ideally, involve the employee in this goal setting process so they experience some control over their work.

***Determine the strengths required to do the job well***

If the employee is going to be successful, the owner and employee must decide jointly what strengths are required, and how the employee is going to be able to apply their strengths. This is where having a good match between the employee and the job is so important. The boss doesn't have to figure this out on their own - the employee will probably already know what's necessary.

***Set standards, and determine HOW they will be done***

Decide the standards that will apply to each activity, as well as how the standards will be achieved. Understanding the level of performance required gives the employee a sense of achievement - which is one of the key ingredients to achieving performance standards. This is true for employees at any level.

***Establish communication agreements***

To ensure success, the owner and employee must decide at the outset how they are going to communicate progress (and challenges) along the way. Will it be day-to-day? Week-to-week? The minimum time frame is week-to-week. Less frequent than that and it all falls apart.

***The employee decides how to achieve the desired results***

The owner will be present and participating for this part, but it is essential that the employee be leading the process in order for them to have ownership. Help the employee take responsibility for deciding how to accomplish the results. You may need to determine if the employee has the skills and development to do this. If they don't, provide maximum guidance to them.

***Get it in writing***

If it is not in writing, within one to two weeks everyone will be confused and uncertain. The focus, responsibility, resources, constraints, timetables and measures all need to be in writing. The purpose of doing this is to make sure the owner and employee are so clear on the goals and process that there is no confusion whatsoever.

***Establish a monitoring method***

Make sure you get agreement on how the performance will be monitored and how frequently. In order for the process to go forward, the employee needs to agree to monitor their own performance, and the owner must agree to sit down and review it with the employee on a pre-determined schedule. Let them know upfront that if they get busy and start cancelling meetings, performance will not improve and expectations will not be met.

It is recommend having the employee keep track of their progress in writing and advise the owner weekly. A simple weekly progress update is a win-win solution and can take as little as 5 minutes. A monthly sit-down, face-to-face meeting is a must also.

***What are the benefits of setting effective performance standards and expectations?***

Employees are energized and empowered to take ownership of their positions. Owners become energized and inspired, ceasing to lower expectations in order to avoid confrontation. The productivity of the company goes up. Everyone knows what is expected of them, which provides certainty to move forward. This process, itself, opens new channels of communication between owners and employees.

H

owever, it is also important to set expectations about how job responsibilities should be discharged and targets delivered as it is unacceptable for staff to deliver these at ‘any cost’. Setting behavioural expectations or ‘competencies’ are an intrinsic part of managing the performance managers and staff. By setting these expectations the business clearly communicates how managers and staff should behave on a day to day basis. Competencies can be set around a range of different areas such as:

* Leadership
* Team working
* Developing people
* Communication
* Ownership
* Improving results
* Customer focus
* Diversity

In addition, competencies can have different ‘levels’ that set expectations for different hierarchy of management responsibility within an organisation. For example, an organisation may wish to set three different levels of competence that apply to:

* Front line managers and team leaders
* Department managers and functional heads
* Senior managers and directors

To help to communicate competencies clearly, they can be set in terms of what’s not expected as well as what is expected. As an illustration the following statements are from a competency describing effective team working:

We (The Employer) expect you (the employee) to:

* Promote tolerance and respect
* Take time to understand others cultural norms, perspectives and rules
* Work effectively across countries and cultures
* Develop and maintain effective internal and external working relationships

We (The Employer) don’t expect you (the employee) to:

* Ignore cultural norms, values and approaches
* Take a narrow personal view
* Stereotype the views and contributions of others
* Put others down

By defining the competencies likely to produce success in a particular role, the organisation clearly communicates the standards that are expected for successful performance within the business. In addition, competencies provide a means of objectively assessing an individual’s strengths and weaknesses and as such form the basis of personal development.

***How can employees succeed if they don't have a good understanding of what they should be doing and how well they should be doing it? They can't. In this section we answer common questions about how to do performance planning with employees, how to set employee goals and objectives, and setting performance standards***

One of the major reasons performance management and performance appraisals fail is that too much time is spent appraising performance using vague criteria, and not enough time and effort put into helping the employee understand what his job is about, and the goals and objectives s/he is expected to achieve to be successful.

Not only do clear goals and objectives improve performance all year long, but when employee and manager are clear about what the employee is expected to do, and the results s/he is expected to produce, the employee review process becomes much easier, and less stressful.Employee goals are simply statements of what the employee is to achieve in his or her job. They serve as the targets for performance, and are also useful and sometimes essential when it comes time to determine if the employee has done his or her job well.

There are no universally accepted uses of the terms employee goals, and employee objectives, so you'll find somewhat different definitions in different companies. However, if we needed to make a distinction between the two (and we usually don't out in the real world), an employee objective is usually more specific and precise than a goal.

In terms of making performance management work, it's worth spending more time setting clear goals and objectives with employees as opposed to spending more time in performance appraisal. Unfortunately, in practice, many companies that use rating scales don't even set clear goals with employees, and because of that they run into problems and disagreements during performance reviews.

***What are standards of performance?***

Standards of performance were originally part of Management By Objectives (MBO). They are even more specific and exact as compared to employee goals or employee objectives because, not only do they outline what is expected from the employee, but they also specify how well the employee is to do the job.

Standards of performance (also called performance standards) include a "standard" by which to measure success. For example, a standard of performance for customer service may look something like this:

Increase personal sales by 10% during the coming year, and receive no more than 1 customer complaint per month.

This is probably not a perfectly written standard of performance but you can see that the "no more than 1 complaint per month part is a criterion or standard to be reached.

***Why are goals and objectives so important to performance management?***

One reason why many performance management systems fail badly is that they rely on poorly defined or even non-existent goals and objectives for employees. Clear goals and objectives for employees serve two major purposes:

***First,*** they help the employee understand what is expected of him or her. They help tell employees what parts of their jobs are most important and less important. Having clear goals helps employees self-correct and make their own decisions on a day-to-day basis, which means less work for managers. So, in short, they guide employee behaviour.

***Second,*** clear goals and objectives make the employee performance review meetings go much more smoothly. While no goals and objectives can completely remove subjectivity from appraisals, they help reduce subjectivity by supplying some criteria for employee success. When these criteria are clear and manager and employee understand them in the same way, they tend to reduce arguments in the performance appraisal process.

***What are SMART goals?***

The acronym "SMART" can be used as a guide for creating and setting effective and useful employee goals and objectives. It tells us the characteristics of good goals and objectives that will be useful for managers and employees.

Here's what each letter stands for as described by Roman Koch:

***Specific*** means that the target is clearly defined. "Server availability greater than 99.5%" is not specific. "Availability of productive intranet servers greater than 99.5%" clearly defines the target.

***Measurable*** means that the target state is defined as a number. "Can do presentations in French" is not measurable. "Runs two presentations in French for an IT audience of more than 20 people" is measurable.

***Appropriate*** means that the staff member can take the necessary actions to meet the objective; "Zero stolen PCs" is not an appropriate objective for a PC asset manager, as he or she cannot control all the thieves of this world. "Users are informed twice a year about measures to avoid thefts" is appropriate.

***Realistic*** means that the staff member has a fair chance to achieve the desired result. "Is on time every day" is not realistic, as it's highly unlikely. "Is on time on 19 out of 20 working days" is realistic.

***Time-bound*** means that the target state is described with a time dimension. "Runs a Visual Basic workshop for the team" is not time-bound. "Runs a one-hour Visual Basic workshop for the team with not more than 1 week of preparation" is time-bound. Note that deadlines are just one way of time-binding an objective (and, very often, the most stupid way for doing so). Periods ("every three months") or durations ("45 minutes for each repair") often are more appropriate.

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| **Identifying performance standards for my department**  **Activity: Group Time Allocation: 90 min** |

Make use of the table below to identify the goals, objectives and deliverables of your department within the organisation. Record your findings clearly in the space provided.

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| --- |
| **Goals:** |
| e.g. Conduct 30 sales calls p/d |
| 1) |
| 2) |
| 3) |
| 4) |
| 5) |
| **Objectives:** |
| e.g. Contact and liaise with new clients |
| 1) |
| 2) |
| 3) |
| 4) |
| 5) |
| **Deliverables:** |
| e.g. Complete daily call list |
| 1) |
| 2) |
| 3) |
| 4) |
| 5) |

Now, discuss your findings with your fellow group members and obtain feedback from them in order to identify any discrepancies which may exists. Record the feedback below or notes which you have made.

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| **Feedback:** |

Make use of the information which you have recorded on the previous page to identify the required activities and specific performance standards which must be achieved by your department to achieve the above goals / objectives and deliverables.

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| **Performance standards:** |
| Activity: Make contact with new possible clients and take note of suitable leads for sales. |
| e.g. Provide clients with up-to-date information on the latest products and services on offer. Complete calls within given time frames. Complete team meeting to discuss progress made and adjust/update the schedule for the following day’s calls to be made. |
| 1. Activity: |
| Performance Standards: |
| 1. Activity: |
| Performance Standards: |
| 1. Activity: |
| Performance Standards: |
| 1. Activity: |
| Performance Standards: |
| 1. Activity: |
| Performance Standards: |

***P***

***erformance appraisals: The purpose and how to make it easier***

Performance appraisals are essential for the effective management and evaluation of staff. Appraisals help develop individuals, improve organizational performance, and feed into business planning. Formal performance appraisals are generally conducted annually for all staff in the organization. Each staff member is appraised by their line manager. Directors are appraised by the CEO, who is appraised by the chairman or company owners, depending on the size and structure of the organization.

Annual performance appraisals enable management and monitoring of standards, agreeing expectations and objectives, and delegation of responsibilities and tasks. Staff performance appraisals also establish individual training needs and enable organizational training needs analysis and planning.

Performance appraisals also typically feed into organizational annual pay and grading reviews, which commonly also coincides with the business planning for the next trading year. Performance appraisals generally review each individual's performance against objectives and standards for the trading year, agreed at the previous appraisal meeting.

Performance appraisals are also essential for career and succession planning - for individuals, crucial jobs, and for the organization as a whole.

Performance appraisals are important for staff motivation, attitude and behaviour development, communicating and aligning individual and organizational aims, and fostering positive relationships between management and staff.

Performance appraisals provide a formal, recorded, regular review of an individual's performance, and a plan for future development.

Job performance appraisals - in whatever form they take - are therefore vital for managing the performance of people and organizations.

Managers and appraisees commonly dislike appraisals and try to avoid them. To these people the appraisal is daunting and time-consuming. The process is seen as a difficult administrative chore and emotionally challenging. The annual appraisal is maybe the only time since last year that the two people have sat down together for a meaningful one-to-one discussion. No wonder then that appraisals are stressful - which then defeats the whole purpose.

There lies the main problem - and the remedy. Appraisals are much easier, and especially more relaxed, if the boss meets each of the team members individually and regularly for one-to-one discussion throughout the year.

Meaningful regular discussion about work, career, aims, progress, development, hopes and dreams, life, the universe, the TV, common interests, etc., whatever, makes appraisals so much easier because people then know and trust each other - which reduces all the stress and the uncertainty.

* Put off discussions and of course they loom very large.
* So don't wait for the annual appraisal to sit down and talk.
* The boss or or the appraisee can instigate this.
* If you are an employee with a shy boss, then take the lead.
* If you are a boss who rarely sits down and talks with people - or whose people are not used to talking with their boss - then set about relaxing the atmosphere and improving relationships. Appraisals (and work) all tend to be easier when people communicate well and know each other.

So sit down together and talk as often as you can, and then when the actual formal appraisals are due everyone will find the whole process to be far more natural, quick, and easy - and a lot more productive too.

***Appraisals, social responsibility and whole-person development***

There is increasingly a need for performance appraisals of staff and especially managers, directors and CEO's, to include accountabilities relating to corporate responsibility, represented by various converging corporate responsibility concepts including: the 'Triple Bottom Line' ('profit people planet'); corporate social responsibility (CSR); Sustainability; corporate integrity and ethics; Fair Trade, etc.

The organisation must decide the extent to which these accountabilities are reflected in job responsibilities, which would then naturally feature accordingly in performance appraisals. More about this aspect of responsibility is in the directors job descriptions section.

Significantly also, while this appraisal outline is necessarily a formal structure this does not mean that the development discussed with the appraisee must be formal and constrained. In fact the opposite applies. Appraisals must address 'whole person' development - not just job skills or the skills required for the next promotion.

Appraisals must not discriminate against anyone on the grounds of age, gender, sexual orientation, race, religion, disability, etc.

When designing or planning and conducting appraisals, seek to help the 'whole-person' to grow in whatever direction they want, not just to identify obviously relevant work skills training. Increasingly, the best employers recognise that growing the 'whole person' promotes positive attitudes, advancement, motivation, and also develops lots of new skills that can be surprisingly relevant to working productively and effectively in any sort of organisation.

Developing the whole-person is also an important aspect of modern corporate responsibility, and separately (if you needed a purely business-driven incentive for adopting these principles), whole-person development is a crucial advantage in the employment market, in which all employers compete to attract the best recruits, and to retain the best staff.

Therefore in appraisals, be creative and imaginative in discussing, discovering and agreeing 'whole-person' development that people will respond to, beyond the usual job skill-set, and incorporate this sort of development into the appraisal process. Abraham Maslow recognised this over fifty years ago.

If you are an employee and your employer has yet to embrace or even acknowledge these concepts, do them a favour at your own appraisal and suggest they look at these ideas, or maybe mention it at your exit interview prior to joining a better employer who cares about the people, not just the work.

Incidentally the Multiple Intelligences test and VAK Learning Styles test are extremely useful tools for appraisals, before or after, to help people understand their natural potential and strengths and to help managers understand this about their people too.

There are a lot of people out there who are in jobs which don't allow them to use and develop their greatest strengths; so the more we can help folk understand their own special potential, and find roles that really fit well, the happier we shall all be.

***Are performance appraisals still beneficial and appropriate?***

It is sometimes fashionable in the 'modern age' to dismiss traditional processes such as performance appraisals as being irrelevant or unhelpful. Be very wary however if considering removing appraisals from your own organisational practices. It is likely that the critics of the appraisal process are the people who can't conduct them very well. It's a common human response to want to jettison something that one finds difficult. Appraisals - in whatever form, and there are various - have been a mainstay of management for decades, for good reasons.

Think about everything that performance appraisals can achieve and contribute to when they are properly managed, for example:

• performance measurement - transparent, short, medium and long term

• clarifying, defining, redefining priorities and objectives

• motivation through agreeing helpful aims and targets

• motivation though achievement and feedback

• training needs and learning desires - assessment and agreement

• identification of personal strengths and direction - including unused hidden strengths

• career and succession planning - personal and organisational

• team roles clarification and team building

• organisational training needs assessment and analysis

• appraisee and manager mutual awareness, understanding and relationship

• resolving confusions and misunderstandings

• reinforcing and cascading organisational philosophies, values, aims, strategies, priorities, etc

• delegation, additional responsibilities, employee growth and development

• counselling and feedback

• manager development - all good managers should be able to conduct appraisals well - it's a fundamental process

the list goes on..

People have less and less face-to-face time together these days. Performance appraisals offer a way to protect and manage these valuable face-to-face opportunities. My advice is to hold on to and nurture these situations, and if you are under pressure to replace performance appraisals with some sort of (apparently) more efficient and cost effective methods, be very sure that you can safely cover all the aspects of performance and attitudinal development that a well-run performance appraisals system is naturally designed to achieve.

There are various ways of conducting performance appraisals, and ideas change over time as to what are the most effective appraisals methods and systems. Some people advocate traditional appraisals and forms; others prefer 360-degree-type appraisals; others suggest using little more than a blank sheet of paper.

In fact performance appraisals of all types are effective if they are conducted properly, and better still if the appraisal process is clearly explained to, agreed by, the people involved.

Managers need guidance, training and encouragement in how to conduct appraisals properly. Especially the detractors and the critics. Help anxious managers (and directors) develop and adapt appraisals methods that work for them. Be flexible. There are lots of ways to conduct appraisals, and particularly lots of ways to diffuse apprehension and fear - for managers and appraisees alike. Particularly - encourage people to sit down together and review informally and often - this removes much of the pressure for managers and appraisees at formal appraisals times. Leaving everything to a single make-or-break discussion once a year is asking for trouble and trepidation.

Look out especially for the warning signs of 'negative cascaded attitudes' towards appraisals. This is most often found where a senior manager or director hates conducting appraisals, usually because they are uncomfortable and inexperienced in conducting them. The senior manager/director typically will be heard to say that appraisals don't work and are a waste of time, which for them becomes a self-fulfilling prophecy. This attitude and behaviour then cascade down to their appraisees (all the people in their team) who then not surprisingly also apply the same 'no good - not doing it' negative attitude to their own appraisals responsibilities (teams). And so it goes. A 'no good - not doing it' attitude in the middle ranks is almost invariably traceable back to a senior manager or director who holds the same view.

As with anything, where people need help doing the right thing, help them.

All that said, performance appraisals that are administered without training (for those who need it), without explanation or consultation, and conducted poorly will be counter-productive and are a waste of everyone's time.

Well-prepared and well-conducted performance appraisals provide unique opportunities to help appraisees and managers improve and develop, and thereby also the organisations for whom they work.

Just like any other process, if performance appraisals aren't working, don't blame the process, ask yourself whether it is being properly trained, explained, agreed and conducted.

**Effective performance appraisals**

Aside from formal traditional (annual, six-monthly, quarterly, or monthly) performance appraisals, there are many different methods of performance evaluation. The use of any of these methods depends on the purpose of the evaluation, the individual, the assessor, and the environment.

The formal annual performance appraisal is generally the over-riding instrument which gathers together and reviews all other performance data for the previous year.

Performance appraisals should be positive experiences. The appraisals process provides the platform for development and motivation, so organizations should foster a feeling that performance appraisals are positive opportunities, in order to get the best out of the people and the process. In certain organizations, performance appraisals are widely regarded as something rather less welcoming ('bollocking sessions' is not an unusual description), which provides a basis only on which to develop fear and resentment, so never, never, never use a staff performance appraisal to handle matters of discipline or admonishment, which should instead be handled via separately arranged meetings.

**Types of performance and aptitude assessments, including formal performance appraisals**

• Formal annual performance appraisals

• Probationary reviews

• Informal one-to-one review discussions

• Counselling meetings

• Observation on the job

• Skill- or job-related tests

• Assignment or task followed by review, including secondments (temporary job cover or transfer)

• Assessment centres, including observed group exercises, tests presentations, etc.

• Survey of opinion of others who have dealings with the individual

• Psychometric tests and other behavioural assessments

• Graphology (handwriting analysis)

None of these methods is mutually exclusive. All of these performance assessment methods can be used in conjunction with others in the list, depending on situation and organizational policy. Where any of these processes is used, the manager must keep a written record, and must ensure agreed actions are followed up. The notes of all review situations can then be referred to at the formal appraisal.

Holding regular informal one-to-one review meetings greatly reduces the pressure and time required for the annual formal appraisal meeting. Holding informal reviews every month is ideal all staff. There are several benefits of reviewing frequently and informally:

• The manager is better informed and more up-to-date with his or her people's activities (and more in touch with what lies beyond, e.g., customers, suppliers, competitors, markets, etc)

• Difficult issues can be identified, discussed and resolved quickly, before they become more serious.

• Help can be given more readily - people rarely ask unless they see a good opportunity to do so - the regular informal review provides just this.

• Assignments, tasks and objectives can be agreed completed and reviewed quickly - leaving actions more than a few weeks reduces completion rates significantly for all but the most senior and experienced people.

• Objectives, direction, and purpose is more up-to-date - modern organizations demand more flexibility than a single annual review allows - priorities often change through the year, so people need to be re-directed and re-focused.

• Training and development actions can be broken down into smaller more digestible chunks, increasing success rates and motivational effect as a result.

• The 'fear factor', often associated by many with formal appraisals, is greatly reduced because people become more comfortable with the review process.

• Relationships and mutual understanding develops more quickly with greater frequency of meetings between manager and staff member.

• Staff members can be better prepared for the formal appraisal, giving better results, and saving management time.

• Much of the review has already been covered throughout the year by the time comes for the formal appraisal.

• Frequent review meetings increase the reliability of notes and performance data, and reduces the chances of overlooking things at the formal appraisal.

performance appraisals process

• Prepare - prepare all materials, notes agreed tasks and records of performance, achievements, incidents, reports etc - anything pertaining to performance and achievement - obviously include the previous performance appraisal documents and a current job description. A good appraisal form will provide a good natural order for proceedings, so use one. If your organization doesn't have a standard appraisal form then locate one, or use the template below to create one, or download and/or adapt the appraisal forms from this page. Whatever you use, ensure you have the necessary approval from your organization, and understand how it works. Organize your paperwork to reflect the order of the appraisal and write down the sequence of items to be covered. If the appraisal form includes a self assessment section and/or feedback section (good ones do) ensure this is passed to the appraisee suitably in advance of the appraisal with relevant guidance for completion. A sample performance appraisal template is available free below, which you can adapt and use to create your own form. Part of your preparation should also consider 'whole-person' development - beyond and outside of the job skill-set - as might inspire and appeal to the appraisees. Many people are not particularly interested in job skills training, but will be very interested, stimulated and motivated by other learning and development experiences. Get to know what your people are good at outside of their work. People's natural talents and passions often contain significant overlaps with the attributes, behaviours and maturity that are required and valued in the workplace. Use your imagination in identifying these opportunities to encourage 'whole-person' development and you will find appraisals can become very positive and enjoyable activities. Appraisals are not just about job performance and job skills training. Appraisals should focus on helping the 'whole person' to grow and attain fulfilment.

• Inform - inform the appraisee - ensure the appraisee is informed of a suitable time and place (change it if necessary), and clarify purpose and type of appraisal - give the appraisee the chance to assemble data and relevant performance and achievement records and materials. If the appraisal form does not imply a natural order for the discussion then provide an agenda of items to be covered.

• Venue - ensure a suitable venue is planned and available - private and free from interruptions - observe the same rules as with recruitment interviewing - avoid hotel lobbies, public lounges, canteens - privacy is absolutely essential (it follows also that planes, trains and automobiles are entirely unsuitable venues for performance appraisals......)

• Layout - room layout and and seating are important elements to prepare also - don't simply accept whatever layout happens to exist in a borrowed or hired room - layout has a huge influence on atmosphere and mood - irrespective of content, the atmosphere and mood must be relaxed and informal - remove barriers - don't sit in the boss's chair with the other person positioned humbly on the other side of the desk; you must create a relaxed situation, preferably at a meeting table or in easy chairs - sit at an angle to each other, 90 degrees ideally - avoid face to face, it's confrontational.

• Introduction - relax the appraisee - open with a positive statement, smile, be warm and friendly - the appraisee may well be terrified; it's your responsibility to create a calm and non-threatening atmosphere. Set the scene - simply explain what will happen - encourage a discussion and as much input as possible from the appraisee - tell them it's their meeting not yours. Confirm the timings, especially finishing time. If helpful and appropriate begin with some general discussion about how things have been going, but avoid getting into specifics, which are covered next (and you can say so). Ask if there are any additional points to cover and note them down so as to include them when appropriate.

• Review and measure - review the activities, tasks, objectives and achievements one by one, keeping to distinct separate items one by one - avoid going off on tangents or vague unspecific views. If you've done your preparation correctly you will have an order to follow. If something off-subject comes up then note it down and say you'll return to it later (and ensure you do). Concentrate on hard facts and figures, solid evidence - avoid conjecture, anecdotal or non-specific opinions, especially about the appraisee. Being objective is one of the greatest challenges for the appraiser - as with interviewing, resist judging the appraisee in your own image, according to your own style and approach - facts and figures are the acid test and provide a good neutral basis for the discussion, free of bias and personal views. For each item agree a measure of competence or achievement as relevant, and according to whatever measure or scoring system is built into the appraisal system. This might be simply a yes or no, or it might be a percentage or a mark out of ten, or an A, B, C. Reliable review and measurement requires reliable data - if you don't have the reliable data you can't review and you might as well re-arrange the appraisal meeting. If a point of dispute arises, you must get the facts straightened out before making an important decision or judgement, and if necessary defer to a later date.

• Agree an action plan - An overall plan should be agreed with the appraisee, which should take account of the job responsibilities, the appraisee's career aspirations, the departmental and whole organization's priorities, and the reviewed strengths and weaknesses. The plan can be staged if necessary with short, medium and long term aspects, but importantly it must be agreed and realistic.

• Agree specific objectives - These are the specific actions and targets that together form the action plan. As with any delegated task or agreed objective these must adhere to the SMARTER rules - specific, measurable, agreed, realistic, time-bound, enjoyable, recorded. If not, don't bother. The objectives can be anything that will benefit the individual, and that the person is happy to commit to. When helping people to develop, you are not restricted to job-related objectives, although typically most objectives will be.

• Agree necessary support - This is the support required for the appraisee to achieve the objectives, and can include training of various sorts (external courses and seminars, internal courses, coaching, mentoring, secondment, shadowing, distance-learning, reading, watching videos, attending meetings and workshops, workbooks, manuals and guides; anything relevant and helpful that will help the person develop towards the standard and agreed task. Also consider training and development that relates to 'whole-person development' outside of job skills. This might be a hobby or a talent that the person wants to develop. Developing the whole person in this way will bring benefits to their role, and will increase motivation and loyalty. The best employers understand the value of helping the whole person to develop. Be careful to avoid committing to training expenditure before suitable approval, permission or availability has been confirmed - if necessary discuss likely training requirements with the relevant authority before the appraisal to check. Raising false hopes is not helpful to the process.

• Invite any other points or questions - make sure you capture any other concerns.

• Close positively - Thank the appraisee for their contribution to the meeting and their effort through the year, and commit to helping in any way you can.

• Record main points, agreed actions and follow-up - Swiftly follow-up the meeting with all necessary copies and confirmations, and ensure documents are filed and copied to relevant departments, (HR, and your own line manager typically).

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| **Handout 1 – Appraisal Form Template** |

***Performance appraisal form template guide and process***

The first part of a formal document needs to contain essential identifying data:

• organization, division and department

• year or period covered

• name

• position

• location/site/based at/contact details (e.g., email)

• months in present position

• length of service

* State your understanding of your duties and responsibilities.
* Discussion points: (not exhaustive or definitive - for more ideas look at the interviews questions)

1. Has the past year been good/bad/satisfactory or otherwise for you, and why?

2. What do you consider to be your most important achievements of the past year?

3. What do you like and dislike about working for this organization?

4. What elements of your job do you find most difficult?

5. What elements of your job interest you the most, and least?

6. What do you consider to be your most important tasks in the next year?

7. What action could be taken to improve your performance in your current position by you, and your boss?

8. What kind of work or job would you like to be doing in one/two/five years time?

9. What sort of training/experience would benefit you in the next year? Broaden this question to include 'whole-person development' beyond job skills - for example:

What do you have a personal passion for that we might help you to pursue? (It's a fact that when person develops interests, talents and experiences that they truly love and enjoy - even if the area seems completely unrelated to work - then the person becomes more valuable, mature, and motivated at work too, because they have grown as a person. Within reason, employers can and should help people to develop in any way they wish, and often even the most unconnected development or experiences hold much valuable learning that are directly transferable and usable at work - all it takes is a bit of imagination.)

Next, list the objectives you set out to achieve in the past 12 months (or the period covered by this appraisal) with the measures or standards agreed - against each comment on achievement or otherwise, with reasons where appropriate. Score the performance against each objective (1-3 = poor, 4-6 = satisfactory, 7-9 = good, 10 = excellent):

Score your own capability or knowledge in the following areas in terms of your current role requirements (1-3 = poor, 4-6 = satisfactory, 7-9 = good, 10 = excellent). If appropriate bring evidence with you to the appraisal to support your assessment. (This list is not exhaustive or definitive - the list should reflect the requirements of the job and the career path.) See the skills and behaviours assessment tools for other aspects to include in this list. Other roles in other industries, for example technical, engineering, healthcare, legal, finance, leisure, transport, construction, etc, will require different skill sets. These are examples of a typical commercial or management skill set.

1. commercial judgement

2. product/technical knowledge

3. time management

4. planning, budgeting and forecasting

5. reporting and administration

6. communication skills

7. delegation skills

8. IT/equipment/machinery skills

9. meeting expectations, deadlines and commitments

10. creativity

11. problem-solving and decision-making

12. team-working and developing/helping others

13. energy, determination and work-rate

14. steadiness under pressure

15. leadership and integrity

16. adaptability, flexibility, and mobility

17. personal appearance and image

18. appreciation and application of social responsibility, sustainability, and ethical considerations

In light of your current capabilities, your performance against past objectives, and your future personal growth and/or job aspirations, what activities and tasks would you like to focus on during the next year. Include in this any 'whole-person non-work-related development that the person feels would help them to grow and become more fulfilled as a person.

# Alternative performance reviews

The best performance reviews let managers and employees *communicate* -- share ideas, opinions, and information. Unfortunately, most traditional reviews put managers into the position of uncomfortable judges, ostensibly telling employees how their work either fit the bill -- or didn't. Possibly because of this, most traditional reviews are no better than the manager's off-the-cuff judgements, and some may be illegal.

Because of these problems, new types of reviews are coming into play. Most require that evaluations be done not for raises, promotions, or bonuses, but for growth, development, and communication. The most important aspect in every case is *communication between the employee and other people,* instead of one-way communication, for higher performance.

## Problems with traditional systems

In traditional reviews, the manager tells the employee how they measure up, assuming that they both perceive the employee's job the same way. New forms of review may help managers, employees, peers, and customers to gain a mutual understanding of what they mean by "good performance." This may improve the work of everyone involved, while clearing up disputes.

Most managers tend to rate their employees a bit higher than they would normally deserve, leading some companies to use ranking systems - but ranking has its own problems.

Generally, traditional reviews are good at sniffing out excellent and very poor employees, but don't differentiate well among the vast middle ground. This is a problem when reviews are used as the basis for salary adjustments and bonuses, unless only people at the extremes are treated differently (e.g. everyone gets a 4% bonus except very poor employees, who get nothing, and excellent employees, who get 6%).

With traditional reviews, employees are rated by a single person, who may be biased or have an incomplete view of their work. Alternative methods provide a more balanced view.

Other problems with traditional evaluation systems include rater carelessness; use of appraisals for political or personal reasons; the halo effect, where an employee's strengths in one area are spread to other areas; and leniency and strictness errors, where all employees are rated either high or low. Newer systems avoid most of these problems.

## Peer Reviews

A peer review program may be designed by a task force of three to six workers, to set the goals, benefits, and objectives of the program; design a criteria-based performance evaluation system; and conduct a pilot program (*Training and Development,* June 1992).

During the pilot program, people may be encouraged to provide feedback on the system itself. Training and support should be available. Pilot programs are very important for any new system, because they let people iron out the bugs without letting the program lose credibility among other workers.

Peer reviews often have a high level of worker acceptance and involvement; they tend to be stable, task-relevant, and accurate. By helping peers to understand each other’s work and by airing grievances in a non-threatening manner, peer reviews may also help people to get along better.

For the organization, this means higher performance. For the people, this means a better place to work and less frustration; it may also help people to concentrate less on politics or working around people, and to spend more time on their work (or to put in less overtime).

Peer reviews may work best if all parties know that the reviews will *not*be used for setting pay, promotion possibilities, or disciplinary actions. However, a peer review system with the power to give promotions, raises, or disciplinary actions might be workable in some businesses, if the employees think it's a good idea.

## Self-Reviews

Self-reviews are based on the idea that employees are most familiar with their work, and that their involvement is essential. Employees rate themselves on a number of criteria, usually with a formal survey form, and suggest improvements.

They help to clarify their own goals, and expose areas of weakness so they may be worked on. The manager may be left out of the process, although an exchange of views between the worker and manager may help their relationship, and boost the employee's own understanding.

Self-reviews tend to have low halo error and result in little paperwork for managers. However, people may not see their own deficiencies as others do, so self-reviews should be used alongside other methods.

## Upward Assessments

Upward assessments are used in a large number of organizations, running from Honda and Chrysler to Motorola and NASA. These programs tend to be somewhat shocking to managers at first, but, if designed well, they can result in strong improvements. Most managers do not realize that what they say sometimes does not match up to what they do. Upward assessments can help managers to keep their words and actions consistent, while showing areas where managers can improve their performance. This can greatly increase their credibility.

The process is more important than the survey form; it can't be successful unless both raters and managers "open up." Managers must be helped to accept and deal with the results of the assessment. Outside consultants may have experience, needed skills, and an "objective outsider" image, so people can open up to them without fear of reprisal. If cost is a major issue, it may be possible to hire an intern from a local doctoral program in organizational or I/O psychology.

Upward assessments may only be run with managers who have three or more direct reports. Someone other than the manager and ratees must assemble the completed survey forms into a report for the manager; some survey publishers do this.

Many consultants recommend using upward assessments at least every two years. This helps managers to check their progress and refreshes the findings of the past survey in their minds; however, it doesn't make the cost unbearable. After the first assessment, the program may be run in-house.

## 360 Degree Feedback (360 Degree Review)

360 degree feedback is the most comprehensive and costly type of appraisal. It includes self-ratings, peer review, and upward assessments; feedback is sought from everyone. It gives people a chance to know how they are seen by others; to see their skills and style; and may improve communications between people.

360 degree feedback helps by bringing out every aspect of an employee's life. Cooperation with people outside their department, helpfulness towards customers and vendors, etc. may not be rewarded by other types of appraisal. This system also helps those who have conflicts with their manager.

360 degree feedback generally has high employee involvement and credibility; may have the strongest impact on behaviour and performance; and may greatly increase communication and shared goals. It provides people with a good all-around perspective.

***S***

uccessful business management requires the ongoing monitoring of performance in order to generate data by which to judge the success or otherwise of specific strategies. Improvement in performance can only be realistically achieved when management is properly informed about current performance.

***Conducting the Performance Appraisal Review Meeting***

While the employee performance review or annual performance review is not the most important component of performance management, it is often what managers focus on most.

That's because it's the most awkward or uncomfortable part of performance management. Here, we answer common questions about how to conduct a performance review meeting so it's more productive and helpful and less stressful and uncomfortable for both manager and employee.

*The performance review meeting is a process where manager and employee work together to assess the degree to which the employee ha attained agree-upon goals, and work together to overcome any difficulties encountered. Also called performance appraisal meeting, or performance evaluation meeting. Usually refers to an annual meeting.*

However, there's considerable merit in holding shorter performance review meetings throughout the year, since doing so can prevent small performance problems from becoming larger ones. Also, the longer performance issues exist, the harder they are to remedy, so it makes sense to have meeting more often than just annually.

**Principles To Apply To Annual Performance Reviews**

Here are some principles that you can apply to all annual performance reviews and employee evaluation meetings.

They will help you get the most out of the employee performance review, and reduce stress and discomfort for both employee and manager.

* Make sure the employee understands the purpose of the meeting and what the information is to be used for.
* Communicate the message that you and the employee are on the same side and you are focused on working ***with*** the employee and not doing something to the employee.
* Share with the employee the responsibility of evaluating his or her performance.
* Draw the employee into active discussion. In fact the employee should be doing most of the talking throughout the annual performance review meeting.
* Comply with any requirements set forth by your company (e.g. completing a set of forms provided) while trying to make the review process useful to you and the employee.

The clearer you are about what needs to be accomplished during an annual performance review meeting, the easier the performance appraisal meeting will be. Here's a list of six outcomes that should be achieved during the performance evaluation:

* Confirmed the major job responsibilities of the employee.
* Provided the employee with your observations and suggestions regarding his or her performance.
* Received comments and suggestions from the employee as to how the two of you can work together to improve performance.
* Identified barriers in the system that need to be overcome and agreed on how they will be done.
* Completed any forms or other paperwork required of you by your company.
* Documented any decisions and/or discussions and recommentations about pay, promotion, or disciplinary action.

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| **Performance appraisal review meeting preparation**  **Activity: Group Time Allocation: 90 min** |

Identify the steps to be followed to prepare yourself and your staff member for a successful performance appraisal review meeting. Also include what information, tools and other resources you will require to effectively prepare for this meeting.

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| Preparations required to be done: |
|  |
| Resources which will be required: |
|  |
| Personnel / staff which must be notified: |
|  |

**You are now ready to go through a check list. Be honest with yourself.**

# Tick the box with either a √ or an X to indicate your response.

* **I am able to formulate performance standards for team members in a unit.**
* **I am able to establish systems for monitoring performance of team members.**
* **I am able to prepare for a performance review of a team member.**
* **I am able to conduct a performance review interview.**



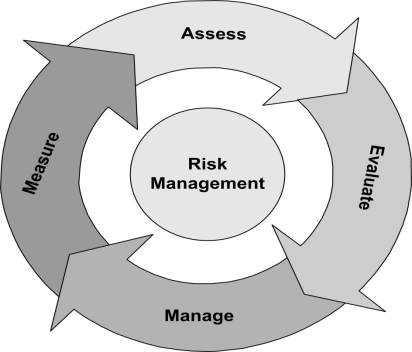
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# You must think about any point you could not tick. Write this down as a goal.

# Decide on a plan of action to achieve these goals. Regularly review these goals.

## Monitor, assess and manage risk

## 252025

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This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   
  
The qualifying learner is capable of:

* Demonstrating an understanding of business processes and potential risks to a unit
* Identifying potential risks and assessing the impact thereof in a unit
* Developing contingency plans for managing risk
* Testing and revising contingency plans

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| **Unit Standard 252025 alignment index**  Here you will find the different outcomes explained which you need to be proved competent in, in order to complete the Unit Standard 252025. | **195** |
| **Unit Standard 252025** | **197** |
| **Identification of the incentives to manage risk in an organisation** | **204** |
| **Assessment of situations in the work place requiring risk management intervention** | **219** |
| **Preparation of cost benefit analyses for the management of resources** | **248** |
| **Assessment and recommendation of strategies to manage risk in an organisation** | **266** |
| **Integration of risk management strategies into the total quality management (TQM) of an organisation** | **278** |
| **Self-assessment**  Once you have completed all the questions after being facilitated, you need to check the progress you have made. If you feel that you are competent in the areas mentioned, you may tick the blocks, if however you feel that you require additional knowledge, you need to indicate so in the block below. Show this to your facilitator and make the necessary arrangements to assist you to become competent. | **282** |

# Unit Standard 252025 – Alignment Index

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| **SPECIFIC OUTCOMES AND RELATED ASSESSMENT CRITERIA** | |
| **SO 1** | **Demonstrate an understanding of potential risks to a unit** |
| **AC 1** | The concept of risk is explained with reference to accepted theory and practice. |
| **AC 2** | The factors that could constitute risks to a unit are identified and explained. |
| **AC 3** | The role of organisational policies and procedures are explained in relation to risk management. |
| **SO 2** | **Identify potential risks and assess the impact thereof in a unit** |
| **AC 1** | Potential risk factors for critical processes in a unit are identified and documented. |
| **AC 2** | Possible scenarios that could constitute a risk are identified and documented. |
| **AC 3** | The possibility of each scenario occurring is evaluated and recorded for future use. |
| **AC 4** | An analysis is performed and documented to rate the impact of each scenario on a unit. |
| **AC 5** | Priorities resulting from the impact analysis are determined and documented for implementation in the event of the risk materializing. |
| **SO 3** | **Develop contingency plans for managing risk** |
| **AC 1** | Contingency plans are developed and documented in accordance with the entity's policies and procedures |
| **AC 2** | Contingency plans are communicated to relevant stakeholders in accordance with the entity's risk management procedures. |
| **AC 3** | Contingency plans are distributed and stored in accordance with the entity's risk management procedures. |
| **SO 4** | **Test and revise contingency plans** |
| **AC 1** | Contingency plans are tested in accordance with the entity's risk management procedures. |
| **AC 2** | Recommendations on improvements to the contingency plans are documented in relation to the findings of the testing. |
| **AC 3** | Contingency plans are revised to incorporate recommendations from the testing in accordance with the entity's policies and procedures. |

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| **CRITICAL CROSS FIELD OUTCOMES** |
| ***UNIT STANDARD CCFO IDENTIFYING***  The learner is able to identify and solve problems when determining potential risks and ensuring that relevant and effective plans are developed.  ***UNIT STANDARD CCFO WORKING***  The learner is able to work effectively with others, ensuring all parties understand their own and other’s responsibility in relation to the implementation of measures to address risks facing a unit.  ***UNIT STANDARD CCFO ORGANISING***  The learner is able to organise and manage his/her own activities to allow sufficient time for planning and implementing measures to address risks.  ***UNIT STANDARD CCFO COLLECTING***  The learner is able to collect, analyse, organise and critically evaluate information when analysing potential risks in the entity.  ***UNIT STANDARD CCFO COMMUNICATING***  The learner is able to communicate effectively both verbally and in writing when recording and communicating information and recommendations relating to managing risk in a unit.  ***UNIT STANDARD CCFO SCIENCE***  The learner is able to communicate effectively both verbally and in writing when recording and communicating information and recommendations relating to managing risk in a unit.  ***UNIT STANDARD CCFO DEMONSTRATING***  The learner is able to use science and technology effectively when distributing and storing continuity plans, and ensuring that complete and accurate information is stored on computer systems.  ***UNIT STANDARD CCFO CONTRIBUTING***  The learner is able to understand the relationships between different risk factors and their impact on the achievement of a unit's objectives |

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| **SOUTH AFRICAN QUALIFICATIONS AUTHORITY** |

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| **REGISTERED UNIT STANDARD:** |

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| **Monitor, assess and manage risk** |

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| --- | --- | --- | --- | --- |
| **SAQA US ID** | **UNIT STANDARD TITLE** | | | |
| 252025 | Monitor, assess and manage risk | | | |
| **ORIGINATOR** | | **REGISTERING PROVIDER** | | |
| SGB Generic Management | |  | | |
| **QUALITY ASSURING BODY** | | | | |
| - | | | | |
| **FIELD** | | | **SUBFIELD** | |
| Field 03 - Business, Commerce and Management Studies | | | Generic Management | |
| **ABET BAND** | **UNIT STANDARD TYPE** | **OLD NQF LEVEL** | **NEW NQF LEVEL** | **CREDITS** |
| Undefined | Regular | Level 5 | New Level Assignment Pend. | 8 |
| **REGISTRATION STATUS** | | **REGISTRATION START DATE** | **REGISTRATION END DATE** | **SAQA DECISION NUMBER** |
| Registered | | 2007-11-28 | 2010-11-28 | SAQA 0474/07 |
| **LAST DATE FOR ENROLMENT** | | **LAST DATE FOR ACHIEVEMENT** | | |
| 2011-11-28 | | 2014-11-28 | | |

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| In all of the tables in this document, both the old and the new NQF Levels are shown. In the text (purpose statements, qualification rules, etc), any reference to NQF Levels are to the old levels unless specifically stated otherwise. |

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| This unit standard replaces: |

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| **US ID** | **Unit Standard Title** | **Old NQF Level** | **New NQF Level** | **Credits** | **Replacement Status** |
| 115833 | Monitor, assess and manage risk | Level 5 | New Level Assignment Pend. | 6 | Complete |

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| **PURPOSE OF THE UNIT STANDARD** |

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| This Unit Standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   The qualifying learner is capable of:   Demonstrating an understanding of business processes and potential risks to a unit.   Identifying potential risks and assessing the impact thereof in a unit.   Developing contingency plans for managing risk.   Testing and revising contingency plans. |

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| **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING** |

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| It is assumed that learners are competent in:   Communication at NQF Level 4.   Mathematical Literacy at NQF Level 4.   Computer Literacy at NQF Level 4. |

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| **UNIT STANDARD RANGE** |

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|  The learner is required to apply the learning in respect of this/her own area of responsibility.   Unit refers to the division, department or business unit in which the learner is responsible for managing and leading staff.   Entity includes, but is not limited to, a company, business unit, public institution, small business, Non-Profit Organisation or Non-Governmental Organisation.   Environmental risk factors include systems, location and changes in the environment.   Risks include financial risk, occupational health, safety and environmental risks.   Company policies include policies relating to Occupational Health, Safety and Environment.   Strategies include mitigation, avoidance, elimination and acceptance.   Contingency plans include tasks, responsibilities, time frames, resources and emergency procedures. |

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| **Specific Outcomes and Assessment Criteria:** |

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| **SPECIFIC OUTCOME 1** |

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| Demonstrate an understanding of potential risks to a unit. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| The concept of risk is explained with reference to accepted theory and practice. |

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| **ASSESSMENT CRITERION 2** |

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| The factors that could constitute risks to a unit are identified and explained. |

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| **ASSESSMENT CRITERION 3** |

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| The role of organisational policies and procedures are explained in relation to risk management. |

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| **SPECIFIC OUTCOME 2** |

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| Identify potential risks and assess the impact thereof in a unit. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Potential risk factors for critical processes in a unit are identified and documented. |

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| **ASSESSMENT CRITERION 2** |

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| Possible scenarios that could constitute a risk are identified and documented. |

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| **ASSESSMENT CRITERION 3** |

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| The possibility of each scenario occurring is evaluated and recorded for future use. |

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| **ASSESSMENT CRITERION 4** |

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| An analysis is performed and documented to rate the impact of each scenario on a unit. |

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| **ASSESSMENT CRITERION 5** |

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| Priorities resulting from the impact analysis are determined and documented for implementation in the event of the risk materialising. |

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| **SPECIFIC OUTCOME 3** |

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| Develop contingency plans for managing risk. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Contingency plans are developed and documented in accordance with the entity's policies and procedures. |

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| **ASSESSMENT CRITERION 2** |

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| Contingency plans are communicated to relevant stakeholders in accordance with the entity's risk management procedures. |

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| **ASSESSMENT CRITERION 3** |

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| Contingency plans are distributed and stored in accordance with the entity's risk management procedures. |

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| **SPECIFIC OUTCOME 4** |

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| Test and revise contingency plans. |

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| **ASSESSMENT CRITERIA** |

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| **ASSESSMENT CRITERION 1** |

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| Contingency plans are tested in accordance with the entity's risk management procedures. |

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| **ASSESSMENT CRITERION 2** |

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| Recommendations on improvements to the contingency plans are documented in relation to the findings of the testing. |

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| **ASSESSMENT CRITERION 3** |

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| Contingency plans are revised to incorporate recommendations from the testing in accordance with the entity's policies and procedures. |

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| **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS** |

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|  Anyone assessing a candidate against this Unit Standard must be registered as an assessor with the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Any institution offering learning that will enable achievement of this Unit Standard must be accredited as a provider through the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures. |

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| **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE** |

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|  Relevant acts and regulations, including the Occupational Health and Safety Act.   Types of risk, including occupational health, safety and environmental risks, financial risks, fraud and theft of intellectual property.   Contingency strategies, including mitigation, avoidance, elimination and acceptance.   Methods and techniques for conducting risk assessment. |

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| **UNIT STANDARD DEVELOPMENTAL OUTCOME** |

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| N/A |

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| **UNIT STANDARD LINKAGES** |

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| N/A |

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| **Critical Cross-field Outcomes (CCFO):** |

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| **UNIT STANDARD CCFO IDENTIFYING** |

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| The learner is able to identify and solve problems when determining potential risks and ensuring that relevant and effective plans are developed. |

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| **UNIT STANDARD CCFO WORKING** |

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| The learner is able to work effectively with others, ensuring all parties understand their own and other`s responsibility in relation to the implementation of measures to address risks facing a unit. |

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| **UNIT STANDARD CCFO ORGANISING** |

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| The learner is able to organise and manage his/her own activities to allow sufficient time for planning and implementing measures to address risks. |

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| **UNIT STANDARD CCFO COLLECTING** |

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| The learner is able to collect, analyse, organise and critically evaluate information when analysing potential risks in the entity. |

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| **UNIT STANDARD CCFO COMMUNICATING** |

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| The learner is able to communicate effectively both verbally and in writing when recording and communicating information and recommendations relating to managing risk in a unit. |

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| **UNIT STANDARD CCFO SCIENCE** |

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| The learner is able to communicate effectively both verbally and in writing when recording and communicating information and recommendations relating to managing risk in a unit. |

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| **UNIT STANDARD CCFO DEMONSTRATING** |

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| The learner is able to use science and technology effectively when distributing and storing continuity plans, and ensuring that complete and accurate information is stored on computer systems. |

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| **UNIT STANDARD CCFO CONTRIBUTING** |

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| The learner is able to understand the relationships between different risk factors and their impact on the achievement of a unit's objectives. |

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| **QUALIFICATIONS UTILISING THIS UNIT STANDARD:** |

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|  | **ID** | **QUALIFICATION TITLE** | **OLD LEVEL** | **NEW LEVEL** | **STATUS** | **END DATE** |
| Core | [59201](http://allqs.saqa.org.za/showQualification.php?id=59201) | National Certificate: Generic Management | Level 5 | New Level Assignment Pend. | Registered | 2010-11-28 |
| Core | [63589](http://allqs.saqa.org.za/showQualification.php?id=63589) | National Diploma: Geographical Information Science | Level 5 | New Level Assignment Pend. | Registered | 2012-02-18 |
| Fundamental | [60072](http://allqs.saqa.org.za/showQualification.php?id=60072) | National Diploma: Inspection and Assessment (Non-Metallics) | Level 5 | New Level Assignment Pend. | Registered | 2011-03-12 |
| Elective | [66869](http://allqs.saqa.org.za/showQualification.php?id=66869) | National Certificate: Home Affairs Services | Level 5 | New Level Assignment Pend. | Registered | 2012-09-09 |
| Elective | [65050](http://allqs.saqa.org.za/showQualification.php?id=65050) | National Certificate: Music | Level 5 | New Level Assignment Pend. | Registered | 2012-03-12 |
| Elective | [59589](http://allqs.saqa.org.za/showQualification.php?id=59589) | National Diploma: Music | Level 5 | New Level Assignment Pend. | Registered | 2011-02-06 |
| Elective | [63689](http://allqs.saqa.org.za/showQualification.php?id=63689) | Bachelor of Arts: Geographical Information Science | Level 6 | New Level Assignment Pend. | Registered | 2012-02-18 |

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|  | *All qualifications and unit standards registered on the National Qualifications Framework are public property. Thus the only payment that can be made for them is for service and reproduction. It is illegal to sell this material for profit. If the material is reproduced or quoted, the South African Qualifications Authority (SAQA) should be acknowledged as the source.* |

***The Risk Management Context***

This Section establishes the strategic, organisational and risk management context and seeks to identify the risks to be managed. Risk management is the term applied to a logical and systematic method of identifying, analysing, assessing, treating, monitoring, and communicating risks associated with any activity, function or process in a way that will enable organisations to minimise losses and maximise opportunities.

Risk management may be applied at all stages in the life of an activity, function, project or asset. The maximum benefit is usually obtained by applying the risk management process from the beginning. However, benefit can be obtained from ongoing reviews during the life cycle of the activity, function, project or asset.

Risk management can be applied to a wide variety situation ranging from large organisations to individuals. Risk is the chance of something happening that will have an impact on the objectives of the organisation. The main elements of the risk management process are to identify, analyse, assess, and treat risks.

***Types of risk***

Management may be defined as the process of planning or organising, directing and controlling the resources and activities of an organisation to reach its objectives with the least possible cost.

Risk Management may be defined as the minimisation of the adverse affects of pure, rather than speculative, risk within an organisation. Pure risk situations will result only in a loss or wastage of business assets, whereas speculative risks may result in either a gain (profit) or loss situation. In this context risk may be defined as the chance of loss, and the risk management program is therefore geared to the safeguarding of the organisation's assets; namely personnel, materials, machinery, methods, manufactured goods and money.

Risk management, which rests with top management and its staff advisers, is concerned primarily with risk financing, including minimising the cost of risk. It. can be defined as the identification, analysis, and evaluation of risk, and the selection of the most advantageous method of treating it.

It goes beyond the idea of loss control to a logical and systematic approach to managing risks. The concept is concerned with preventing loss or destruction of assets, both property and people, and of earning power. At the same time, it applies general management concepts.

Clearly no single executive acting alone can perform the entire function satisfactorily. The risk manager is not required personally to minimise the adverse effects of all accidental losses. Rather, she or he has to manage or co-ordinate the efforts of the organisation's managers and staff to reduce potential losses for which each has some responsibility.

***Interrelationship between risk management and Loss control***

Risk management and loss control as techniques have developed within a comparatively short time when considered in relation to the more traditional business functions. During this development, a certain confusion, sometimes merely semantic, has arisen concerning terminology and the interrelation between risk management, loss control and simple injury control.

Rather than there being differences between the subject areas, there is more of a logical expansion from one area to the next. The technique of risk management includes the other two subject areas.

***The task of risk management is:***

* To consider the impact of certain risky events on the performance of the organisation
* To devise alternative strategies for controlling these risks and/or their impact on the organisation
* To relate these alternative strategies to the organisation's decision framework.

Risk management co-ordinates both the insurance and non-insurance aspects of accidental loss within the operations of an organisation via various financial and non-financial strategies. One of the most important of the non-financial strategies is that of risk reduction or loss control. Loss control per se does not profess to be a new accident prevention technique.

Rather, it is a program which involves and co-ordinates the activities of management, supervisors and operatives in the prevention of all aspects of accidental loss, not only those accidents which result in injuries to people.

The means of promoting this involvement in the loss control program differs from that used in injury prevention. The difference is in the emphasis placed on the three arguments; legal, humanitarian, and economic, which may be used to obtain the necessary involvement.

Injury prevention alone is seen primarily in terms of the humanitarian argument; the need to care for fellow employees. This duty of care is enforced in certain areas by the legal argument, to provide a safe place of work and safe system of work. Little emphasis is placed on the economic factors associated with accidents, except possibly in connection with claims for damages.

Loss control, however, is firmly based on the economic argument that accidents lead to a wastage of assets and that an effective program of loss control can lead to a reduction or elimination of this wastage.

Risk management involves the *identification, evaluation* and *control* of the pure risks within an organisation.

***Risk identification***

Risk identification may be achieved by one or more of the following techniques:

* Inspection of the physical working environment by management and shopfloor personnel; management/employee discussions, eg. Safety committees; independent audits by outside consultants; and detailed, multi-disciplinary hazard studies undertaken during the design and planning stages of a production operation.

***Risk evaluation***

Risk evaluation (or measurement) may be undertaken on economic, social or legal grounds.

* Economic considerations should include the financial impact on the organisation, legislative requirements, the uninsured cost of accidents, the effect on insurance premiums, and the overall profitability of the organisation.
* Social and humanitarian considerations should include the general well-being of employees, the interaction with members of the public who either live near the organisation's premises or come into contact with its operations (e.g. transportation, effluent discharges, nuisance noise etc.) and the consumers of the organisation's products or services.
* Legal considerations should include all aspects of health and safety legislation, codes of practice, and accepted standards. In addition, other relevant legislation in the areas of fire safety, pollution and product liability will have to be taken into account.

The probability and frequency of each occurrence and the severity of the outcome

* Including the maximum potential loss
* Will also need to be brought into the evaluation

**Risk control**

Risk control strategies may be classified into four main areas; risk avoidance, risk retention, risk transfer and risk reduction.

**Risk avoidance**

This strategy involves a conscious decision on the part of the organisation to avoid a particular risk by eliminating the operation producing it.

For example, a decision may be made to pay all employees by cheque or credit transfer, obviating the need for large amounts of cash on the premises and the inherent risk involved with cash collection, handling, and distribution.

Another example of risk avoidance strategy—this time from the health and safety field—is the decision to eradicate the use of a toxic chemical in favour of a less toxic one.

**Risk retention**

There are two aspects to consider under this heading; risk retention *with knowledge,* and risk retention *without knowledge.*

* *With* knowledge. A conscious decision is made to retain the risk within the organisation's financial operations. This may involve the formation of a captive insurance company or the use of deductibles—that is, the self-assumption of risk. Decisions on self-insurance can be made only when all the risks have been identified and effectively evaluated.
* *Without* knowledge. This involves self-assumption via error or omission and arises because the risks have not been fully identified and evaluated, hence appropriate control action has not been taken.

***Risk transfer***

This strategy involves the legal assignment of the costs of certain potential losses to another party. The most common way is through insurance. The insurer undertakes an obligation to compensate the insured with a set of contractual rules if a specific event occurs. The introduction of clauses into contracts which result in another party being responsible for the costs of a particular loss is an alternative risk transfer strategy.

***Risk reduction***

Briefly, this approach considers the reduction of risk within the organisation by the (loss control) implementation of some form of a loss control program (discussed in detail above). The basic aim is to protect the organisation's assets from wastage caused by accidental loss. Initially, there is a need to collect data on as many loss-producing accidents as possible in order to set up an effective program of remedial action.

The *first* stage of such a development will involve the reporting of accidents resulting in physical harm to an individual (injury or disease); damage to property, plant, equipment, materials or product; and 'near misses' which result in no injuries or damage. The second stage is achieved by bringing other areas such as fire safety, security, pollution control, product liability and business interruption considerations together into one coordinated management function, with the aim of reducing all accidental losses within the organisation's operations. Thus the risk reduction strategy of risk management is synonymous with loss control management.

***Factors influencing risk management***

***Incentives for effective management of risk***

In South Africa the newer style of occupational safety legislation requires a consultative approach to occupational health and safety. This means that management works with employees to create a safe workplace, with the final decision-making power resting with management. The reasons for emphasising an integrated, planned approach to occupational health and safety are economic, humanitarian and legal.

***The economic impact***

Workplace accidents and poor employee health are a significant cost to industry. Industrial accidents are considerably more costly to the community than industrial disputes or motor vehicle accidents. Accidents include both injuries and diseases. Estimates of the costs of losses associated with accidents vary widely, both because of difficulties in collecting data and the hidden costs such as rehabilitation centres and other hospitalisation costs. Total costs include direct (insured) and indirect (uninsured) costs of losses.

The Review of Occupational Health and Safety in South Africa provides statistics that the estimated cost of workers compensation claims (a direct cost) was R4.8 billion in 1989-90. This represented 1.3% of non-farm GDP. Total costs (including the indirect costs) are estimated as being several times the direct workers compensation costs.

Occupational disease may be under-reported by the workers compensation statistics referred to above. The cost of occupational diseases may be as high as that of occupational injuries, making the total direct cost to South African society of occupational injuries and diseases R9.6 billion.

By international standards, South Africa’shealth and safety costs are high. Revised management of these direct costs has led to the restructuring of the workers compensation systems in recent years (primarily a reduction in the access to common law claims and an increased emphasis on rehabilitation) which has resulted in reduced workers compensation premiums.

A preventative approach to health and safety can reduce these costs, and lead to less tangible cost benefits, such as the increased production caused by a more harmonious and fulfilled work force.

**The human factor**

The fact that employees may be injured or killed should be sufficient incentive to ensure the safest possible workplace. However, the Review of Occupational Health and Safety in South Africa(seeabove) indicates that each week over 3,000 workers experience a compensable injury which results in at least five days absence from work. Work-related accidents kill approximately 300 workers annually.

Each of these injuries represents a person whose life has been significantly affected by a traumatic incident which arose out of a deficiency in the control of workplace safety or health. Besides the highly visible personal injury, there is the incidence of occupational disease, which in many cases is a slow deterioration going unnoticed in the early stages. Examples include industrial deafness, dust diseases and occupational cancer. It may be only after a time delay of five years or more that the existence of such diseases is established, by which time their effects may have become irreversible.

The social costs of work-related injury (to the affected employee, his/her family and the community) can be less obvious than the economic impact. An employee whose injury disallows continuing employment becomes to some extent invisible, and once the individual matter of compensation is settled the incident may no longer be an influence for change at that workplace or others.

**The legal impact**

Occupational health and safety legislation places a duty of care on employers to ensure the health and safety of all their employees. More specific laws, in the form of regulations, standards, codes of practice and guidelines, regulate or provide guidance as ‘good practice’ in the control of hazards associated with the use of plant, equipment and substances (such as hazardous chemicals), as well as environmental factors such as noise levels, lighting, and ventilation.

Regardless of whether there is specific legislation on an issue, there is a general duty to ensure the safety of employees in the work place, and a failure to do so can result in a damages claim against the employer. Despite increasing legal requirements in recent years, the available industrial accident statistics show that accidents remain a severe drain on the economy as a whole, as well as the individual organisation.

***In Pairs***

Explain the following terms:

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| ***Term*** | ***Explanation of the term*** |
| ***Hazard*** | *Example. A source with a potential to cause loss* |
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| ***Exposure*** |  |
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| ***Loss*** |  |
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| ***Risk*** |  |
|  |
| ***Consequence*** |  |
|  |
| ***Likelihood*** |  |
|  |
| ***Risk management*** |  |
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| ***Risk identification*** |  |
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| ***Risk analysis*** |  |
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| ***Risk assessment*** |  |
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| ***Risk treatment*** |  |
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***Notes on sources of risk***

One major objective of an organisation is to minimise the loss of business assets. Loss control is based strongly on the economic approach and may be described as a program designed to reduce or eliminate all aspects of accidental loss which result in a wastage of the organisation's assets. These so-called operational losses lead to an erosion of organisation profit margins and adversely affect the overall performance of the organisation.

Those assets protected by such a program are human resources, materials, machinery, methods, goods and money. The component parts of a loss control program may be considered in terms of protecting one or more of these assets from loss by identifying and controlling the risks to those assets.

***Risks to the Human Resources Asset***

(Risk of injury and direct loss of labour in the workplace). Protection of the human resource asset can be extended outside the workplace to include off-the-job safety such as home safety and road safety. Injuries are an indirect risk to the money asset, since a reduction in the number of injuries should result in a reduction in direct and indirect accident costs.

Issues associated with the risk management of human resources include:OH&S policies, OH&S committees and Health & Safety Representatives, safety training and communication, safe operating procedures, safe systems of work, machine guarding, housekeeping, personal protective equipment, responsibility and awareness programs, incentive schemes and safety inspections/audits.

***Risks to the Materials Asset***

(The risk of damage to machinery, materials and manufactured goods from accidental loss). Damage is an indirect risk to the money asset because of repetitive damage and associated repair and replacement costs. Damage is an indirect risk to the human resource asset if damage causes and injury causes are similar.

Fire riskis a special aspect of damage because fire damage is a very costly item for machinery, materials, and manufactured goods assets, as well as causing injury in the human resources asset and indirectly the money asset.

Issues associated with the fire risk include: fire prevention techniques, methods of fire control, fire fighting and extinguishment, fire protection and fixed equipment—for example, sprinkler systems, handling and storage of flammable materials, flammable liquids, fire safety of employees, evacuation drills and procedures, electrical installations and disaster plans.

***Risk associated with lack of Security.***

Security protects the materials, methods, manufactured goods, and money assets. Safety hazards that can arise because of a lack of security include the high risk involved when employees are sent to collect wages, or the potential risk to children and others when a factory or construction site is not physically secure from unauthorised access. Hence, indirectly, a system of security can improve the overall safety of the organisation as well as directly protecting the assets mentioned above.

However, security, in the form of locked doors, can also conflict with protection of the human resource asset if the doors are the fire escape doors.

Risks associated with security include: the physical security of premises, cash collection and distribution, theft and pilfering, vandalism, storage of valuable and attractive items, and the control of confidential data. Consideration should also be given to defensive techniques such as stocktaking, accounting checks and mechanical and electrical defences. Aspects of computer security should also be included in this area.

***Risk associated with Occupational Health and Hygiene.***

(Risk to the human resource asset from industrial diseases and other long term effects caused by the physical working environment.

***Indirect risk to the money asset from the associated costs)***

Specific issues include: noise, dusts, corrosives, toxic materials, ventilation, heating, lighting, humidity, environmental monitoring, biological monitoring, health checks, general and personal hygiene, counselling, health education, employee screening and employment medicals.

***Risks of Pollution***

(Environmental damage within the workplace and also outside). Pollution of air, ground and water affects the human resource asset directly and the money asset indirectly.

Adverse publicity because of causing pollution would initially harm the organisation's image and perhaps harm it economically. Persistent breaches of one or other of the Acts dealing with pollution will ultimately lead to fines and more adverse publicity. Special attention should also be paid to the problem of noise as a pollutant or nuisance.

***Risk associated with Products.***

Product liability extends the protection to all consumers of the organisation's products and as such is concerned with the factory employees only in their role as potential consumers. Product liability is concerned primarily with the protection of the money asset.

This asset may suffer accidental losses directly because of compensation payments or indirectly because of adverse publicity which is detrimental to the organisation’s image.

Issues include the development of a product safety strategy which is in keeping with both occupational and consumer safety legislation and codes of practice. In an industrial context, special attention should be paid to appropriate State legislation.

Any such strategy should lead to the prevention of possible losses arising from product design, utilisation and inferior quality control.

Aspects of consumer safety in terms of product usage, advertising literature and legal liability should also be taken into account, as should the non-insurance aspects of public liability such as consumer and fleet safety.

***Risk Risks associated with Business interruption.***

Risk of loss of any production or service is detrimental to the overall profitability of the organisation. Hence business interruption is concerned primarily with the protection of the money asset. Indirectly, however, it serves to maintain the assets of machinery, materials and manufactured goods.

Issues associated with business interruption include planned lubrication, planned preventive maintenance, statutory inspections, machinery replacement programs, availability of key spares, identification of key machines and areas within the organisation, continued supplies of raw materials, minimisation of production bottlenecks, and highlighting dependencies on specific items of plant, suppliers, customers and/or public utilities.

***In Pairs - Part 1***

Complete the Table by adding examples of sources of risk. Obtain your own examples and/or use the list supplied below. Add more generic headings if required for your examples.

|  |  |  |
| --- | --- | --- |
| ***Generic Risk sources*** | ***Risk Source Examples*** | ***Add more examples of sources of risk*** |
| ***Commercial and legal relationships:*** | ***subcontractors*** |  |
| ***Economic circumstances:*** | ***exchange rates*** |  |
| ***Human behaviour:*** | ***injury & disease*** |  |
| ***Natural events:*** | ***earthquakes*** |  |
| ***Political circumstances:*** | ***legislative changes*** |  |
| ***Technology and technical issues:*** | ***obsolescence*** |  |
| ***Management activities and controls:*** | ***policies / procedures*** |  |

***List of sources of risks***

Fire, water, oil, explosions, windstorm, machinery breakdown, transport losses, burglary, theft, fraud, shrinkage, robbery, computer risks, sabotage, industrial espionage, production standstill, service interruption, bomb threat, industrial stoppage, external environmental threat, product liability, subcontractors liability, external environment liability, data liability, accident, illness, disease, employee death, employee retirement, kidnapping.

***Part 2***

Please complete this section by preparing a Risk Identification Matrix Table to summarise the way in which risk arises in the organisation you have selected (your organisation).

The following Table is a suggested format for content (but use ‘landscape’ page orientation). The Table should identify the sources of risk and areas of impact that you have selected as relevant to your organisation.

Add additional explanatory text (as attachments to the Table) to expand on the headings so that the scope of the ‘Sources of risk’ and the particular losses associated with the ‘Areas of impact’ are described in sufficient detail for your organisation.

Complete the Table by indicating in the matrix, the particular sources of risk which are impacting on the different areas you have identified for your organisation.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Areas of impact relevant to your selected organisation** | | | | |
| **Sources of risk relevant to your selected organisation** | **People**  Health, safety & welfare | **Equipment**  Tools & machinery | **Materials**  Used, worked or made | **Work practices**  Operating procedures | **Environment**  Physical surroundings |
| Commercial and legal relationships |  |  |  |  |  |
| Economic circumstances |  |  |  |  |  |
| Human behaviour |  |  |  |  |  |
| Natural events |  |  |  |  |  |
| Political circumstances |  |  |  |  |  |
| Technology and technical issues |  |  |  |  |  |
| Other |  |  |  |  |  |

***Section Outline***

This section will cover the following areas:

* Identify risk factors in the work place.
* Compare and contrast models of accident causation.
* Describe the purpose and components of a safety audit and a specific risk audit.

***Information on accident causation models***

***Accident analysis models should:***

* provide objective definitions of concepts and terms (enables measurements of the parameter to be made) and
* should have some utility in helping us achieve our overall goals (an increased understanding of the processes particularly in order to enhance our ability to implement preventive measures)

We are inherently dealing with unwanted events and consequences. Our sole objective is to make such adverse consequences less likely. Our interest in the process of occurrence of accidental injury is only to achieve a better understanding of possible risk control measures.

Causation may offer an understanding of possible control measures. There are three basic principles and corresponding models.The models should be viewed for their defined inter-relationship.

|  |  |
| --- | --- |
| ***Basic principle*** | ***Accident causation model*** |
| Energy is required in the production of injury and damage. | Energy damage model |
| The process develops sequentially in time. | Time sequence concept |
| The process involves uncertainty as an inherent principle i.e. probabilities are involved). | Risk estimation model |

***The energy damage model***

The energy damage model states that damage (injury) is a result of incident energy whose intensity at the point of contact with the recipient exceeds the damage threshold of the recipient.

Recipient’s boundary

Hazard control mechanism

Space transfer mechanism

HAZARD

RECIPIENT

Explanation of the diagram:

***The hazard control mechanism*** is the means of controlling the potentially damaging properties of the energy source assuming that the source and the recipient are in sufficiently close proximity for the recipient to be adversely affected by them.

***The space transfer mechanism*** is the means of bringing the recipient and the energy together in space assuming that they initially are remote from one another.

The ***recipient’s boundary*** is that surface which is exposed and susceptible to the incident energy. It may be the skin or an inner organ. The strength of the boundary can be defined as the intensity of incident energy needed to just create a detectable unit of damage. This can also be thought of as the damage threshold of the boundary.

The types of ***risk control measures*** which are evident are:

* controlling the existence or amount of energy
* maintaining the reliability of the hazard control mechanism
* removing or reducing the need for the space transfer mechanism
* raising the damage threshold of the recipient
* separating the hazard and the recipient

***Background information about hazards***

Hazards are seen as sources of potentially damaging energy which either exist naturally or as a result of humanmodification of the naturally occurring world.

This use of the word hazard in this way does not always conform to its colloquial use. Colloquially the brick on the floor or a stationary and unlit truck on the side of the road at night are regarded as hazards. However, if the brick trips a person up it is not the brick's energy which results in damage but rather the gravitational potential energy in the body of the person who was tripped, who is therefore the hazard under this definition.

If a car hits the stationary truck at night, similarly it is not the truck which is the hazard but rather the car whose kinetic energy has resulted in the subsequent damage to both vehicles.

On the other hand there are numerous examples of hazards which we do colloquially recognise in a manner which is consistent with the definition. Examples are machinery energy, electrical energy, and thermal energy.

If the hazard and the recipient are not co-existent, then a space transfer mechanism is required to transport the energy to the recipient through space.

Energy can be transferred through space either as a unit or quantum (such as a flying particle with kinetic energy) or in the form of a wave of disturbance in some property of the medium between the two. Examples of the latter are pressure waves and thermal and electro-magnetic radiation.

In some instances the type of energy contained in the source hazard may change to a different type of energy for the propagation process. A simple example is that of an explosion in which the initial hazard is the chemical bonding energy of the explosive materials and the propagating energies are chemical, electromagnetic (i.e. light), acoustic (i.e. air pressure) and kinetic (in the event that solid objects are flung outwards by the force of the explosion).

Thus the transfer mechanism may be varied for any single hazard and involve a change of energy type. Transfer through space can be brought about either by movement of the energy or of the recipient or both.

Energy movement often occurs because of some radiating or mobility property associated with the energy. These ideas are consistent with that of a pathway, introduced in the risk estimation model. Once there, the energy will only result in damage if its intensity at the boundary of the recipient is greater than the strength of the boundary at that point.

The strength of the recipient is a measure of its capacity to absorb energy without damage or to sustain damage without significant effect, either because the unit of damage is so small or because of some damage repair process which exists.

It is apparent that levels of energy capable of creating injury co-exist with us as a matter of routine and as most hazards do not continuously create damage it is self-evident that in each case a normally occurring control measure of some sort is in operation. For example, at almost any time even the gravity potential energy in our own bodies is capable of inflicting serious injury.

It is not therefore the existence of these energies which is of fundamental importance in understanding the process of injury, but rather the way in which their potentially injurious properties are normally held in control. Attention must clearly be focused on the control mechanisms which enable us to live alongside hazards without continuously sustaining injury.

Clearly an injury will only occur if this hazard control mechanism fails. For example, one of the hazard control mechanisms of the body's gravity potential energy is the traction available at the feet while walking. A slip is said to have occurred when this particular control mechanism fails. The probability of this control mechanism failing is presumably quite low otherwise the experience of an uncontrolled slip would be a very much more common one. Our concern therefore should be with the probability of failure of control mechanisms or alternatively with the reliability of control mechanisms.

**Potentially injurious or damaging energy sources *within* the injured person or damaged body**

|  |  |
| --- | --- |
| **ENERGY TYPE** | **description** |
| Gravitational potential energy | due to height above a datum |
| Kinetic energy | in body movement (self generated or externally powered) |
| Muscle energy | in the maintenance of body posture  in undertaking physical work and force application  in the generation of movement |
| Chemical energy | molecular bonding energy released in oxidising reactions (eg. self-combustion) |

**Potentially injurious or damaging energy sources *external* to the injured person or damaged body**

|  |  |
| --- | --- |
| **ENERGY TYPE** | **description** |
| Potential energies | gravitational energy  structural strain energy  stored energy in compressed fluids |
| Kinetic energy | energy stored in a body's mass due to its speed in a linear or rotational motion |
| Mechanical power | The rate of energy flow in machinery from the source of power to the point where the energy is absorbed in the action of the machine |
| Acoustic and mechanical vibrations | noise  acoustic shock waves  mechanical vibration in solids |
| Electrical energy | electrical **potential energy** (Volts)  electro-magnetic radiation  electrostatic charge |
| Nuclear particle radiation | radiation of a nuclear origin (eg X-rays) |
| Thermal energy | solids, liquids, gases (including flames)  ambient (atmospheric) condition |
| Chemical energy | molecular bonding energy released in oxidising reactions (eg fire and explosion, corrosion)  modification to the chemical processes of the body (eg. acute toxic and non-respirable conditions) |
| Microbiological 'energy' | viruses, bacteria, fungi |
| Muscle energy | attacks (purposeful) or inadvertent striking |

***Limitations of the Energy Damage Concept***

Not all injuries or illnesses are derived from energy impinging on the body. The major area of disease includes mechanisms involving microbiological organisms such as bacteria and viruses as well as exposure to chemicals either in low levels for prolonged periods or high exposure concentrations for short periods. Psychological stress may result also from chemical, noise or psycho/social stressors. Bodily damage could thus be defined as an adverse effect on either the physical, psychological or social functioning of the body.

**THE RISK ESTIMATION MODEL**

The Model can be considered as a combination of an occurrence and a consequence associated with an event.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Mechanism type <<< | Mechanism  class <<< | Mechanism  family <<< | **Event <<<>>>** | Outcomes >>> | Exposed group >>> | Consequence type & value |

The occurrence is the energy release part of the process and the consequence the nature of the injury or damage, as well as its value. Event is that point in time at which control is lost over the potentially damaging properties of the energy source.

Occurrence consists of a number of pre-Event matters which are of two basic types:

* The Mechanism of the Event, ie. the means by which control of the potentially damaging energy was lost. A given Event may have a variety of possible Mechanisms, such as type, class and family.
* The circumstances within which the Mechanism occurs. Circumstances arise and may combine quite by chance.
* The determination of all possible Mechanisms of an Event is through a process which Viner calls Event analysis.
* The Outcome (consequence) in the process can affect different exposed groups (or assets).

Each group can experience different types of consequence. People experience injury or illness and psychological trauma, as well as financial loss from accidents. Organisations experience financial loss or harm to their public image and so on. Generally the significance (value) of the consequence is affected by the chance associated with the way in which the group is exposed to the Outcome. If a brick falls off a scaffold as a person is walking past the seriousness of the injury is determined by whether the brick hits the person at all or where it hits them.

The consequence process involves the development and stabilisation of the consequence and hence its value to the affected group. The value will generally only be known with certainty some time after the actual start of the damage. It is appropriate to consider these aspects as a part of a modelling of the time sequence of occurrences.

**THE TIME SEQUENCE Model**

This Model is used to provide a time structure to the analysis of the Events in the occurrence-consequence sequence (Risk estimation model, above). The generalised time sequence model draws attention to counter-measures involving dynamic interaction with the system in which the Event takes place and

to the need to develop a supervisory system capable of recognising the build up of circumstances and conditions within which the Event Mechanism is possible.

In the Time Sequence Model the temporal characteristics of an occurrence and also the consequence can be emphasised and displayed. This is useful because the time intervals between the various parts of an occurrence can be significant in terms of recognition and control of potentially damaging circumstances and conditions.

If the sum of the Event Mechanism evolution time and the energy release and transfer time is sufficiently long then there is an opportunity to detect, recognise and react to the imminently damaging conditions and so avoid the damage by exerting some active control over the Mechanism, the hazard, the release, the transfer or the damage threshold. As a counter-measure this could be termed active control, avoidance or protection.

**The generalised time sequence model**

Opportunity for the ‘supervisory system’ to control the risk, prior to the first consequence.

Opportunity for active control of the occurrence.

Opportunity for damage control and rehabilitation.

TIME AXIS

EVENT

Development of conditions supporting possible event mechanisms.

Initiation of event mechanism.

Specific outcome.

Damage complete, recovered or stabilised.

Damage starts.

Time zone 1.

Preconditions

Time zone 2.

Occurrence

Time zone 3.

Consequence

***Features of the model***

***Supervisory system***

The opportunity for active control over the Event and energy transfer only exists if the risk is recognised in the first instance so that the appropriate steps may be taken. This requires a *supervisory system* which is capable of identifying risks, recognising the existence of potentially damaging conditions and circumstances and taking effective control measures.

A supervisory system can be defined as any individual, group or organisational process capable of influencing the design, environmental and behavioural aspects of the conditions within which the Event can take place.

The supervisory system may not be limited to the immediate confines of the organisation within which the event can take place, but can include the community support systems necessary for the total c*ontrol of* risk in this industry as a part of the community.

***Time zone one***

The preliminary time zone is one in which the circumstances and conditions necessary to support the Event Mechanism are developed

Consider a fatigue crack in a pipeline containing hydrocarbon gas. The conditions of the process are the pipeline material and the cycle-time of the chemical process. The circumstances can be thought of as the unforeseen generation and transmission of vibration from an item of equipment which may be entirely unrelated to the primary function of the pipeline.

Apart from these physical requirements which enable fatigue cracks to occur, there are also administrative aspects. At the design stage are there adequate risk review processes which are intended to identify such possibilities? Such processes depend on the knowledge of the participants.

Are there adequate pathways in our society to bring new knowledge to the attention of engineers. architects, managers and tradespeople? Did this particular organisation establish crack detection and monitoring procedures of a sort which could, in principle, detect this particular crack? And so on.

***Time zone two***

This time structure depicts the sequence from the initiation for the Event Mechanism through to the specific Outcome of the occurrence in question. This time zone (time zone two), structured in this way, might be thought of as the fundamental zone upon which our attention should be fixed. However, other aspects of the process are also of importance.

***Time zone three***

This is the consequence time zone beyond the Event and Outcome. It takes time to develop or be fully understood.

For example, it commonly takes some weeks for the nature and severity of strain injuries to become totally apparent. Sometimes the consequence type which is apparent initially changes during time to become something quite different. A motorcycle rider who experiences a crash will initially sustain physical injuries which may or may not over time repair themselves. Subsequently however, a psychological problem may develop which prevents the person from riding motorcycles for a living. Here both the nature and severity of the consequence have changed.

In time zone three the damage proceeds to a point at which the whole consequence can be looked back upon with certainty, terminating at the point when no further change is taking place and no significant further uncertainty exists regarding the consequence.

***Length of time zones***

The length of any zone is extremely variable. From the initiation of the Event Mechanism to the Outcome, a fall may take place in less than one second. Some Event Mechanisms take months to develop to the Event (eg. a fatigue crack). Furthermore the development of conditions supporting these types of Events may take place over a number of years.

Similarly the third zone may take a number of years before it reaches a point of finalisation; a permanently disabling injury may still be developing consequences of different types and values some years after the Event.

***Advantages of the time sequence model***

The generalised time sequence model draws attention to counter-measures not evident in the previous two models. The supervisory system in the first time zone can recognise the possibilities and take steps to reduce the probabilities.

There is the opportunity physically to monitor circumstances and conditions to provide a warning of the impending existence of an Event Mechanism or the development of that Mechanism immediately prior to the initial release of energy in the Event.

Until the Event occurs it is possible to prevent it: the Event Mechanism could be detected, the significance of what has been detected could be recognised, a decision about the appropriate preventative action could be made and carried out. If the time between the initiation of the Event Mechanism and the Event is short in relation to the time required to react positively to the Event Mechanism, then this counter-measure is not feasible.

There is an opportunity once the Event has taken place to take active steps to influence the Outcome, exposed groups and consequence types in order to minimise the consequence value of the Event.

***Applying the concepts to real cases***

**Case Study**

Consider the case study of a sub-contractor driver of a long haul semi-trailer tanker who drove his vehicle off a country highway. The truck was equipped with a tachograph to record speed and driving/rest periods and the driver adhered to company rules by not travelling faster than 100 km/hr or for longer than two hours without a break.

Investigation indicated that there were no tyre or steering mechanism defects.

It appeared that the driver lost his ability to maintain directional control of the vehicle and. Fatigue is a simple explanation; the driver may have fallen asleep or lost his ability to discriminate important visual clues.

Much research has been carried out into fatigue by government departments and by universities.

Work on the directional stability of articulated vehicles and experience suggests the importance of such factors as tyre tread patterns and inflation pressures, turn-able types, road slope, braking conditions, trailer suspension geometry and trailer mass loading. Further, vibration may be important.

Driver training seldom if ever addresses these points.

***Application of the Energy Damage Model***

The hazard is the kinetic energy of the vehicle including that of the driver. The normally existing control on the potentially damaging aspects of the kinetic energy is the ability of the driver and vehicle combination to control speed and direction. The Event is the point in time at which the driver lost control of the potentially damaging properties of the kinetic energy of the vehicle and driver. The case study implies that the Event is a loss of directional control of the vehicle.

The transfer mechanism can be determined by considering the recipient(s) as the driver and/or vehicle which are coincident with the energy, in which case no transfer mechanism is required. The energy changes involved in an impact or roll-over of the vehicle would be the transformation from kinetic energy resulting in structural deformation strain energy of the vehicle and structural deformation of the driver.

The damage threshold of the vehicle is the impact magnitude which the vehicle is capable of sustaining without significant damage. Similarly the damage threshold of the driver is the energy intensity at impact which is just sufficient to create a noticeable injury to the driver's body.

Note that the energy intensity will depend upon the surface area over which the energy is spread. If the impact energy is dissipated on a sharp surface such as a hard dashboard edge, then the intensity is more likely to exceed the damage threshold of the driver than if the dashboard edge were curved and padded. With the curved dashboard the energy would be spread over a larger surface area and consequently its intensity at the point of impact would be reduced.

***Application of the Risk Estimation Model***

The Event has been defined above as the point in time at which the driver lost directional control of the vehicle. The Outcome in this case was that the vehicle ran off the road and it may be assumed impacted with some object off the roadside. There could have been other Outcomes such as running off the road but not impacting anything, losing directional control but managing to return to the road, moving across into the oncoming lane and impacting with a vehicle there, running off the side of a bridge and falling into a valley, and so on.

Exposed groups with this particular Outcome are the driver and immediate family, the vehicle owner or operator, the owner of the contents of the vehicle, the associated insurance companies and rescuers who may expose themselves to risk in retrieving the injured driver.

Consequence types are as follows:

* For the driver: physical injury; psychological shock; loss of income earning ability; possible loss of ability to work.
* For the operating company: loss of morale amongst employees; loss of public image; loss of income from the trip; increase in operating costs due to rises in insurance premiums, legal fees etc.; loss of customer satisfaction; and so on. The same or similar may be listed for other exposed groups.

Consequence values appropriate to each consequence type can be noted as a range from minimal consequence to maximum consequence. If necessary, estimates of dollar values can be placed upon this range.

***Application of the Generalised Time Sequence Model***

***Time Zone One***

The start of time zone one is that instant at which the circumstances and conditions within which these Event Mechanisms and Events could take place first existed. The real origin of this time zone is that point when road vehicles, particularly articulated vehicles of this sort, first became used for long distance haulage on a regular basis. In so far as this operating company is concerned, this zone apparently started when they became involved in the long distance road haulage business, particularly making use of articulated vehicles. Either origin can be taken for the time zone, the only effect it has is on the subsequent definition of the supervisory system.

The supervisory system consists of any individual, group of people, organisation or institution which has a role to play in influencing any of the relevant circumstances and conditions. In practice the necessary or possible elements of the supervisory system can be noted by listing all relevant circumstances and conditions.

For example, in this case assuming the Event Mechanism to be loss of neuromuscular function of the driver (due to fatigue), the following list could be produced:

* vehicle directional stability characteristics (influenced by turntable design; trailer loading pattern; trailer tyre tread and inflation; vehicle braking systems characteristics; vehicle steering characteristics; vehicle suspension type and geometry; vehicle aerodynamic characteristics)
* vibration levels
* driving speed, driving time limitations, and rest periods

chronic driver fatigue, affected by lifestyle

* driver's medical condition ambient conditions of temperature, wind, rain, snow, etc.
* road conditions. including bumps, camber, bend radius, surface traction, etc.

***Control over the supervisory systems***

It will be noted that the supervisory systems which have control over these various factors are:

* national vehicle design rule committees
* vehicle designers
* establishments’ training mechanics and drivers
* road construction and maintenance authorities
* operating company management (driver selection, training and operating rules, also vehicle maintenance procedures)
* road transport regulatory bodies

The end of this time zone is the point when the Event Mechanism is initiated (in time zone 2).

***Time Zone Two***

This time zone starts at the initiation of whatever Mechanism led to the Event. The case history implies that the driver probably fell asleep so the Event Mechanism is in general terms loss of neuromuscular function of the driver. The techniques of Event analysis can be used to determine all possible Event Mechanisms.

In this case the initiation of the Event Mechanism would have occurred at an un-determined point in time at which fatigue reduced the driver's performance to an unacceptable level. With greater physiological understanding it may be possible to identify and define this point with greater accuracy. For example, the initiation of the Event Mechanism may be capable of being defined as a point in time at which the brain starts to experience brief sleep periods. The time between the initiation of the Mechanism and the Event could range from several seconds to several minutes.

The Event has already been defined and may be regarded as the point at which the driver finally fell asleep. Some few seconds may pass before the Outcome becomes apparent. One Outcome is always the 'null Outcome' in which no damaging energy is transmitted to a recipient. For example a vehicle could run off the road and the driver could wake up with the rough ride and manage to bring the vehicle back onto the road again.

This particular case history is of an occurrence involving some resulting damage so the null Outcome did not occur. Some time, possibly measured in seconds, would have occurred between the Event and the final Outcome, depending on how far from the initial point was the point of impact. Time zone two ends when the Outcome is an accomplished fact

***Time Zone Three***

This time zone begins as damage starts as a result of the Outcome. In the case of an impact, the initial physical damage will be completed in a very brief period of time measured perhaps in fractions of a second. On the other hand the impact may result in a fire so that the damage takes place during a longer period while the truck is being burned out.

In this time zone the term 'damage' can be used to signify not only physical damage (such as to the truck) or physiological damage (to the driver) but also loss sustained by any of the other exposed groups and described in the form of the various other consequence types which would become evident during the use of the risk estimation model.

It may take years for these losses to become apparent in nature and magnitude. The time zone ends when the complete consequence scenario becomes stabilised so that no further unrecognised implications exist and the values of all consequence types are known with a very high degree of certainty.

***Counter-Measures***

***Supervisory system***

Improved design criteria are always to be preferred over any other measure of risk control. Considering first the opportunity for the supervisory system to recognise the existence of a risk and to take some appropriate control measures, the need for research into vehicle directional stability and its effect upon driver work load and hence fatigue would be recognised.

This counter-measure implies that a logical connection exists in the community between the operators of long distance road vehicles, the vehicle design rules, maintenance and driver education, and organisations capable of carrying out the necessary research.

A national association of road hauliers, with responsibility for coordinating the efforts of the other community organisations involved and providing them with information and test facilities, would be an important component of such a supervisory system. These counter-measures terminate at the end of time zone one in this case.

***Time zone 2***

In the first half of time zone two there is the opportunity for an active counter-measure. Devices which are capable of detecting driver’s head droop, and of providing audible warnings aimed at waking the driver, exist. Further, regular driver response could be required to some stimulus, such as is used in railway trains, failing which the vehicle could sound audible alarms etc.

The road surface on either side of the carriageway could be created in such a way that a great deal of noise is generated if a vehicle strays off the roadway and this may also have the effect of waking the driver.

***In Pairs***

Apply the energy damage, risk estimation and time sequence models, using the questions below, to the case history.

***Case History—Process worker entangled in machinery***

A process worker was cleaning a mixing tank from the inside when the mixing arms were activated. The push button switch was mounted on a pole at high thigh level facing towards a walkway next to the tank. The top of the tank was at walkway floor level and it contained the access hole, from which the lid had been removed to allow the worker into the tank.

The worker was not backed up by a second worker on the outside of the tank, neither did he have an air supply, harness etc. as required by the local Entry into Confined Spaces Regulations, made in 1954. There was no lock-out in use on the switch, which was in a badly corroded state and not protected by a hood. The factory was a subsidiary of a large international corporation. The factory manager was 50 years old and had grown up in the industry.

The factory had a safety committee comprised of departmental supervisors in the main, although some labourers and odd-job men sat on it. The personnel manager, who convened the committee, had attended various safety seminars. This particular Event resulted in no injury and no one in the factory was aware of their statutory duty or common law duty of care.

***Energy damage model***

1. What is the hazard?
2. (b) What is the normal hazard control mechanism?
3. (c) Which type of hazard control mechanism failure is appropriate to the case?
4. d) What is the transfer mechanism (if any)?
5. (e) Which, if any, counter-measures are appropriate?

***Risk estimation model***

(a) Write down the statement of the Event.

(b) What are the possible Event Mechanisms implied in the case history?

(c) What is the Outcome of this case?

(d) Who/what are the exposed groups?

(e) What consequences are foreseeable for the worker?

***Time sequence model***

(a) Estimate the possible time scale of the first time zone-development of conditions etc.

(b) What type of supervisory system(s) might have been required to prevent such occurrences?

(1) Within the company?

(ii) Within the trade/industry associations?

(iii) Within the government agencies 'responsible' for health and safety?

(iv) Within the academic/research institutions of the society?

***Discuss their role and interaction.***

(c) Comment on the applicability of the counter-measure to these cases.

***Notes on Audits***

There is a variety of terms used in describing ‘looking’ at the workplace for risks. These include: observational survey; survey; inspection; audit; and investigation. Investigation is a reactive activity associated with a particular loss event and not included under the heading of audit.

The major confusion arises between inspection and audit. These terms are frequently used interchangeably. However it is generally accepted that the audit has a quantitative role in looking at the effectiveness of controls over time and/or checking against performance indicators.

It means a full examination and report of the status of some aspect of the organisation or production system. Inspection is more looking for the presence or absence of hazards and controls. Auditing techniques enable managers, supervisors, health and safety committee members and/or representatives to assess current operations and, if these deviate from desired positions, to develop suitable corrective actions in response.

Safety audits can cover individual jobs through to whole departments, locations and complete organisations. The scope of the audit can cover the management system, physical workplace features and procedures.

Topics that should be addressed in the audit include:

|  |  |
| --- | --- |
| Objectives and priorities | Line management accountability |
| OHS department staffing | Management health and safety policy statement |
| Performance measurement(s) | Contractual liabilities |
| Reporting and recording | Safety standards and practices |
| Hazard identification and control | Fire and other emergency procedures |
| Loss investigations | Formal training program(s) |
| Occupational health and safety committees /representatives | In-house OHS manual |
| Job specifications | Workers compensation insurance claims management procedures |
| Safe systems of work | Rehabilitation of injured workers |
| Pre-placement and ongoing medicals | Medical facilities |
| Induction | Risk management reinforcement program. |
| Employee selection procedures | Identification of toxic/flammable substances and inventory control |

Audits are carried out using checklists. An example of the questions used in checklists in the CCH Reference: ‘Managing OH&S’, are:

***1. MANAGEMENT SYSTEMS***

**Policy**

* Is there a written health, safety and environment policy signed by the location manager?

Is the policy made available to all employees?

* Is the policy referred to in all management and employee training programs?

Co‑ordination

* Has at least one person in each work area been designated as the focal point for health, safety and environment?
* Has this person received specialist training to prepare him/her for this responsibility?

**Line management responsibility**

* Are health, safety and environment goals and targets included in every line manager's performance appraisal?
* Is performance against these goals and targets regularly assessed?
* Are the OHS programs and performance regularly assessed at management meetings?

Site inspections

* Do all the line managers make regular site safety inspections?
* Are the findings of these inspections recorded and reviewed?

Information

* Do line managers have access to relevant information including:

injury statistics and reports

injury compensation costs

costs of plant, equipment and property

occupational hygiene data

environmental data.

* Do employees, or their delegates, have access to the above information?
* Is someone responsible for the co-ordination and dissemination of this data?

***2. MAJOR HAZARD CONTROL***

* Have all potential major hazards been clearly identified and documented?

For example:

1. fire
2. explosion

chemical spillage

1. gas/vapour emission
2. environmental impact.

* Are there written control measures to combat the major hazards?
* Where a potential major hazard can become a threat to the general public, what steps have been identified to inform them:

before the potential event

during the potential event

after the event?

* Are local emergency services informed of the risks of major hazards?
* Does a site disaster plan exist?

***3. REGULATORY REQUIREMENTS***

* Have all relevant legal requirements been identified and listed in procedure manuals?
* Who is responsible for monitoring changes in the legislation and informing those who need to know of these changes?
* Has the location been inspected or reported upon by the regulatory authorities?
* Has the location been fined, prosecuted or otherwise criticised by regulatory authorities since the last audit?
* Is there compliance with all regulatory standards?
* Are there any special licences or exemptions under which the activity operates?

***4. PURCHASING***

* Is there a comprehensive purchasing policy which includes specification in line with health, safety and environment considerations?
* Are newly purchased items checked for compliance with this policy as a condition of acceptance?
* Are incoming chemical products always accompanied by an MSDS (Material Safety Data Sheet)?
* Is there a system of tracking chemical products from purchasing to users and eventually to waste?

***5. ENGINEERING CONTROLS***

* Is there a written maintenance program?
* Are critical i.e. high risk, areas identified for their potential health, safety or environmental impacts?
* Are there regular inspections and reports on plant integrity?

**6*. DESIGN AND CONSTRUCTION***

* Are health, safety and environment factors considered in the design, construction, installation and commissioning of new plant, equipment and processes?

***7. CONTRACTS AND CONTRACTORS***

* Are contractors subject to the same health, safety and environment policies and programs as employees?
* Are tenders by contractors accepted only if conforming to the health, safety and environment requirements stipulated by the location?

***8. EMERGENCY PROCEDURES***

**Procedure manuals**

Is there a written procedures manual for emergencies? If so, does the manual cover:

1. fire
2. chemical spills or product loss
3. fume/vapour/gas leaks
4. explosions
5. transportation accidents
6. radiation leaks
7. major illness?

**Protective equipment**

* Is there an adequate supply of readily available, appropriate protective equipment?
* Is its selection and maintenance in keeping with relevant standards?
* Are employees trained in the correct use of the protective equipment?
* Training - are employees given regular training on emergency procedures?
* Are the emergency procedures regularly rehearsed in plant protection drills, etc.?

***9. HAZARD EVALUATION AND CONTROL***

* Is there a written hazard control program?
* Have line managers and employees been trained in the application of the hazard control program?
* is the program systematically followed by all line managers?
* Does the program include evaluation and control of occupational hygiene and environmental factors such as noise, dust, fumes/vapours, radiation?
* Are employees involved in the hazard control program?
* Is there a written isolation/lock/tag-out permit to work program which is systematically reviewed by line management?

***10. JOB SAFETY ANALYSIS***

* Is there a written job safety analysis program which involves participation of employees?
* Is the program systematically reviewed?
* Have the critical jobs, i.e. high risk, been clearly identified and written job analyses been prepared?
* Does the program include occupational hygiene and environmental factors such as noise, dust, fumes/vapours, radiation?
* Are ergonomic factors included in the job safety analysis?

***11. HOUSEKEEPING***

* Are line managers accountable for housekeeping in their areas of responsibility?
* Is there a program of regular inspections and written reports on housekeeping?

***12. TRANSPORT***

* Are there any specific regulatory requirements (e.g. Code for the Transportation of Dangerous Goods) applying to your undertaking?
* If so, are the regulatory requirements observed? Who checks?
* Is there a training program for all drivers? Does it specifically highlight reversing as a hazard?
* Are all drivers subject to health assessments? Are these conducted according to written guidelines?
* Is there a written transportation manual listing all safety provisions including design specifications?

***13.* *PROTECTIVE EQUIPMENT***

Personal protective equipment

* Is the use of protective equipment required for any operation or area?
* If so, are there written procedures covering the specifications, purchasing, storage, maintenance, issuing and correct use of the protective equipment?
* Are employees trained in the use of the protective equipment?
* Are systematic checks made of the reliability and use of guards on railings, floor openings, machinery, etc.?
* Are all emergency stop switches, alarms, interlocks, etc. regularly checked?

***14. TRAINING***

All employees

* Do all employees receive induction training which highlights-health and safety?
* Are all employees provided with periodic training (and retraining) on particular issues such as hearing conservation, emergency; procedures, chemicals safety contra, etc.?

Line managers

* Do all line managers receive training on health, safety and environmental management?
* Is there a regular training update for supervisors?
* Is there a regular training update for health and safety committees and representatives
* Is there a training program for health and safety committee members?
* Do union representatives attend union-based health and safety training?
* Do union health and safety bulletins circulate on site?

***15. HEALTH AND SAFETY COMMITTEES***

* Is there a health and safety committee which includes representatives from management and employees?
* If so, is the committee appointed/elected according to statutory requirements?
* Does the committee make recommendations on policy and procedural matters?
* Does the committee consider occupational hygiene and environmental matters?
* Does the committee, either individually or collectively, receive regular training?
* Does the committee meet regularly?
* Are the deliberations of the committee communicated to the other employees?
* Are the recommendations of the committee acted upon? If not, are reasons given?
* Does the committee adequately fulfil a monitoring role?

***16. COMMUNICATION WITH EMPLOYEES***

Information

* Are all employees provided with information on health, safety and environment matters?
* Are the views of employees actively sought prior to changes in work procedures, installation of new equipment or introduction of new substances?

***17. INVESTIGATION OF INJURIES, INCIDENTS AND PHYSICAL DAMAGE***

Injuries:

* Are all work related injuries and illnesses recorded in a standard format and reported according to written procedures?
* Are the causes of injuries investigated immediately and the findings acted upon?

**Incidents and physical damage**

* Is there a procedure for recording, reporting and investigating incidents which could have resulted in significant injury, illness or physical damage?
* Is physical damage, i.e. damage to plant, equipment or property recorded, reported and investigated?

**Costs**

* Do the above systems include information on the costs of injuries, illness and damage?

***18. ANALYSIS OF INJURIES, INCIDENTS AND PHYSICAL DAMAGE***

* Are the injury, incident and/or major damage statistics collated into an appropriate form for analysis, e.g. site, department, type, cause, day, etc.?
* Are trends analysed?

***19. INVENTORY OF CHEMICAL SUBSTANCES***

* Is there an inventory of all chemical substances used by the location?
* Is the inventory up to date?
* Are MSD (material safety data) sheets; or equivalent available for each substance?
* Are employees kept informed of the toxic properties of, and precautions for all chemical substances used?
* Is there a program for minimising the use of chemical substances and for substituting high toxicity substances with low toxicity substances?

***20. MONITORING THE WORK ENVIRONMENT***

* Has there been an audit by specialist occupational hygiene services?
* Is there a written monitoring program which includes noise, dust, vapour, gas, fumes, radiation, etc.?

Do monitoring procedures conform to recognised standards for equipment sampling techniques and analysis?

* Are employees and their representatives informed of the results of monitoring?
* Do the monitoring results conform with statutory or other recognised standards and company requirements?

***21. MONITORING THE EXTERNAL ENVIRONMENT***

* Has an audit been made of potential sources of environmental pollution?
* Is there a written monitoring program which includes noise, dust, stack emissions, water pollution, ground vibration, chemical pollution, odours, etc.?
* Do the monitoring results comply with statutory or other recognised standards and company requirements?
* Is there an established procedure for receiving, investigating and responding to complaints relating to environmental pollution?
* Are licences required by various regulatory authorities up to date?

***22. PRODUCT SAFETY***

* Have the location's products been evaluated for their potential to cause harm to their users or the environment?
* Have material safety data sheets, or equivalent, been prepared for all products?
* Do product labels and literature include appropriate warnings on health, safety and environment factors?

***23. ERGONOMICS***

* Have systems of work been evaluated for ergonomic factors, e.g. office systems including visual display units, repetitive production work, manual materials handling, seating and controls in operating cabins?
* Are ergonomic factors considered in the design of new plant and equipment, in changes to production processes and in the introduction of new technology?

***24. HEALTH SCREENING***

* Are there written guidelines for pre-placement health screening?
* Do all new employees undergo health screening?
* Is periodic health‑ screening provided for particular employees, e.g., VDU operators, drivers of tankers, heavy goods vehicles, commercial vehicles and mobile equipment?
* Are specific screening tests (biological monitoring provided for particular employees, e.g., audiometry for noise exposure, blood tests for pesticide exposure, etc.?

***25. HEALTH PROMOTION***

* Does the location have any on‑site or community health based promotion programs, e.g., drugs and alcohol advice, smoking cessation, heart disease and hypertension screening?

***26. TREATMENT AND REHABILITATION***

Treatment of injuries and illness:

* Is there an on‑site occupational health service?
* Are there written guidelines for the operation of on‑site first aid or paramedic facilities and procedures?
* Are there written guidelines for the treatment and evacuation of people suffering major injuries and illnesses?
* Is there a liaison between local medical, paramedical and hospital services?

Rehabilitation

* Are there written procedures for systematic rehabilitation of injured or ill employees?
* Have these procedures been written in consultation with the employees and their representatives?
* Is regular contact maintained between the organisation and injured or ill employees and their doctors?
* Are local doctors, physiotherapists, etc. familiar with working conditions at the location?

***27. IMPROVEMENT PLAN***

* As a result of previous audits, is there a written improvement plan?
* Are all high risks being controlled?

***In Pairs***

***Part 1***

Conduct an audit to identify occupational health and safety risks in the selected workplace:

* Develop a checklist suitable for the type of workplace which you have selected.
* Conduct the audit.
* Carry out a preliminary analysis of the results of the audit by combining estimates of likelihood and consequences in the context of existing control measures. Document in summary form, the reasons for your conclusions.
* Identify areas of significant risk and exclude low impact risks from detailed study.

Use this information in Part 2.

***Part 2***

* Complete an audit of your organisation using the checklist supplied or a suitable alternative. Identify risks to the organisation. (Also use relevant information from Section 1).
* Select a particular risk and assess this risk using a model of accident causation.
* Prepare a diagram with text which illustrates the application of the accident causation model to the risk situation which you have selected. (Also use relevant information from Activity 2.1).
* Submit the completed audit, the risks identified and the assessment of the particular risk.

***Section Outline***

This Section will cover the following:

* identifying the critical specifications for equipment, facilities or processes.
* identifying perceived and actual costs.
* a method for the ‘cradle to grave’ cost analysis for a process or equipment.
* identifying potential hazards resulting from equipment facilities design, environmental noise or ergonomic factors.
* compare and recommend purchase or refurbishment based on risk management options.

***2. A REVIEW OF COSTS OF ACCIDENTS TO THE ORGANISATION***

***2.1. The distribution of risk***

Generally, the management of risks involves the following approach: part of the risk is eliminated by the preventive measures taken;

* another part of the risk is covered by insurance entered into as a protection against it; and
* the residual or uncovered part of the risk is considered as part of the hazard associated with the management of any organisation.
* The expenditure borne by an organisation in respect of work accidents (including occupational injuries) naturally affects the production costs and product prices; the cost is thus transferred to the consumers of the manufactured products and the users of the services provided (whether they be individuals or other organisations) . An increase in the price of products marketed by these organisations results in a reduction in the purchasing power of the members of the community and thus a drop in their standard of living .

***2.2. The costs of production***

At the planning stage, account must be taken of the safety of;-

***The work environment:*** buildings and sites of all kinds (construction, mines, etc.) must meet legal requirements

***The substances used*** (raw materials, intermediate products, finished products, waste). Some of these substances need to be handled and used with special precautions, accompanied by control measures which may be imposed by regulations (limitation of quantities stocked or used, declaration to the responsible authority, etc.)

***The working equipment*** (production machines, transport and other installations, control and regulatory systems, equipment for protection of machinery, individual protective gear, etc.)

***The people*** who need to be prepared for the tasks they are assigned (training, instruction, information), fit to undertake them (medical and other examination, aptitude tests) and to continue work without impairment of their health (early detection).

***The working methods:*** safety in doing a job depends to a large extent on the method employed.

***Maintenance of equipment:*** when equipment stops working from accident or breakdown the repairs can involve risks. Control systems may involve preventive maintenance, the stocking of spare parts, and the means of protecting the operatives.

***Emergency facilities and procedures:*** premises, material and personnel are needed for first aid, rescue, fire-fighting, etc. Time is required for workers to participate in the organisation of safety. As this participation expands to include planning and control responsibilities, an ever-increasing number of workers, taken from among the most highly skilled, devotes an increasing proportion of time to training courses, meetings, inspections or other similar activities. The result is a gradual increase in the expenditure by the organisation.

***Protection of the environment and the public:*** workplace (factories, workshops, sites, offices, etc.) form part of the general environment. *Protection of the environment* includes measures for dealing with harmful waste, vibrations and noise.

***2.3 Overall costs of accidents***

The costs of accidents may be fixed during a given period, or variable being related to the events that accompany the production operations. This may be expressed as:

**C(tot) = C(pf) + C(if) + C(pv) + C(l)+ C(d) + C(pe) + C(prod)**

where:

C(tot) = total expenditure during the course of production.

C(pf) = fixed expenditure on prevention.

C(ip) = fixed expenditure on occupational injury insurance.

C(pv) = variable expenditure on prevention.

C(l) = expenditure resulting from occupational injuries.

C(d) = expenditure arising from material damage related to occupational injuries.

C(pe) = prevention expenditure of an exceptional nature.

C(prod) = expenditure related to production losses.

***2.3.1. Fixed expenditure***

This type of expenditure arises even when there is no occupational injury during a given period. It consists essentially of the following :

***Fixed expenditure on prevention*** C(pf) includes:

* expenditure for the operation of the safety and health organisation. Supervisors, the medical service, the safety service, the fire service, the personnel service, the training service, the social service etc. may contribute part or all of their time
* expenditure arising from participation by the workers and their representatives (safety, delegates, safety and health committees, etc.)
* expenditure related to control of the state of health of workers, protective equipment, dangerous installations and machinery, the environment, etc.
* expenditure resulting from administrative requirements (keeping records and files, compilation of statistics and reports, etc.)

These expenses may be calculated by estimating the respective work times, and multiplying them by the wages and unit allowances paid to the various categories of persons concerned. Details include the following:

* The level of expenditure can be taken directly from the accounts of the enterprise e.g. the premises, materials, equipment, casts reimbursed to auditors/controllers or to external consultants
* The time spent by the members of the staff of the enterprises in carrying out certain duties, e.g. Occupational Health and Safety Staff, CaseManager/Rehabilitation Provider, Loss Control Co-ordinator, etc.

***Fixed insurance expenditure;*** C(ip) which is of several types:

For material damage, there are special types of insurance; e.g. fire, subsequent losses, etc.)

***2.3.2 Variable expenditures***

Variable expenditures depend on the occurrence of accidents and are largely related to their frequency and severity. They include the following;

***Variable expenditure on prevention*** c(pv) which corresponds to:

* the costs of the case management plan arranged by the case manager/rehabilitation adviser
* the occasional operation of the services mentioned above (medical service, safety service, etc.) which in turn depend on the extent to which occupational injuries occur in the enterprise: additional information and training courses; promotional campaigns and measures to arouse interest; studies, research, surveys, inspections, reports, etc.: additional (or special) activities of the workers' participatory bodies.

***Variable expenditure on occupational injuries*** C(l) which consists of many items, which can be subdivided into two categories: expenditure on treatment and other consequences of the injury and expenditure related to wages paid without any counterpart in productive work (lost time).

* Consequential costs (except wages) the first aid given on the site of the accident, the cost of transporting victims; the cost of external medical treatment assumed by the organisation; the grants paid voluntarily by the employer to the victims or their families; expenditure on administrative and legal consequences (legal expenses, fees, fines, etc);
* Unproductive wages (lost time): the wage paid to the victim while absent from work; the wages paid to other workers while they are inactive at the time of the accident (providing assistance to victims, etc) or later (while enquiries are being made by the enterprise or by the responsible authorities, etc.)

This information can be obtained from the following:

* the cost of the organisation's first aid material is recorded in its accounts
* the transport of victims to outside places for treatment can be either by vehicles belonging to the organisation or by outside ambulances. In the former case, the expenditure can be determined from the number of such transports and their average cost; in the latter case, it appears in the accounts of the enterprise
* the cost of outside medical treatment at the expense of the organisation appears in its accounts; when such treatment is paid for by the insurance, the amount is included in the contribution paid;
* the amount of the benefits paid voluntarily to victims or their families, either directly by the organisation or through the insurer can be obtained by consulting the accounts of the organisation or of the insurer concerned;

the expenditure resulting from any civil or criminal lawsuits (legal expenses, fees of experts and lawyers, etc) can also be taken from the accounts of the organisation; the same is true of fines and compensation paid to members of the personnel or to outside parties; and

* the accounts of the organisation do not generally show the expenditure related to the wages which, following occupational injuries, for example, have been paid to persons without any counterpart in production. This expenditure has to be estimated on the basis of the duration of absences and the hourly or daily wage.

***These expenses include several categories:***

***Minor accident*** for which first aid suffices; the victim’s absence is generally entered as being a quarter or half an hour, depending on whether the first aid is given on the spot, or longer if a local hospital is used.

***Medical treatment accident*** which requires the victim to leave work and receive paid wages up to the end of the shift. If the hours at which the work accidents occurred have been noted, one can calculate exactly the number of hours paid for in these circumstances; otherwise

one can use an average value

For occupational injuries leading to a ***longer absence***, the organisation is sometimes required, when the insurance does not compensate the victim during a specified waiting period, to pay to the victim full wages during that period.

When the victim ***resumes work*** after a period of absence following an occupational injury, control of her / his work aptitude can involve other expenses.

In certain cases the victim will be unable to resume the former job but a ***less skilled position***, which could have been filled by a lower paid worker. In this case, one has to take into account the difference between the two wages.

In respect of the wages paid to workers other than the victim, whether at the time of the accident or later, the total amount is calculated on the basis of the production time lost by the workers in the various categories of staff and the corresponding wages.

If the accident involves material damage, it may be that stoppage of a particular means of production leads to losses of time for the operators concerned.

***Variable expenditure arising from material damage linked with occupational injuries*** C(d)

Generally this damage affects fixed and movable materials, equipment, buildings, protective equipment, the substances being used, and the intermediate materials, parts or products.

The calculation of the cost of material damage associated with occupational injuries involves little difficulty when the organisation records ***all the material damage*** and its cost.

The number of such cases is low in relation to the total, but they should be studied directly if one wishes to identify the circumstances at the origin of such accidents.

Machinery and other material damaged in such a way that it is no longer possible or profitable to continue using it constitutes a particular problem.

One must then take into account, according to the circumstances, demolition expenditure, receipts of sale, changes to be made in the inventory and the accounts of the organisation in respect of depreciation. On the other hand, other expenditure items may at the same time disappear (maintenance costs and energy consumption by items eliminated, etc.).

One may have to replace old material by new equipment (which will frequently have a high output); in this case, inverse calculations have to be made.

***Exceptional expenditure on prevention*** C(pe) falling outside the fixed routine prevention expenditure is sometimes necessary to meet risks that were not taken into account at the design stage.

Examples are **Protection against noise, the replacement of asbestos, etc.** This expenditure can involve substantial sums, but its effect extends beyond the year in which it is incurred. For this reason, it can be amortised over a number of years in the same way as the expenditure at the planning stage.

This expenditure can be caused by:

* new risks linked with new production processes. The cost of installing the process is the subject of an initial estimate and is checked at the end of the work. Estimate the part of this cost which may be attributed appropriately to prevention alone.
* Improving protection against risks arising from the existing installations (noise, pollution, etc); one should attribute the total amount given in the estimate and revised at the end of the work.

***Losses related to production C(prod). Work stoppages***, caused by damage to persons or materials can lead to a drop in production and a deterioration in the quality of the product; and the result is a loss of part of the profit that would have been earned from production at the full level and without defects.

Depending on the nature of the production process, a stoppage which occurs at any one point can lead to stoppage or unsatisfactory operation of other machines or departments. This phenomenon of ‘consequential losses’. can, as one sees, have considerable technical and financial repercussions.

It has to be taken into account as part of the risk management policy, and it leads logically to a prevention activity consisting of:

a thorough analysis of the production cycle designed to identify the main points where work stoppages can lead to indirect losses and including, for each of these points, an assessment of the probability and the likely severity of such a stoppage.

* making arrangements for appropriate measures, such as providing stocks of products, introduction of redundancy measures in the production cycle, search for additional sources of supply in case of need, etc. Another basic measure consists of avoiding setting up production units which are on too large a scale.
* resort to special insurance against consequential losses which can supplement the other industrial insurances (material damage, fire, etc.).

**2.4. Financial consequences**

The financial consequences of losing part of the production vary depending on whether one has decided to accept the losses or to adopt alternative measures. Where such losses are accepted, the consequences are:

* loss of profit associated with the lost production
* payment of penalties or compensation to customers because the delivery terms have not been met
* to replace the missing production by equivalent production obtained by special measures
* a deterioration in the quality of the product
* group stoppages arising from strikes called because of particularly severe or frequent occupational injuries, or their probability

The total sum of all these production losses must be included in the overall cost as it will affect the decision on making all practicable efforts to reduce the number and severity of occupational injuries.

***2.5 The Total Cost***

**2.5.1 Methods of calculating the cost**

Each organisation is naturally interested in knowing the total costs that occur or might occur.

As a general rule one should determine all the elements of the total costs listed above. Up to now no method has been available to make it easier to calculate expenditure incurred during the stage of planning and preparation of activities; it is therefore necessary to determine this expenditure directly in each individual case.

Furthermore, it is mainly the expenditures and losses that occur during the production activities of the enterprise which are of immediate interest when one is trying to limit the cost. At this point in time all the preparatory expenditure has been agreed upon and the value which results from its amortisation has to be accepted.

Heinrich qualified as direct cost (CD) the total amount of benefits paid by the insurance company, the indirect cost (CI) as the expenditure assumed directly by the enterprise and the total cost (CT) as the sum of the direct and indirect costs.

The ratio CI/CD can vary very greatly between values of one and 50. This reflects the variations that can occur, either in the numerator (number and severity of occupational injuries depending on the risks inherent in each type of activity, methods of work adopted, safety measures, etc.) or in the denominator (the insurance benefits, mainly).

Thus the ratio CI/CD changes in value from one category of occupational injuries to another, from one enterprise to another, from one department of a particular enterprise to another and, for a particular department, from one time to another.

Despite these variations, one should recognise the fundamental principle and adopt cautious values for the ratio CI/CD. In theory, a method which enables one to calculate directly the cost of occupational injuries from the various elements (both fixed and variable) of the related cost is obviously the best.

However, continuous recording of all the basic data and its subsequent processing requires many hours of work by a skilled person, and involves procedures that may be regarded as too time consuming in comparison with the objective pursued. This is why research of this kind is usually confined to covering a limited period of time. The validity of the results obtained is naturally related to the length of the period involved.

The study begins by distributing the occupational injuries over a number of classes and continues by determining the overall cost for each class. The total cost is obtained by adding up the respective costs for each different class. One can also obtain the value of the average cost for each class for successive periods, by taking into account the comments above.

The distribution into classes is absolutely essential if one wishes to deduce useful information for prevention purposes (number of cases and cost corresponding to each class). In fact, the total cost of all occupational injuries enables one to measure only the financial effect of the phenomenon; it is absolutely unable to provide indications which can exert any effect on the phenomenon itself.

**2.5.2 Simplified methods and formulae for quick calculation**

In current practice, studies made by enterprises of the cost of occupational injuries involve, at least at the outset, the use of simplified methods and formulae for quick calculations.

The simplifications consist of leaving out some data chosen from among those which are least profitable for the purpose of the information required. In this respect account must be taken of the basic fact that the research being done is aimed not only at determining the cost of occupational injuries, but also at bringing to light the points at which it is appropriate to intervene and the factors on which one must act in order to reduce the number, the severity and the cost of occupational injuries.

Various simplified methods can be adopted depending on the characteristics and needs of each enterprise and in the light of the research resources available to it.

The data omitted relate generally not to the fixed expenditure, but to other elements in the total cost. Above all it is at the time when one begins a cost study that one needs a method of calculation which is as simple and convincing as possible, based on data that are normally available in any enterprise.

**2.5.3 Special methods**

When one wishes to determine certain elements in the cost of occupational injuries, one frequently runs up against the difficulty inherent in the fact that the corresponding amounts are hidden in various items of the enterprise's accounts. To remedy this problem entirely, one would have to set up an occupational injury accounting as part of the enterprise's accounts.

The most frequently used method is that of cost control based on the reports on occupational injuries drawn up in each case, and whose various sections are drafted either by the department where the accident took place, or by the medical service, or by the personnel service or another service within the organisation.

***2.6 General Comments***

**2.6.1 Definition of objectives and training of personnel**

Whatever the method of cost calculation used, the following applies:

It is necessary to maintain an appropriate balance between the desire for information, on the one hand, and the cost of the research related to its benefit, on the other.

One should also, from the outset, determine the degree of accuracy that one seeks to obtain. Excessive accuracy is often very costly; it also gives too much confidence in the validity of the figures obtained, which in fact must always be subject to considerable reservation.

A single person or a small group of persons in a particular unit of the organisation (e.g., Health and Safety Unit) can be entrusted with the research work. In other cases, several people or units have to take part, by providing data and giving opinions that fall within their respective fields of responsibility.

Success will depend on the quality of the participation of all those involved in this work. They must be motivated and must clearly understand the nature and purpose of their contribution and the benefit they can draw from taking part.

The management, with the help of its experts or outside consultants, then has to determine what data are to be identified and what degree of accuracy is desirable and possible. The management must also define the procedures, give precise instructions to each individual taking part in the research, appoint a person to co-ordinate the work, decide on the forms to be used for recording data on each occupational injury case, and determine the form of the periodical summary reports for general management, for the departments concerned, for the persons taking part in the research, etc.

**2.6.2 The significance of cost centres**

An organisation generally embodies several main branches of activity. Each of these branches has occupational injuries; however, their frequency and severity usually differs from one branch to another. Determination of an overall cost for all branches of activity in an enterprise inevitably masks these differences; it is therefore preferable to make the calculation separately for each branch.

For similar reasons, it is also advisable to establish separately the costs that apply to the most important departments in each branch of activity.

**2.6.3 Accounting identification of risks and costs**

Every organisation should know not only the cost of occupational injuries to it, but also the points where such injuries arise. An accounting of the ‘financial’ type is hardly suitable for identification of this nature.

It can be achieved by using a ‘management’ type of accounting whose essential purpose is to control costs and output, and take into account expenditure arising from occupational injuries and debit this to cost or risk centres at the points where they arise. The systematic location of costs from this type of accounting, together with the knowledge of the corresponding figures, provides valuable information for measures to control occupational risks.

**3. Criteria for evaluating the expenditure on prevention**

Activities aimed at determining the cost of occupational injuries and the points at which they arise open the way to measures to prevent these injuries and reduce their cost.

In planning these measures, the following must be taken into account:

* the effect of prevention measures on the cost of occupational injuries
* the effect of occupational injury insurance;
* changes in procedures and organisation;
* the effectiveness of the prevention measures; and
* decision-making techniques.

It is also useful to try to establish a cost-benefit ratio.

**3.1 Effect of the prevention measure.**

It is clear that a reduction in the cost of occupational injuries (expenditures and losses) can be obtained through measures involving cost of prevention and designed to reduce occupational injuries, taken both at the stage when the work plan and the working equipment are being designed and during the work process itself.

The current trend is towards developing integrated safety at the planning stage, coupled with assignment to the operative staff of responsibilities affecting safety during the work process.

Consider the effect of the cost of prevention measures on the total cost of occupational injuries, in other words, compare the trend in prevention costs with the trend in subsequent costs for various levels of safety in the enterprise.

A

B

Optimal

PREVENTIVE COST (P)

TOTAL COST (T)

SUBSEQUENT COST (S)

COSTS

CONTROL OF RISK

M

The diagram in the Figure gives a qualitative picture of this.

The curves P, S and T correspond to the preventive, subsequent and total costs respectively. Point M corresponds to the minimum cost, while points A and B correspond to two combinations of preventive and subsequent costs which give the same total cost (TA - TB), but two degrees of control of risk, A and B which are very different. From this graph one can draw the following conclusions:

* where the total cost T is the same, the combination in which the share of the prevention cost P is greater than that of the subsequent cost S (case B) allows a higher degree of safety than that would be obtained when the prevention cost is less than the subsequent cost (case A).

The gain thus obtained brings many advantages, particularly in a more productive working environment.

* The existence of a minimum possible M of the total cost shows that where certain subsequent costs exist, an increase in the prevention cost cannot lead to a reduction of the total cost below this quantity M.

However, organisations are not free to adopt a degree of safety which is lower than that implicitly accepted by the legislator when defining the minimum prevention measures required of enterprises.

**3.2 Occupational injury insurance**

There is no financial incentive to reduce occupational injuries, unless the premium rate for an enterprise is related to one or both of:

* the frequency and the severity of the occupational injuries
* an increase or reduction in the degree of safety achieved

The first of these factors is obtained, on the basis of objective data, by the insuring organisation which operates the ‘occupational injury’ risk for the organisation; the second is provided by the technical unit (risk management consultants), operating under the insuring organisation or under contract with it. The premium rates can vary between certain limits defined by percentages of the average rate. In practice, it is only for large organisations that one can establish that variations recorded during a given period are due to factors other than chance.

In general:

* there is no incentive for small organisations to engage in prevention in order to reduce the cost of occupational injury insurance
* in large organisations, there is an incentive to lower the current rate of premiums and an incentive to avoid an increase in the current rate

It is in the interests of all organisations:

* to know the amount of expenditure they are incurring on occupational injury insurance

to know their current rate of premium and the most favourable rate provided for in the scale

* to calculate the reduction in premium which would result from moving from one rate to another
* to define this amount in absolute figures and in percentages of wages, cost prices and profits, and
* to take a decision, and if appropriate to draw up a work plan, which can bring about the desired reduction. The reduction can in general be obtained only after a certain period of time, which must be estimated with caution and in co-operation with the insuring organisation.

**3.3 Review of procedures and organisation**

There are several possible ways of reducing the total cost of occupational injuries by studying closely and systematically the way in which the work process proceeds, by looking for potential risks and by examining the ways in which occupational injuries occur and their trend, in respect both of technical processes and the general organisation.

**3.4 Effectiveness of the prevention measures**

It is easy to appreciate that not all preventive measures will be equally effective. This is indeed confirmed by experience. It is essential, especially at the outset, to concentrate the available resources (and thus the expenditure) on the most effective measures.

One can collect and compare the considered opinions of various units and individuals (management, supervisors and workers) and consult experts from outside the organisation who are well aware of the problems of the particular economic sector to which it belongs.

**3.5 Decision-making techniques**

Financially managers seek to obtain optimum benefit from expenditure on safety. That is, to obtain a degree of safety fixed in advance at minimum total expense.

This strategy involves:

* the evaluation of the cost of the risks:
* evaluation of the possible solutions ; and
* the choice of the optimum (most effective) solution.

Solutions can be sought by using decision-making techniques. The difficulty is the inaccuracy of the basic data, particularly the probabilities of occurrence of work accidents and the severity of occupational injuries.

**3.6 Cost‑benefit statement**

The profitability of a cost-benefit statement for prevention measures cannot be evaluated daily, but is demonstrated whenever an infrequent but serious event which should be foreseen at the planning stage actually occurs.

Thus:

* The adequacy of safety standards involved in the selection of materials and construction techniques for buildings are demonstrated when there are earthquakes, fires or explosions.
* the validity of emergency systems and procedures is demonstrated by the consequences of fires which devastate inadequate installations; and
* the effectiveness of occupational safety and health activities becomes apparent in terms of the life and health of people.

A long-term approach is required because the chance nature of occupational injuries means that a cost-benefit statement covering a relatively short period, may be negative if the occupational injuries have been few in number and not particularly severe. However, during subsequent periods, the probability of accidental happenings increases.

Consequently it is in the organisation’s interest to avoid all potential sources of occupational injuries. In summary the cost-benefit analysis for prevention measures should apply to a relatively long period, on the basis that a wide range of occupational injuries may occur during this period.

***In Pairs – Part 1***

Complete the Table of the total costs of accidents, by adding any new dot points and by inserting examples of items under the headings. You can use this information towards your cost benefit evaluation.

|  |  |  |  |
| --- | --- | --- | --- |
| ***COSTS OF PREVENTION (P)*** | | | |
| ***Fixed costs***  ***C(pf)*** | ***Insurance***  ***C(ip)*** | ***Variable costs***  ***C(pv)*** | ***Exceptional***  ***C(pe)*** |
| ***Costs of OH&S organisation*** | ***People insurance*** | ***Rehabilitation*** | ***Unexpected risks*** |
|  |  |  |  |
| ***Time on safety issues*** | ***Property insurance*** | ***Training*** | ***Estimates of new risks*** |
|  |  |  |  |
| ***Safety equipment and PPE*** |  |  |  |
|  |  |  |  |
| ***Admin. costs*** |  |  |  |

|  |  |  |
| --- | --- | --- |
| ***COSTS OF LOSSES (consequential losses)*** | | |
| ***Variable costs***  ***of injuries. C(l)*** | ***Variable costs***  ***of damage. C(d)*** | ***Production.***  ***C(prod)*** |
| ***Lost time (uninsured)*** | ***Plant and equipment*** | ***Work stoppages*** |
|  |  |  |
| ***Medical costs (uninsured)*** |  |  |
|  |  |  |

***Part 2***

Review the scope of the types of costs associated with accidents and the methods for calculating the costs of losses. Using the risk you identified in Assessment Task 1, calculate the cost benefit analysis of that situation using the existing hazard controls.

Review this risk with your proposed new controls to reduce the hazard and recalculate the cost benefit analysis. That is, evaluate the two risk treatment options (the existing and revised strategies) by balancing the cost of implementing the risk treatment option against the benefits (including any opportunities) derived from it.

***Section Outline***

This Section will cover the following:

* Identify risk management strategies utilising the hierarchy of hazard control.
* Assess individual strategies against corporate risk management goals and needs.
* Recommend with justification, preferred control strategies to manage risk in an organisation.

***The scope of risk management***

***1.1 What is risk-management?***

Management may be defined as the process of planning or organising, directing and controlling the resources and activities of an organisation to reach its objectives with the least possible cost.

Risk Management may be defined as the minimisation of the adverse affects of pure rather than speculative risk within an organisation.

Pure risk situations will result only in a loss or wastage of business assets, whereas speculative risks may result in either a gain (profit) or loss situation. In this context risk may be defined as the chance of loss, and the risk management program is therefore geared to the safeguarding of the organisation's assets, namely people, materials, machinery, methods, products and money.

Risk management requires the commitment of senior management and the expertise of staff advisers, and is concerned with the identification, analysis, and

evaluation of risk and the selection of the most advantageous method of controlling it. The risk manager minimises the adverse effects of all accidental events and co-ordinates the efforts of the organisation's managers and staff to reduce potential losses for which each has some responsibility.

***1.2 What is the relationship between accident prevention and risk management?***

Risks arise from accidents. Consequently, there is a logical expansion in the scope of accident prevention activities from simple injury control (people protection), to include loss control (property protection), under the umbrella of risk management (financial control). Therefore you can classify Risk Management co-ordinates both the insurance and non-insurance aspects of accidental loss within the operations of an organisation via various financial and non-financial strategies.

***1.3 What is the strategy of risk management?***

* To consider the impact of certain risky events on the performance of the organisation
* To devise alternative strategies for controlling these risks and/or their impact on the organisation
* To relate these alternative strategies to the organisation's decision framework.
* It involves the identification, evaluation and control of the pure risks within an organisation, as described below:

***Risk identification*** may involve any of the following activities:

* inspection of the physical working environment by management and operative personnel
* management/employee discussions (eg safety committee)
* independent audits by outside consultants
* detailed, multi-disciplinary hazard studies undertaken during the design and planning stages of a production operation.

***Risk evaluation (or measurement***) may be undertaken on economic, social or legal grounds and should address the probability and frequency of each occurrence and the severity of the outcome including the maximum potential loss . Economic considerations include the financial impact on the organisation, legislative requirements, the uninsured cost of accidents, the effect on insurance premiums, and the overall profitability of the organisation.

Social and humanitarian considerations include the general well-being of employees, the interaction with members of the public who either live near the organisation's premises or come into contact with its operations and the customers of the organisation's products or services.

Legal considerations include all aspects of health and safety legislation, codes of practice, and accepted standards, including relevant legislation in the areas of health and safety, pollution and product liability.

***Risk control*** strategies may be classified into four main areas; risk avoidance, risk retention, risk transfer and risk reduction. Risk avoidance involves the decision to avoid a particular risk by eliminating the operation producing it.

Risk retention may occur with or without knowledge.

***With knowledge -*** A decision is made to retain the risk within the organisation's financial operations. This may involve the formation of a captive insurance company. That is the self-assumption of risk. Decisions on self-insurance should be made only when all the risks have been identified and effectively evaluated.

***Without knowledge -*** This involves self-assumption via error or omission and arises because the risks have not been fully identified and evaluated.

Risk transfer involves the legal assignment of the costs of certain potential losses to another party, usually through insurance. The insurer undertakes an obligation to compensate the insured specific event occurs. Risk reduction (loss control) is the implementation of a loss control program.

***1.4 The modern approach to loss control***

This accepts that most accidents derive from operational errors involving inadequate planning, incomplete decision making, faulty judgements and administrative miscalculations.

These are largely management deficiencies and unless they are correctly identified and controlled, similar accidents will continue with resulting loss and/or injury. The key to effective action is full appreciation and understanding that any accidental event is a warning indicator to senior management that something has gone wrong with the system.

Consequently the employer who wants to prevent injuries, to reduce loss of assets and to increase efficiency must look systematically at the total pattern of accidental happenings, whether or not they caused injuries or damage (to property), and must plan a comprehensive system of prevention (a loss control program) rather than rely on the ad hoc patching up of deficiencies which injury or accidents have brought to light.

***1.5 A loss control program***

This should have a logical structure and methodology. Loss control is based strongly on the economic approach to accident prevention and may be described as a program designed to reduce or eliminate all aspects of accidental loss which result in a wastage of the organisation's assets.

The development of a loss control program within an organisation usually follows a definite progression where the range of protection is extended at each stage; from a simple injury prevention program to damage control, fire safety, security, occupational health and hygiene, pollution product liability and business interruption.

***Overview of measures to control risk***

Techniques to evaluate risks commonly involve a form of cost-benefit analysis to assess both the tangible and intangible advantages and disadvantages of accepting or controlling the risk to allow a more equitable allocation of resources.

***Control of risk***

Measures to control risk can be assessed in a hierarchy of preferred options. This hierarchy is based on a 'safe place' approach to health and safety rather than a 'safe person' approach. 'Safe place' means that the design of workplaces, processes and operations is intrinsically safe, so that the safety of persons within the workplace does not rely on their safe behaviour.

Safe person' refers to the reliance on people's behaviour for their safety. 'Safe person’ controls are considered both less reliable than 'safe place' controls and less cost effective in the longer term. Once a control measure has been implemented it is necessary to evaluate its success and suitability to ensure that the risk has been reduced sufficiently and other unforeseen hazards have not been created. Continued monitoring of control measures is essential.

***Hierarchy of control measures***

It should be our long term aim to adopt ‘safe place’ controls in preference to ‘safe person’ controls, as reflected in the following hierarchy of preferred options.

***Elimination and Substitution***

The ideal ‘safe place’ control solution is the elimination of the risk. Examples of elimination are the removal of a hazardous chemical from a process; the removal of a noisy machine from an otherwise quiet work area; the use of non-flammable, instead of flammable materials, in paints, fabrics and electrical insulation; and the use of pneumatic or hydraulic systems in place of electrical where there is a risk of fire.

Substitution ensures a less hazardous situation, which may be either a substance or a process. Examples of substitution of a hazardous substance are the replacement of trichloroethylene with 1, 1, 1 - trichloroethane in degreasing processes and the replacement of cancer causing benzene with one of a variety of less hazardous solvents. Ensure that the risks are reduced, and not merely replaced with another hazard about which less is known at the time.

***Examples of substitution of a less hazardous process include***

* cleaning with a vacuum rather than sweeping to generate less dust
* use of wetted materials, slurries or pellets to suppress dust rather than processes utilising powders
* where a person is required to lift components from floor level onto a bench it may be possible to raise the box of components to bench height
* where heavy bags are handled it may be possible to obtain materials in smaller quantities; and
* noise generated by air turbulence in ducting can be reduced by redesign to smooth out bends and junctions.

***Engineering Controls***

If the hazard cannot be eliminated or replaced by a substitute, the next preferred measure is to control the risk arising from it. This may include the modification of tools and equipment, the introduction of enclosures, the use of mechanical equipment or automation and local exhaust ventilation.

***Administrative Controls***

There are various strategies that can be used at a managerial level to introduce appropriate systems to ensure the health and safety of workers. They are ‘safe person’ controls. They include purchasing policies to include safety; housekeeping; training of employees; job rotation; adequate supervision; special precautionary measures for hazardous chemicals or processes; work systems to ensure the safety of workers, for example, systems for permits to work; and lock-out procedures.

***Personal Protective Equipment (PPE)***

PPE is an interim measure pending more appropriate (higher order) controls. Personal protection places the onus of responsibility back on to the employee to work ‘safely’, and is inconsistent with the 'safe place' approach.

The use of PPE, although cheap in the short term, has many limitations which may result in the worker not being adequately protected. Reasons for poor protection by PPE result from problems with poor compliance, where workers fail to wear the personal protective equipment. This may be associated with PPE which does not fit properly; PPE which is poorly maintained; and the necessity to wear a number of items of PPE at one time which may affect comfort and work performance.

***Reliability of control measures***

Once control options other than elimination of the hazard are adopted, reliability is reduced. Control of the hazard by measures other than elimination relies on human interaction in the form of such measures as maintenance, education, training and supervision .

The extent of this human interaction increases as the hierarchy of control measures descends. Effective hazard management requires that we attempt to design safe workplaces and processes to minimise our reliance on human behaviour. Our aim is to adopt a strategy which ensures using a control measure as close to the top of the hierarchy as possible.

***Risk Assessment using hazard analysis***

This method of risk assessment is based on hazard analysis. It is derived from the energy damage model of accident analysis. Hazards are identified in terms of energy. Energy is needed to do work and, when it is properly understood, it can be used and controlled effectively so that the work is completed without incident or accident (loss events).

When energy is not properly understood, the most effective controls are not likely to have been implemented. This makes it more likely that uncontrolled energy releases will occur, resulting in loss events. Hazard analysis should be applied to both current risks and to assess new or planned situations, e.g. new technology or equipment and process changes.

**Method of hazard analysis**

* recognise the hazard (sources of uncontrolled energy release)
* define the size of the consequential loss arising from the release of the uncontrolled energy of that hazard
* This requires an understanding of the type and nature of the hazard.
* establish the likelihood of those unwanted events, either by using historical data (e.g., industry and/or company incident and accident records) or by best available expert opinion (how likely is it that the potential consequences that have been identified will occur?)
* combine consequence and likelihood information to obtain a risk level for each event and a risk ranking
* determine if those risks are acceptable (by comparing the risk ranking levels against acceptability criteria)
* propose controls for those risks that are considered as being unacceptable (identify appropriate control measures to eliminate or reduce the risks)
* assess whether these planned risk control methods will reduce the risks to acceptable levels (and, if not, propose more effective controls)

***Obtaining information on hazards***

Hazard information can be gathered by various methods including observation from inspections / audits, interviews / questionnaires / surveys, documentation / literature review and by team or work group exercises. Team exercises are a quick and effective way to gather hazard data, especially when the team is made up of people who have the knowledge and experience clearly to understand the situation being reviewed. Workplace teams or groups are particularly effective where documented accident information and specific historical accident/incident causal data are limited.

***Relationship between the Sections of this Module***

***In Section 1***, risk in organisations was viewed from the strategic context. This was necessary to identify broad areas of risk. The approach now is to analyse risks in the work place at the project or process level. ***In Section 2***, the consequences of accidental losses were examined. ***In Section 3***, this previous information is analysed using qualitative and/or quantitative approaches to both the physical workplace and to work practices.

***Risk assessment using the LIKELIHOOD / consequence matrix.***

Risk is the combination of the likelihood (probability, chance) of a specific unwanted event and the potential consequences (impact) if it should occur. The acceptability of that risk can assessed using a method of ranking risk.

***Risk Ranking Method***

For each event, the appropriate Likelihood (a letter A to E) and Consequence (a number 1 to 5) is selected. If an event affects more than one area of consequence (e.g. affects people and production), the highest rank number (highest risk), is always selected.

***Qualitative measures of Likelihood***

|  |  |  |
| --- | --- | --- |
| **Level** | **Descriptor** | **Description** |
| **A** | Almost certain | The event is expected to occur in most circumstances.  A common or repeating occurrence |
| **B** | Likely | The event will probably occur in most circumstances.  It is known to occur, or it has happened. |
| **C** | Moderate | The event should occur at some time.  It could occur, or ‘I have heard of it happening'. |
| **D** | Unlikely | The event could occur at some time.  Not likely to occur. |
| **E** | Rare | The event may occur in exceptional circumstances. Practically impossible. |

**measures of Consequence or impact**

The measures used should reflect the needs of the organisation and activity under study (e.g., criteria for loss). This Table provides a guide to establish a suitable Level.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | **Examples of assets and magnitude of impact** | | |
| **Level** | **Descriptor** | **People** | **Equipment, assets or environment** | **Production** |
| **1** | Insignificant | no lost time | less than R5K damage | less than R5K delay |
| **2** | Minor | minor lost time injury or illness | R5K to R50K damage | R5K to R50K delay |
| **3** | Moderate | moderate lost time injury or illness | R50K to R100K damage | R50K to R100K delay |
| **4** | Major | serious lost time injury or illness | R100K to R500K damage | R100K to R500K delay |
| **5** | Catastrophic | fatality or permanent disability | more than R500K damage | more than R500K production delay |

***Risk Ranking Table* (risk analysis matrix)**

The consequences (loss outcomes) are combined with the likelihood (of those outcomes) in the risk ranking table to identify the risk rank of each loss event. For example, a consequence 3 with a likelihood B yields a risk ranking of S (significant). The number of categories (cells) reflects the needs of the study. An interpretation of the outcomes in the Matrix is given below.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | ***Consequence (impact on asset)*** | | | | |
| **Likelihood of event occurring** | **Insignificant**  **1** | **Minor**  **2** | **Moderate**  **3** | **Major**  **4** | **Catastrophic**  **5** |
| **A** Almost certain | **S** | **S** | **H** | **H** | **H** |
| **B** Likely | M | **S** | **S** | **H** | **H** |
| **C** Moderate | L | M | **S** | **H** | **H** |
| **D** Unlikely | L | L | M | **S** | **H** |
| **E** Rare | L | L | M | M | **S** |

***Interpretation of the Matrix***

|  |  |  |  |
| --- | --- | --- | --- |
| ***Level*** | ***Descriptor of risk*** | ***Example of the acceptability of the risk assessed*** | ***Example of action arising to control the risk*** |
| H | High | Not acceptable.(Events represented on the risk ranking matrix as H and S are not acceptable risks). | Detailed research and management planning required at senior levels. |
| S | Significant | Not acceptable. | Senior management attention needed. |
| M | Moderate | Acceptable.(Events represented on the risk ranking matrix as M and L may be considered as acceptable risks). | Management responsibility must be specified |
| L | Low | Acceptable | Manage by routine procedures |

***General Consequences of unwanted Energy Release (physical)***

This Table provides a method of analysing the physical workplace for risks associated with hazards. The particular controls for the risks associated with these hazards will depend on the details of the workplace, and are not shown on the Table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **HAZARDS**  **(Sources of energy release)** | ***RISK TYPES (loss areas*** | | | |
|  | **HEALTH & SAFETY** | **EQUIPMENT & ASSETS** | **PRODUCTION DELAY** | **ENVIRONMENT** |
| **CHEMICAL** | burns  lung damage  poisoning  irritation | fire  explosion  corrosion  melting | not available  too much  too little  wrong chemical | water pollution  air pollution  soil pollution |
| **ELECTRICAL** | burns  shock  eye damage | fire  fault  flashover  back feed  induction | not available  too much (amps)  too little (amps)  wrong voltage |  |
| **MECHANICAL**  **(including vibration)** | contusions  crushes  impact injuries | impact damage  structural failure | not available  too much  too little  wrong machine |  |
| **PRESSURE** | contusions  impact injuries  cuts | over‑pressure damage impact damage | not available too much too little |  |
| **NOISE** | hearing damage  error |  |  | noise pollution |
| **GRAVITY**  **(including acceleration)** | impact injuries | impact damage |  |  |
| **RADIANT**  **(radiation & thermal)** | burns  cancer  freezing | fire  melting  heat & cold damage | not available  too much  too little | water pollution air pollution soil pollution |
| **BIO-**  **MECHANICAL** | sprains/strains  slips/trips | drop damage |  |  |
| **MICRO-**  **BIOLOGICAL** | illness | contamination | contamination delay | contamination pollution |

***General Consequences of unwanted Energy Release (work practices)***

This Table provides a method of analysing the risks associated with the hazards of work practices. The management of risk in work practices is assisted by performing a job safety analysis (JSA). Criteria to be considered when selecting jobs for analysis will include:

* past accident and loss experience
* maximum potential loss
* probability of recurrence
* legal requirements
* the newness of the job; and
* the number of employees at risk

The ultimate aim must be to undertake JSA on all jobs within an organisation. Once the job has been selected, the next stage is to break it down into its component parts or job steps. On average, there will be approximately fifteen job steps; if more than twenty, then the job under study should be sub-divided; if less than ten, then a bigger slice of the job should be analysed.

Each job step should be one component part of the total job where something happens to advance by a measurable amount the doing of the work involved. The breakdown should be neither too general nor too specific. An example of such a job breakdown is given below.

***Changing a car wheel***

|  |  |  |
| --- | --- | --- |
| ***Job step*** | ***Risk factor*** | ***Control action*** |
| 1 Put on handbrake | Strain to wrist/arm | Avoid snatching, rapid movement |
| 2 Remove spare from boot and check tyre pressure | Strain to back | Use kinetic handling techniques |
| 3 Remove hub cap | Strain; abrasion to hand | Ensure correct lever used |
| 4 Ensure jack is suitable and is located on firm ground. | Vehicle slipping. Jack sinking into ground. | Check jack |
| 5 Ensure jacking point is sound | Vehicle collapse | Consider secondary means of support |
| 6 Jack up car part‑ way, but not so that on jack/car the wheels leave the ground. | Strain; bumping hands | Avoid snatching, rapid movements. |
| 7 Loosen wheel nuts. | Hands slipping-bruised knuckles. Strain. | Ensure spanner brace in good order. Avoid snatching, rapid movements. Use gloves. |
| 8 Jack up car fully in accordance with manufacturers advice | Strain; bumping hands on jack/car | Avoid snatching, rapid movements |
| 9 Remove wheel | Strain to back. Dropping onto feet | Use kinetic handling techniques, gloves (if available) to improve grip |
| 10 Fit spare | Strain to back | Use kinetic handling techniques |
| 11 Tighten wheel nuts | Hand slipping bruised knuckles. Strain | Use gloves. Avoid snatching, rapid movements |
| 12 Lower car | Strain; bumping hands on jack/car | Avoid snatching, rapid movements |
| 13 Remove jack and store in boot, together with removed wheel | Strain to back | Use kinetic handling techniques |
| 14 Re-tighten wheel nuts | Hand slipping-bruised knuckles | Use gloves. Avoid snatching, rapid movements |
| 15 Replace hub cap | Abrasion to hand | Use gloves |
| 16 Ensure wheel is secure, prior to driving off. |  | Check wheel and area around car |

From the above, it may be seen that each job step has been systematically analysed for its component risk factor. For each identified risk factor a control action has been developed. The third column; ‘Control action’, becomes the Job Safety Instructions, and forms the basis of the written safe system of work.

***In Pairs***

***Part 1***

* Using the risk you selected from your audit, identify the hazards and the risks associated with them.
* Apply the likelihood consequence matrix to establish a risk ranking.
* Select a high risk and discuss the controls required to reduce that risk to acceptable levels.

***Part 2***

Document sources of information about the likelihood and consequence (impact) of events associated with risks.

2.1.1. List the potential sources of information available about likelihood and consequences.

2.1.2. Obtain information about likelihood and consequences associated with risks in your selected workplace.

***Section Outline***

This Section will cover the following:

* identify where the new strategy co-exists in the Total Quality Management program.
* develop policy / procedures linking the new strategy with the TQM program.
* develop briefing sessions for relevant personnel within the organisation.

***1. Implementing the risk Management program***

The process of risk management requires a policy and support mechanism to provide a framework for carrying out a risk management program. The framework for carrying out the program includes:

* A risk management policy consistent with the organisation’s goals, objectives and business;
* Organisational arrangements which include defined personnel, and resources;
* Management review of the risk management system;
* An implementation program.

***Steps in developing and implementing a risk management program***

**1. Support of senior management.**

* Develop an organisational risk management philosophy and awareness of 'risk' at senior management levels. This could be facilitated by training, education and briefing of executive management.
* The active ongoing support of the organisation’s Chief Executive Officer is necessary.
* A senior executive manager or similar 'champion' (or team) needs to sponsor the initiative.
* All senior executives shall give full support.

***2. Develop the organisational policy***

Develop and document a corporate policy and framework for managing risks, to be endorsed by the organisation’s executive and implemented throughout the organisation.

The policy may include information such as:

* the objectives of the policy :and rationale for managing risk
* the links between the policy and the organisation’s strategic / corporate plan
* the extent. or range of issues to which the policy applies
* guidance on what may be regarded as acceptable risk
* who is responsible for managing risks
* the support/expertise available to assist those responsible for managing risks
* the level of documentation required
* the plan for reviewing organisational performance in regard to the policy.

***3. Communicate the policy***

Develop, establish and implement an infrastructure or arrangements to ensure that managing risk becomes an integral part of the planning, management processes and the general culture of the organisation.

This. may include:

* establishing a team containing senior management personnel to be responsible for internal communications about the policy
* raising awareness about managing risks
* communication/dialogue throughout the organisation about managing risk and the organisation’s policy

acquiring risk management skills, e.g. consultants, and developing the skills of staff through education and training

* ensuring appropriate levels of recognition, rewards and sanctions
* establishing performance management processes

***4. Manage risks at organisational level***

Develop and establish a program for managing risks at the organisational level through the application of the risk management system outlined above. The process for managing risks should be integrated with the strategic planning and management processes for the organisation.

This will involve documenting

* the organisation and risk management context
* the risks identified for the organisation
* the analysis and assessment of these risks
* the treatment strategies
* the mechanisms to review the program
* the strategies for awareness raising, skirts acquisition, training and education

***5. Manage risks at the program, project and team level***

Develop and establish a program to manage the risks for each sub-organisational area, program, project, or team activity through the application of the risk management process outlined in an earlier Section. The process for managing risks should be integrated with other planning and managerial activities. The process followed, the decisions taken, and the actions planned should all be documented.

***6. Monitor and review***

Develop and apply mechanisms to ensure ongoing review of the risks. This will ensure that the implementation and the risk management policy remain relevant as circumstances are changing all the time and review of previous decisions is vital. Risks are not static. The effectiveness of the risk management process should also be monitored and reviewed.

***Total Quality Management (TQM)***

An effective risk management program should be integrated with a system which maximises its performance by enhancing quality. TQM aims to makes process improvement a continual activity and integrates risk management with corporate goals for productivity and quality. TQM applied as a system is based on a process model for continuous improvement and provides process improvement teams with everything they need to review and improve risk management processes.

Risk management excellence is about designing and implementing systems that lead to error free performance. Many organisations rely on the use of safety audits to prevent losses such as mishaps involving injury, disease or pollution. However many believe that safety for example, can no more be audited into an organisation than can quality be inspected into a product or service. Audits assess compliance with standards but may not ensure safety within the system.

A TQM system is an alternative method to, but may complement, external audits. TQM aims to incorporate the best practices in risk management by showing internal process improvement teams how to apply them. This includes identifying key processes impacting on success, assigning ownership for process improvement, and planning to implement those improvements.

Thus TQM is based on a pro-active approach, one that emphasises continuous improvement by changing the process itself, and not just fixing problems in the existing process. This latter approach is re-active in that it causes management to focus on particular problems rather than matters such as improvement.

***Integration of risk management and TQM***

The integration of risk management into an organisation with TQM requires the application of TQM principles to the ‘risk management requirements’ and the ‘risk management process’ identified above.

**Principles of TQM**

A summary of the TQM principles espoused by Dr Edwards Deming includes the following:

* **Creating a constancy of purpose**

Establishing a vision for future risk management performance and adopting an risk management philosophy that is consistent with the broader vision and philosophy of the organisation.

* **Getting commitment to improving OHS that runs from the top of the organisation to the bottom**

Recognising that risk management performance improvement is primarily the result of senior management actions and decisions.

* **Emphasising a long term perspective**

Strengthen the underlying processes rather than ‘fire fighting’ to get short term cosmetic results.

* **Bench-marking to identify key processes impacting on success**

Bench-marking is the process of continually searching for new ideas, methods, practices and processes, and adopting the good features and providing guidance on how the ‘best practice’ can be achieved.

* **Focussing on continuous improvement in the risk management processes**

Closing the gap between existing processes/practices and the ‘best practices’ (benchmarks). The quest for continuous improvement becomes a way of life.

* **Assigning ‘ownership’ for the process management**

Responsibility rests clearly with managers. However people at all levels in the organisation have some ‘ownership’ (responsibility for operation and improvement of the process).

* **Accurately measuring improvements**

Using statistical process control and benchmarks, improvement should be plan-driven, not event-driven.

* **Fostering a cross functional team approach**

Implementing best practices and solving risk management problems across different areas in the organisation.

* **Educating, training and retraining everyone in TQM principles**

All staff will be involved with risk management.

* **Recognising the costs of operational errors**

Managed risks can have an immediate positive effect on productivity, performance, customer service and customer relations.

Note that TQM principles can be integrated into a safety system comprising the following elements:

|  |  |
| --- | --- |
| Policy and Planning | Education and Training |
| Hazard Identification and Risk Control | Communications |
| Design Control and Purchasing | Health Planning and Rehabilitation |
| Systems Failure Analysis | Emergency Planning and Response |
| Task Analysis |  |

***In Pairs***

* Obtain the goals / objectives / mission statement / policies for an organisation.
* Identify the area(s) of unacceptable risk which you have identified previously.
* Select that part of the organisation which has managerial control in the area(s) of identified unacceptable risk.
* Develop a policy / procedures which describe the new strategy for controlling the risk.
* Describe how these will integrate with the existing organisational program.
* Apply the principles of TQM to the new strategy.
* Develop a briefing session for personnel which describe the activities required to implement the new risk management strategy in the existing management system.

**You are now ready to go through a check list. Be honest with yourself.**

# Tick the box with either a √ or an X to indicate your response.

* **I am able to demonstrate an understanding of business processes and potential risks to a unit.**
* **I am able to identify potential risks and assessing the impact thereof in a unit.**
* **I am able to develop contingency plans for managing risk.**
* **I am able to test and revise contingency plans.**



# .

# You must think about any point you could not tick. Write this down as a goal.

# Decide on a plan of action to achieve these goals. Regularly review these goals.

## Select and coach first line managers

## 252035

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This unit standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them. The qualifying learner is capable of:

* Selecting a first line manager for a specific position
* Planning the coaching process of a first line manager
* Coaching selected first line manager
* Monitoring and measuring the results of coaching sessions

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| **SPECIFIC OUTCOMES AND RELATED ASSESSMENT CRITERIA** | |
| **SO 1** | Select first line manager for a specific position. |
| **AC 1** | An analysis is conducted of the job profile to determine the key performance areas for the first line management position. |
| **AC 2** | Selection and weighting criteria for the Key Results Areas of the first line management position are described on the basis of the job profile. |
| **AC 3** | Liaison with the recruitment function of the entity is undertaken to ensure understanding of the requirements of the position. |
| **AC 4** | Interviewing, desk checking and/or other techniques are used to arrive at a short list of the candidates who applied for the position. |
| **AC 5** | Decisions are taken and offers made to the selected manager in accordance with organisational policies and procedures. |
| **SO 2** | Plan the coaching process of a first line manager. |
| **AC 1** | Records of expected performance against the manager's Key Results Areas are prepared to serve as a basis for discussions with the selected manager. |
| **AC 2** | Records of expected performance against the manager's Key Results Areas are prepared to serve as a basis for discussions with the selected manager. |
| **AC 3** | A system is implemented for recording the decisions, commitments made and other relevant information from the discussions. |
| **SO 3** | Coach selected first line manager. |
| **AC 1** | The purpose, content and schedule of the coaching process is explained to the selected manager in order to reach agreement on the coaching process. |
| **AC 2** | During the coaching sessions the selected manager's performance is discussed against the Key Result Areas and recorded for future reference. |
| **AC 3** | Identified gaps and actions to close them are agreed upon and recorded in the coaching action plan. |
| **AC 4** | Feedback given to the manager is honest, constructive and supportive. |
| **SO 4** | Monitor and measure the results of coaching sessions. |
| **AC 1** | Actions agreed to at a coaching session are monitored at the times agreed to during the coaching session. |
| **AC 2** | Positive feedback is given to the selected manager for accomplishments against the coaching action plan. |
| **AC 3** | Corrective actions agreed upon are recorded in areas where requirements in the coaching action plan have not been met. |
| **AC 4** | Follow up action taken on the basis of the manager's response to the coaching is in line with organisational policies and procedures. |
| **AC 5** | Line managers are encouraged to use the coaching process with people reporting to them after explaining and agreeing a system with them. |

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| **CRITICAL CROSS FIELD OUTCOMES** |
| UNIT STANDARD CCFO IDENTIFYING  Identify and solve problems relating to the implementation of a coaching process.  UNIT STANDARD CCFO WORKING  Work effectively with others during coaching sessions with a first line manager.  UNIT STANDARD CCFO ORGANISING  Organise and manage oneself and one's activities in preparing a coaching schedule.  UNIT STANDARD CCFO COLLECTING  Collect, evaluate, organise and critically evaluate information concerning applicants for a position.  UNIT STANDARD CCFO COMMUNICATING  Communicate effectively in explaining the coaching purpose and process.  UNIT STANDARD CCFO DEMONSTRATING  Demonstrate an understanding of the world as a set of related systems by guiding the first line manager to understand the interrelationship between work processes. |

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| **SOUTH AFRICAN QUALIFICATIONS AUTHORITY** |

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| **REGISTERED UNIT STANDARD:** |

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| **Select and coach first line managers** |

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| **SAQA US ID** | **UNIT STANDARD TITLE** | | | |
| 252035 | Select and coach first line managers | | | |
| **ORIGINATOR** | | **ORIGINATING PROVIDER** | | |
| SGB Generic Management | |  | | |
| **QUALITY ASSURING BODY** | | | | |
| - | | | | |
| **FIELD** | | | **SUBFIELD** | |
| Field 03 - Business, Commerce and Management Studies | | | Generic Management | |
| **ABET BAND** | **UNIT STANDARD TYPE** | **PRE-2009 NQF LEVEL** | **NQF LEVEL** | **CREDITS** |
| Undefined | Regular | Level 5 | New Level Assignment Pend. | 8 |
| **REGISTRATION STATUS** | | **REGISTRATION START DATE** | **REGISTRATION END DATE** | **SAQA DECISION NUMBER** |
| Reregistered | | 2012-07-01 | 2015-06-30 | SAQA 0695/12 |
| **LAST DATE FOR ENROLMENT** | | **LAST DATE FOR ACHIEVEMENT** | | |
| 2016-06-30 | | 2019-06-30 | | |

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| In all of the tables in this document, both the pre-2009 NQF Level and the NQF Level is shown. In the text (purpose statements, qualification rules, etc), any references to NQF Levels are to the pre-2009 levels unless specifically stated otherwise. |

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| This unit standard does not replace any other unit standard and is not replaced by any other unit standard. |

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| **PURPOSE OF THE UNIT STANDARD** |

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| This unit standard is intended for managers in all economic sectors. These managers would typically be second level managers such as heads of department, section heads or divisional heads, who may have more than one team reporting to them.   The qualifying learner is capable of:   Selecting a first line manager for a specific position.   Planning the coaching process of a first line manager.   Coaching selected first line manager.   Monitoring and measuring the results of coaching sessions. |

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| **LEARNING ASSUMED TO BE IN PLACE AND RECOGNITION OF PRIOR LEARNING** |

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| It is assumed that learners are competent in:   Communication at NQF Level 4.   Mathematical Literacy at NQF Level 4.   Computer Literacy at NQF Level 4. |

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| **UNIT STANDARD RANGE** |

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|  The learner is required to apply the learning in respect of this/her own area of responsibility.   Unit refers to the division, department or business unit in which the learner is responsible for managing and leading staff.   Entity includes, but is not limited to, a company, business unit, public institution, small business, Non-Profit Organisation or Non-Governmental Organisation. |

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| **Specific Outcomes and Assessment Criteria:** |

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| **SPECIFIC OUTCOME 1** |

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| Select first line manager for a specific position. |

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| **ASSESSMENT CRITERION 1** |

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| An analysis is conducted of the job profile to determine the key performance areas for the first line management position. |

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| **ASSESSMENT CRITERION 2** |

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| Selection and weighting criteria for the Key Results Areas of the first line management position are described on the basis of the job profile. |

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| **ASSESSMENT CRITERION 3** |

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| Liaison with the recruitment function of the entity is undertaken to ensure understanding of the requirements of the position. |

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| **ASSESSMENT CRITERION 4** |

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| Interviewing, desk checking and/or other techniques are used to arrive at a short list of the candidates who applied for the position. |

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| **ASSESSMENT CRITERION 5** |

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| Decisions are taken and offers made to the selected manager in accordance with organisational policies and procedures. |

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| **SPECIFIC OUTCOME 2** |

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| Plan the coaching process of a first line manager. |

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| **ASSESSMENT CRITERION 1** |

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| A coaching plan and schedule is drawn up according to identified priorities in a unit. |

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| **ASSESSMENT CRITERION 2** |

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| Records of expected performance against the manager's Key Results Areas are prepared to serve as a basis for discussions with the selected manager. |

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| **ASSESSMENT CRITERION 3** |

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| A system is implemented for recording the decisions, commitments made and other relevant information from the discussions. |

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| **SPECIFIC OUTCOME 3** |

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| Coach selected first line manager. |

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| **ASSESSMENT CRITERION 1** |

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| The purpose, content and schedule of the coaching process is explained to the selected manager in order to reach agreement on the coaching process. |

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| **ASSESSMENT CRITERION 2** |

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| During the coaching sessions the selected manager's performance is discussed against the Key Result Areas and recorded for future reference. |

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| **ASSESSMENT CRITERION 3** |

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| Identified gaps and actions to close them are agreed upon and recorded in the coaching action plan. |

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| **ASSESSMENT CRITERION 4** |

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| Feedback given to the manager is honest, constructive and supportive. |

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| **SPECIFIC OUTCOME 4** |

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| Monitor and measure the results of coaching sessions. |

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| **ASSESSMENT CRITERION 1** |

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| Actions agreed to at a coaching session are monitored at the times agreed to during the coaching session. |

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| **ASSESSMENT CRITERION 2** |

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| Positive feedback is given to the selected manager for accomplishments against the coaching action plan. |

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| **ASSESSMENT CRITERION 3** |

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| Corrective actions agreed upon are recorded in areas where requirements in the coaching action plan have not been met. |

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| **ASSESSMENT CRITERION 4** |

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| Follow up action taken on the basis of the manager's response to the coaching is in line with organisational policies and procedures. |

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| **ASSESSMENT CRITERION 5** |

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| Line managers are encouraged to use the coaching process with people reporting to them after explaining and agreeing a system with them. |

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| **UNIT STANDARD ACCREDITATION AND MODERATION OPTIONS** |

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|  Anyone assessing a candidate against this Unit Standard must be registered as an assessor with the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Any institution offering learning that will enable achievement of this Unit Standard must be accredited as a provider through the relevant ETQA or an ETQA that has a Memorandum of Understanding with the relevant ETQA.   Moderation of assessment will be overseen by the relevant ETQA according to the moderation guidelines and the agreed ETQA procedures. |

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| **UNIT STANDARD ESSENTIAL EMBEDDED KNOWLEDGE** |

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|  Deriving performance requirements from Key Results Areas.   The coaching process.   Feedback techniques.   Negotiation and conflict handling techniques. |

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| **Critical Cross-field Outcomes (CCFO):** |

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| **UNIT STANDARD CCFO IDENTIFYING** |

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| Identify and solve problems relating to the implementation of a coaching process. |

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| **UNIT STANDARD CCFO WORKING** |

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| Work effectively with others during coaching sessions with a first line manager. |

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| **UNIT STANDARD CCFO ORGANISING** |

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| Organise and manage oneself and one's activities in preparing a coaching schedule. |

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| **UNIT STANDARD CCFO COLLECTING** |

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| Collect, evaluate, organise and critically evaluate information concerning applicants for a position. |

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| **UNIT STANDARD CCFO COMMUNICATING** |

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| Communicate effectively in explaining the coaching purpose and process. |

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| **UNIT STANDARD CCFO DEMONSTRATING** |

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| Demonstrate an understanding of the world as a set of related systems by guiding the first line manager to understand the interrelationship between work processes. |

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| **QUALIFICATIONS UTILISING THIS UNIT STANDARD:** |

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|  | **ID** | **QUALIFICATION TITLE** | **PRE-2009 NQF LEVEL** | **NQF LEVEL** | **STATUS** | **END DATE** | **QUALITY ASSURING BODY** |
| Core | [59201](http://allqs.saqa.org.za/showQualification.php?id=59201) | National Certificate: Generic Management | Level 5 | New Level Assignment Pend. | Reregistered | 2015-06-30 | As per Learning Programmes recorded against this Qual |
| Elective | [80046](http://allqs.saqa.org.za/showQualification.php?id=80046) | National Certificate: Tactical Road Traffic Operations | Level 5 | NQF Level 05 | Reregistered | 2015-06-30 | SAS SETA |

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***M***

anagers are organizational members who are responsible for the work performance of other organizational members. Managers have formal authority to use organizational resources and to make decisions.

In organizations, there are typically three levels of management: top-level, middle-level, and first-level. These three main levels of managers form a hierarchy, in which they are ranked in order of importance. In most organizations, the number of managers at each level is such that the hierarchy resembles a pyramid, with many more first-level managers, fewer middle managers, and the fewest managers at the top level.

Each of these management levels is described below in terms of their possible job titles and their primary responsibilities and the paths taken to hold these positions. Additionally, there are differences across the management levels as to what types of management tasks each does and the roles that they take in their jobs.

Finally, there are a number of changes that are occurring in many organizations that are changing the management hierarchies in them, such as the increasing use of teams, the prevalence of outsourcing, and the flattening of organizational structures.

**Top-level Managers**

Top-level managers, or top managers, are also called senior management or executives. These individuals are at the top one or two levels in an organization, and hold titles such as: Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Operational Officer (COO), Chief Information Officer (CIO), Chairperson of the Board, President, Vice president, Corporate head.

Often, a set of these managers will constitute the top management team, which is composed of the CEO, the COO, and other department heads. Top-level managers make decisions affecting the entirety of the firm. Top managers do not direct the day-to-day activities of the firm; rather, they set goals for the organization and direct the company to achieve them. Top managers are ultimately responsible for the performance of the organization, and often, these managers have very visible jobs.

Top managers in most organizations have a great deal of managerial experience and have moved up through the ranks of management within the company or in another firm. An exception to this is a top manager who is also an entrepreneur; such an individual may start a small company and manage it until it grows enough to support several levels of management. Many top managers possess an advanced degree, such as a Masters in Business Administration, but such a degree is not required.

Some CEOs are hired in from other top management positions in other companies. Conversely, they may be promoted from within and groomed for top management with management development activities, coaching, and mentoring. They may be tagged for promotion through succession planning, which identifies high potential managers.

**Middle-level Managers**

Middle-level managers, or middle managers, are those in the levels below top managers. Middle managers' job titles include: General manager, Plant manager, Regional manager, and Divisional manager.

Middle-level managers are responsible for carrying out the goals set by top management. They do so by setting goals for their departments and other business units.

Middle managers can motivate and assist first-line managers to achieve business objectives. Middle managers may also communicate upward, by offering suggestions and feedback to top managers. Because middle managers are more involved in the day-to-day workings of a company, they may provide valuable information to top managers to help improve the organization's bottom line.

Jobs in middle management vary widely in terms of responsibility and salary. Depending on the size of the company and the number of middle-level managers in the firm, middle managers may supervise only a small group of employees, or they may manage very large groups, such as an entire business location.

Middle managers may be employees who were promoted from first-level manager positions within the organization, or they may have been hired from outside the firm. Some middle managers may have aspirations to hold positions in top management in the future.

**First-level managers**

First-level managers are also called first-line managers or supervisors. These managers have job titles such as: Office manager, Shift supervisor, Department manager, Foreperson, Crew leader, Store manager.

First-line managers are responsible for the daily management of line worker she employees who actually produce the product or offer the service. There are first-line managers in every work unit in the organization.

Although first-level managers typically do not set goals for the organization, they have a very strong influence on the company. These are the managers that most employees interact with on a daily basis, and if the managers perform poorly, employees may also perform poorly, may lack motivation, or may leave the company.

In the past, most first-line managers were employees who were promoted from line positions (such as production or clerical jobs). Rarely did these employees have formal education beyond the high school level. However, many first-line managers are now graduates of a trade school, or have a two-year associates or a four-year bachelor's degree from college.

Management Levels and the four Managerial Functions

Managers at different levels of the organization engage in different amounts of time on the four managerial functions of planning, organizing, leading, and controlling.

Planning is choosing appropriate organizational goals and the correct directions to achieve those goals. Organizing involves determining the tasks and the relationships that allow employees to work together to achieve the planned goals. With leading, managers motivate and coordinate employees to work together to achieve organizational goals. When controlling, managers monitor and measure the degree to which the organization has reached its goals.

The degree to which top, middle, and supervisory managers perform each of these functions is presented in Exhibit 1. Note that top managers do considerably more planning, organizing, and controlling than do managers at any other level. However, they do much less leading. Most of the leading is done by first-line managers. The amount of planning, organizing, and controlling decreases down the hierarchy of management; leading increases as you move down the hierarchy of management.

**Management Roles**

In addition to the broad categories of management functions, managers in different levels of the hierarchy fill different managerial roles. These roles were categorized by researcher Henry Mintzberg, and they can be grouped into three major types: decisional, interpersonal, and informational.

**Decisional Roles**

Decisional roles require managers to plan strategy and utilize resources. There are four specific roles that are decisional. The entrepreneur role requires the manager to assign resources to develop innovative goods and services, or to expand a business. Most of these roles will be held by top-level managers, although middle managers may be given some ability to make such decisions. The disturbance handler corrects unanticipated problems facing the organization from the internal or external environment.

Managers at all levels may take this role. For example, first-line managers may correct a problem halting the assembly line or a middle level manager may attempt to address the aftermath of a store robbery. Top managers are more likely to deal with major crises, such as requiring a recall of defective products. The third decisional role that of resource allocator, involves determining which work units will get which resources.

Top managers are likely to make large, overall budget decisions, while middle managers may make more specific allocations. In some organizations, supervisory managers are responsible for determine allocation of salary raises to employees. Finally, the negotiator works with others, such as suppliers, distributors, or labour unions, to reach agreements regarding products and services.

First-level managers may negotiate with employees on issues of salary increases or overtime hours, or they may work with other supervisory managers when needed resources must be shared. Middle managers also negotiate with other managers and are likely to work to secure preferred prices from suppliers and distributors.

Top managers negotiate on larger issues, such as labour contracts, or even on mergers and acquisitions of other companies.

**Interpersonal Roles**

Interpersonal roles require managers to direct and supervise employees and the organization. The figurehead is typically a top of middle manager. This manager may communicate future organizational goals or ethical guidelines to employees at company meetings. A leader acts as an example for other employees to follow, gives commands and directions to subordinates, makes decisions, and mobilizes employee support.

Managers must be leaders at all levels of the organization; often lower-level managers look to top management for this leadership example. In the role of liaison, a manger must coordinate the work of others in different work units, establish alliances between others, and work to share resources. This role is particularly critical for middle managers, who must often compete with other managers for important resources, yet must maintain successful working relationships with them for long time periods.

**Informational Roles**

Informational roles are those in which managers obtain and transmit information. These roles have changed dramatically as technology has improved. The monitor evaluates the performance of others and takes corrective action to improve that performance. Monitors also watch for changes in the environment and within the company that may affect individual and organizational performance.

Monitoring occurs at all levels of management, although managers at higher levels of the organization are more likely to monitor external threats to the environment than are middle or first-line managers. The role of disseminator requires that managers inform employees of changes that affect them and the organization.

They also communicate the company's vision and purpose. Managers at each level disseminate information to those below them, and much information of this nature trickles from the top down.

Finally, a spokesperson communicates with the external environment, from advertising the company's goods and services, to informing the community about the direction of the organization. The spokesperson for major announcements, such as a change in strategic direction, is likely to be a top manager.

But, other, more routine information may be provided by a manager at any level of a company. For example, a middle manager may give a press release to a local newspaper, or a supervisor manager may give a presentation at a community meeting.

**Management Skills**

Regardless of organizational level, all managers must have five critical skills: technical skill, interpersonal skill, conceptual skill, diagnostic skill, and political skill.

**Technical Skill**

Technical skill involves understanding and demonstrating proficiency in a particular workplace activity. Technical skills are things such as using a computer word processing program, creating a budget, operating a piece of machinery, or preparing a presentation.

The technical skills used will differ in each level of management. First-level managers may engage in the actual operations of the organization; they need to have an understanding of how production and service occur in the organization in order to direct and evaluate line employees.

Additionally, first-line managers need skill in scheduling workers and preparing budgets. Middle managers use more technical skills related to planning and organizing, and top managers need to have skill to understand the complex financial workings of the organization.

**Interpersonal Skill**

Interpersonal skill involves human relations, or the manager's ability to interact effectively with organizational members. Communication is a critical part of interpersonal skill, and an inability to communicate effectively can prevent career progression for managers. Managers who have excellent technical skill, but poor interpersonal skill are unlikely to succeed in their jobs. This skill is critical at all levels of management.

**Conceptual Skill**

Conceptual skill is a manager's ability to see the organization as a whole, as a complete entity. It involves understanding how organizational units work together and how the organization fits into its competitive environment.

Conceptual skill is crucial for top managers, whose ability to see "the big picture" can have major repercussions on the success of the business. However, conceptual skill is still necessary for middle and supervisory managers, who must use this skill to envision, for example, how work units and teams are best organized.

**Diagnostic Skill**

Diagnostic skill is used to investigate problems, decide on a remedy, and implement a solution. Diagnostic skill involves other skills such as technical, interpersonal, conceptual, and politic. For instance, to determine the root of a problem, a manager may need to speak with many organizational members or understand a variety of informational documents. The difference in the use of diagnostic skill across the three levels of management is primarily due to the types of problems that must be addressed at each level.

For example, first-level managers may deal primarily with issues of motivation and discipline, such as determining why a particular employee's performance is flagging and how to improve it. Middle managers are likely to deal with issues related to larger work units, such as a plant or sales office.

For instance, a middle-level manager may have to diagnose why sales in a retail location have dipped. Top managers diagnose organization-wide problems, and may address issues such as strategic position, the possibility of outsourcing tasks, or opportunities for overseas expansion of a business.

**Political Skill**

Political skill involves obtaining power and preventing other employees from taking away one's power. Managers use power to achieve organizational objectives, and this skill can often reach goals with less effort than others who lack political skill. Much like the other skills described, political skill cannot stand alone as a manager's skill; in particular, though, using political skill without appropriate levels of other skills can lead to promoting a manager's own career rather than reaching organizational goals.

Managers at all levels require political skill. Managers must avoid others taking control that they should have in their work positions. Top managers may find that they need higher levels of political skill in order to successfully operate in their environments. Interacting with competitors, suppliers, customers, shareholders, government, and the public may require political skill.

**Changes in Management Hierarchies**

There are a number of changes to organizational structures that influence how many managers are at each level of the organizational hierarchy, and what tasks they perform each day.

**Flatter Organizational Structures**

Organizational structures can be described by the number of levels of hierarchy; those with many levels are called "tall" organizations. They have numerous levels of middle management, and each manager supervises a small number of employees or other managers. That is, they have a small span of control. Conversely, "flat" organizations have fewer levels of middle management, and each manager has a much wider span of control. Examples of organization charts that show tall and flat organizational structures are presented in Exhibit 2.

Many organizational structures are now more flat than they were in previous decades. This is due to a number of factors. Many organizations want to be more flexible and increasingly responsive to complex environments. By becoming flatter, many organizations also become less centralized. Centralized organizational structures have most of the decisions and responsibility at the top of the organization, while decentralized organizations allow decision-making and authority at lower levels of the organization. Flat organizations that make use of decentralization are often more able to efficiently respond to customer needs and the changing competitive environment.

As organizations move to flatter structures, the ranks of middle-level managers are diminishing. This means that there a fewer opportunities for promotion for first-level managers, but this also means that employees at all levels are likely to have more autonomy in their jobs, as flatter organizations promote decentralization.

When organizations move from taller to flatter hierarchies, this may mean that middle managers lose their jobs, and are either laid off from the organization, or are demoted to lower-level management positions.

This creates a surplus of labour of middle level managers, who may find themselves with fewer job opportunities at the same level.**\**

**Increased use of Teams**

A team is a group of individuals with complementary skills who work together to achieve a common goal. That is, each team member has different capabilities, yet they collaborate to perform tasks.

Many organizations are now using teams more frequently to accomplish work because they may be capable of performing at a level higher than that of individual employees. Additionally, teams tend to be more successful when tasks require speed, innovation, integration of functions, and a complex and rapidly changing environment.

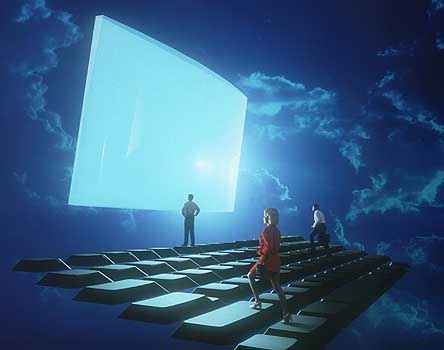
Another type of managerial position in an organization that uses teams is the team leader, who is sometimes called a project manager, a program manager, or task force leader. This person manages the team by acting as a facilitator and catalyst. He or she may also engage in work to help accomplish the team's goals. Some teams do not have leaders, but instead are self-managed. Members of self-managed teams hold each other accountable for the team's goals and manage one another without the presence of a specific leader.

**Outsourcing**

Outsourcing occurs when an organization contracts with another company to perform work that it previously performed itself. Outsourcing is intended to reduce costs and promote efficiency. Costs can be reduced through outsourcing, often because the work can be done in other countries, where labour and resources are less expensive than in the original country.

Additionally, by having an out-sourcing company aid in production or service, the contracting company can devote more attention and resources to the company's core competencies. Through outsourcing, many jobs that were previously performed by South African workers are now performed overseas.

Thus, this has reduced the need for many first-level and middle-level managers, who may not be able to find other similar jobs in another company.

***A coach is defined in the Oxford dictionary as a “private tutor”. This illustrates the basic between training and coaching. Where coaching is done on a one-on-one basis, training is usually scheduled to involve a number of people at the same time.***

Coaching entails the counselling and instruction of a subordinate by their superior or colleague. The aim of coaching is to develop the learners’ potential in their present position and to prepare them for possible promotion. The learner learns by doing, they learn continuously and over a long period of time. In order for coaching to be effective, it must be conducted on a daily basis. It has to be a continuous process that is systematic and purposeful towards the learner, in their working environment. A mutual trust between the learner and the coach is of utmost importance for the relationship to be mutually beneficial.

***The Principles of Coaching***

* The practical application by the learner of what is being learned is imperative.
* A time and place for when the coaching session must occur should be agreed upon.
* Thorough planning for the coaching session should be done
* A “development file” should be kept for each learner.
* Feedback is very important and has to be done on a regular basis; communication is the key to effective coaching
* Questioning from the learner must be encouraged as it shows their interest and progress of learning
* Learning should progress from simple single skills to more interactive and complex knowledge required tasks
* The learning has to be based on the current knowledge of the learner; this is the starting point for further learning
* New materials and skills has to be introduced gradually to the learner, the repetition of old skills and their graduation to new skills has to be a flowing process
* The need for coaching must be established by conversation with the learner, where they identify the need for coaching, thus making them more receptive to coaching. The concepts and skills required have to be explained and demonstrated to the learner.
* A coaching program has to be drawn up in consultation with the person who will be coached, their participation with this plan is very important to ensure they are part of the process. This program must allow for the knowledge which is being learned, to be transferred into other situations. The program must be evaluated on a regular basis to ensure that it is effective, valid and up-to-date.
* Incoherent habits or responses has to be changed, the learners has to be made aware of the reasons why their duties and methods are judged as incorrect
* Learners must be given the opportunity to work on and solve their own problems
* The individual must be coached at a rate which is suitable to them

***Questioning Techniques***

* As the coach, you should prepare the questions you will be asking the coachee as well as know what the correct answers to the questions are
* You have to maintain your interest in obtaining the correct answer
* You have to maintain eye contact with the person you are coaching
* Questions has to be
  + Clear and easy to understand
  + Aimed at the appropriate level of learning for the coachee
  + relevant to the skills / knowledge being coached
  + Asked in such a way that it does not allow for a closed answer. The answer given must portray the knowledge the coachee has
* Listen attentively to the answer you are given, evaluate the answer objectively, keeping the workplace requirements in mind
* Avoid words and phrases as answers such as “You’re joking” and “really”

***Feedback***

* It gives the learner the opportunity to formulate their own ideas and then comment on them with regards to their progress in the workplace
* It identifies areas that still require additional attention, gives the learners the ability to come up with solutions they feel will assist them in reaching the desired outcome and lastly it assists them to evaluate (in cooperation with their coach) their own performance
* By focussing on one issue at a time, you can build on the positive; identify and formulate ideas to correct the shortcomings and in that way increase the self-confidence of the learners

**What is coaching?**

To explain what coaching is, let me start by explaining what is isn’t, and how it differs from the other helping modalities.

Coaching is different to consulting. A consultant is usually an expert in a field and s/he function is to give advice.

It also differs from mentoring. A mentor is also an expert who takes another under their wing and guides them from their experience.

Training is about teaching someone new skills, and thus it also differs from coaching.

Coaching is not counselling or therapy. Counselling is based on solving problems, recovering and exploring things from a person’s past.

All of the above, including coaching form part of important management tools. These tools are used to mange individuals through growth, personal conflict, workplace stress as well as achievement issues. They are used as a process in which management aims to assist their staff in obtaining certain goals or achievements which they have the need for.

**Well then… what is coaching?**

It’s about fixing problems. Well, if advice is at the heart of consulting, and mentoring is about guiding, and the centre of training is teaching and of counselling is fixing, then what is coaching about?

At the heart of coaching is facilitation. It’s facilitating individuals to maximize their existing skills and resources to take their performance to the next level.

Coaching is a one-on-one solution focused, outcome orientated, collaborative partnership where you and your Coach spend time focusing on just you – you and your life and your challenges and your skill levels and your dreams. With this focus on you and your development, you will experience having someone there who believes in you, listens to you, doesn’t judge you, and totally supports you. You will develop holistically in that you work not only with your mind, body, actions, and behaviours, but also with your feelings, beliefs and higher levels of your mind.

The heart of Coaching is about choice. It’s about choices in your life and making those choices. So how much more interested are you now in finding out more about coaching?

Coaching is a successful tool for supporting the long-term development of individuals. It works because it initiates a change in behaviour that is based in the coachee choosing, unprompted, to respond in a different way, rather than being forced to behave in a new way by some external driver.

Coaching initiates long term change as the coachees are able to internalise the discoveries and use the knowledge in their lives, not just when dealing with the task at hand. The success of this modality is founded in the coachee. Many other forms of personal development used within companies are ‘threat/ bribe’ motivators and for these to be successful there always needs to be a person threatening and/ or bribing.

***“One of the key outcomes from the coaching relationship is that the process is self-generating and eventually self-sustaining”***

After a period of time, the coachee is able to continuously improve and learn beyond the coaching process. The skills of reflection, resource development and action selection are learnt and can be used in the future.

***“In addition the coachee is self-correcting“***

By passing on the ability to recognise when one is no longer performing at the competency level expected, the coaching process ensures that coachees are able observe when they are not on track and take steps to correct this.

Coaching puts the individual in control of their actions, their feelings and their future. Coachees take responsibility for their performance and then are in a position to make the required changes to be more effective and more fulfilled.

Coaching is effective specifically because it is designed to meet the unique needs and expectations of each individual. It can positively, effectively and permanently impact both the coachees and the companies they work for. Many organisations already embrace coaching. A recent survey revealed that…

***“…one-on-one executive coaching is the single most planned-for development tool being considered by executives for leadership development”***

**So what are the benefits of coaching?**

**For individuals**

* Increased productivity
* Improved work quality
* Improved relationships with both direct reports and supervisors
* Increased job satisfaction and a sense of fulfilment
* Greater adaptability

**And for organisations**

* Improved individual performance
* Focused and effective development of people
* Increased retention of staff – specifically, coaching supports the retention of top performers as it enables these individuals to optimise their feelings of fulfilment in the workplace, and to find their own, authentic working and leadership style

**What personal qualities do I need to be a good coach?**

Coaches are trained to listen, to observe and to customise their approach to individual client needs. They seek to elicit solutions and strategies from the coachee; they believe the coachee is naturally creative and resourceful. The coach's job is to provide support to enhance the skills, resources, and creativity that the coachee already has.

It is the coach's responsibility is to:

* Discover, clarify, and align with what the coachee wants to achieve
* Encourage coachee self-discovery
* Elicit coachee -generated solutions and strategies
* Hold the coachee responsible and accountable

Professional Coaching is an on-going professional relationship that helps people produce extraordinary results in their lives, careers, businesses or organisations. Through the process of coaching, coachees deepen their learning, improve their performance, and enhance their quality of life.

In each meeting, the coachee chooses the focus of conversation, while the coach listens and contributes observations and questions. This interaction creates clarity and moves the coachee into action. Coaching accelerates the coachees’ progress by providing greater focus and awareness of choice. Coaching concentrates on where coachees are now and what they are willing to do to get where they want to be in the future.

***Who Can Coach?***  
Someone can coach when she/he:

1. Can observe the activity being correctly done or not, e.g., was that a brilliant chess sacrifice or a big blunder?
2. Can work with the client until the client can observe her/himself doing the activity correctly or not. This step is obvious and vital.
3. Can work with the coachee so that her/his competence improves. Isn't this the whole point? In coaching, the outcome is always the point. (I love to make absolute statements using "always" because I know readers will immediately try to come up with exceptions. But really, would we call someone a successful coach if her/his clients' performances didn't improve?)

***C***

oaching is about one person **interacting** with another in a way that assists them to produce positive results in their institution because good leadership requires emotional intelligence which, in turn, requires from the coachee the ability to understand and manage intentions, emotional responses and communications. Everyone needs **feedback**, insights, and **encouragement**, particularly the executive leading an institution, but they still need to turn to someone, somewhere, for a **confidential** and **informed** sounding-board and **advice**.

Before somebody is coached, there has to be a definitive need for coaching. This need has to be realized by the person who will be coached as well as their appointed coach.

A coach is somebody who is a subject matter expert in a certain field. It is important to have the knowledge, experience and expertise in certain fields to be able to coach people in similar fields. After all, you can’t help somebody who is willing to take advice from you, to achieve their goals if you do not know what the end product should be.

Furthermore coaches must be able to **listen** to their coachees to correctly identify the needs of each individual. They have to be **tolerant**, **understanding** and have a large amount of **patience**.

The ability of a coach to **translate behavioural feedback into an action plan** is critical in creating an effective development plan for the coachee. The coach must be able to also **determine the relationship between personal behaviour** **and the organisational and business context in which the coachee operates.**

All coaches do not have to be psychologists and nor are psychologists trained or necessarily suitable to become a coach. However, coaching is all about **achieving behavioural change** and change is a psychological process. A successful, professional, ethical coach has to understand, be confident and competent in the psychological aspects of coaching and a master in the use of a range of behavioural change coaching techniques and validated psychological-based tools that bring about genuine, lasting, measurable results.

***Listening Skills***

Coaching is a give-and-take relationship between two people. Both give, and both take. But it is what they take and what they give, that defines the difference in this relationship. Look at the diagram below to understand the above statement.



I need help to become better at what I do

Which area do you need help in?

I need help with personal skills

Is it communication or people skills you need help with?

**COACHEE**

**COACH**

**Information flow**

**Information flow**

As explained in the picture above, coaching is an extensive exercise of good, active listening, understanding and careful formulation of plans to assist and direct the coachee into the direction he/she wishes to further his/her development.

Coaches cannot make their own decisions on the requirements of the coachee or the future they wish for them. The coachee decides on this matter and then conveys their ambition to their coach, verbally. In turn, the coach will then advise the coachee on a variety of methods available as well as paths to follow. But only once the coachee has made the final decision on what they want the outcome to be, can the coach assist them.

***Good Listening Skills -****Hear What People are Really Saying*

It is obvious to say that if you have poor interpersonal communications skills (which include active listening), your productivity will suffer simply because you do not have the tools needed to influence, persuade and negotiate – all necessary for workplace success. Lines of communications must be open between people who rely on one another to get work done.

Considering this, you must be able to listen attentively if you are to perform to expectations, avoid conflicts and misunderstandings, and to succeed - in any arena. Following are a few short tips to help you enhance your communications skills and to ensure you are an active listener:

***1 - Start by Understanding Your Own Communication Style***

Good communication skills require a high level of self-awareness. Understanding your personal style of communicating will go a long way toward helping you to create good and lasting impressions on others. By becoming more aware of how others perceive you, you can adapt more readily to their styles of communicating. This does not mean you have to be a chameleon, changing with every personality you meet. Instead, you can make another person more comfortable with you by selecting and emphasizing certain behaviors that fit within your personality and resonate with another. In doing this, you will prepare yourself to become an active listener.

***2 - Be An Active Listener***

People speak at 100 to 175 words per minute (WPM), but they can listen intelligently at 600 to 800 words per minute. Since only a part of our mind is paying attention, it is easy to go into mind drift - thinking about other things while listening to someone. The cure for this is active listening - which involves listening with a purpose. It may be to gain information, obtain directions, understand others, solve problems, share interest, see how another person feels, show support, etc. If you're finding it particularly difficult to concentrate on what someone is saying, try repeating their words mentally as they say it - this will reinforce their message and help you control mind drift.

***3 - Use Nonverbal Communication***

Use nonverbal behaviours to raise the channel of interpersonal communication. Nonverbal communication is facial expressions like smiles, gestures, eye contact, and even your posture. This shows the person you are communicating with that you are indeed listening actively and will prompt further communications while keeping costly, time-consuming misunderstandings at a minimum.

***4 - Give Feedback***

Remember that what someone says and what we hear can be amazingly different! Our personal filters, assumptions, judgments, and beliefs can distort what we hear. Repeat back or summarize to ensure that you understand. Restate what you think you heard and ask, "Have I understood you correctly?" If you find yourself responding emotionally to what someone said, say so, and ask for more information: "I may not understand you correctly, and I find myself taking what you said personally. What I thought you just said is … … …; is that what you meant?"

***Feedback is a verbal communications means used to clearly demonstrate you are actively listening and to confirm the communications between you and others. Obviously, this serves to further ensure the communications are understood and is a great tool to use to verify everything you heard while actively listening.***

***Questioning Skills***

Just as listening skills are important, so is questioning skills. To be able to get information from a learner, without the normal yes or no answers, you need to phrase the question correctly. If you would like to establish whether a learner is able to competently prepare coffee, simply asking them “Can you make coffee?” will produce either a “Yes” or “No”. When they say “No”, you will know that they need further assistance. However, when they say “Yes”, how do you know whether their skills in making coffee is sufficient to suit the requirements of the organisation they are working in? If you had rather asked “Explain to me how you make coffee.”, then you would have given them an indirect instruction where they must explain their knowledge and skills. So phrasing the question correctly is most important to get the required information from the person you talking to. The magical rule is to include the four W’s and the one H in your question as this will help the person explain their knowledge to you, in their answer.

WHAT

WHERE

WHEN

WHO

HOW

Other than asking the right questions, with the right words in them, you also have to prepare the questions according to what the information you require, to be able to make the decisions. When you just sit a person down and immediately start shooting questions at them, they will not produce the best answers they can. Questioning techniques are vitally important, so is the preparation of the staff member.

***Characteristics of a good question:***

A good question…

* Is an expressive demonstration of genuine curiosity, behind every question there must be a need to know
* Has an inner logic related in some way to the coaches’ focus and the coachees’ experience
* Order the words in such a way that the thinking is clarified both for the coachee and coach
* Is intonated and non-verbal signs correlated to support the intent (looking interested)
* Challenges existing thinking and encourages reflection
* Is seen as part of an on-going dialogue which involves relationships between speakers

***“In essence… a good question has reason, focus, clarity and the appropriate intonation. It should challenge and surprise, maintain engagement from both parties, stimulate thought and evoke feelings”***

Some hints for preparing good questions:

* Prepare your questions beforehand to ensure they are relevant
* Ask questions that:
  + Are concise (one idea per question)
  + Are short enough to remember
  + Are relevant to the objectives required
  + Are challenging (not too obvious)
  + Is designed to produce more than a simple “Yes or No”
  + Requires the depiction of knowledge of facts through understanding

***Feedback Skills***

Feedback is the session that follows after an evaluation has occurred. Feedback is done in a two-directional method. Firstly feedback is given by the coach and then feedback is taken by the coach, from the coachee. But as feedback is given by the coach, it is also divided into two sections, firstly constructive feedback and then positive feedback. Feedback should never be negative. It should rather be constructive. Constructive feedback always pre-cedes the positive feedback to ensure the feedback session ends on a positive note.

Below there are three different scenarios, each one of them requires a different feedback method. Read through the sessions and decide on the appropriate method of feedback that must be given to each scenario.

**Feedback at the water-well**

G0422566.WMFJohn (on the left) has just completed a questioning session with his direct manager Graham (on the right). This session tested John’s ability to work on the new computer system that his company has bought and is vitally important to him, to ensure his progression in the company. He did not do very well, hence the fact that he is very thirsty. Graham gives him feedback while at the water dispenser, jokingly informing John that his application for the new position will not be very successful because of the outcome of his questioning. John is more dumbstruck in disbelief and can’t help but dropping his jaw in disbelief. He does not know whether he will ever have another chance at this promotion. Quite frankly, he is in two minds whether he would even want to stay on at the company after the humiliation he has just suffered in front of all the other employees in the direct vicinity. After Graham left, still chuckling, John did not know where to bury his head while walking away.

**Insufficient Feedback**

You are cutting with the wrong technique!

But that is how you taught me!?

Chef Anderson coached James on the finer details of how to slice the smoked beef two weeks ago. Chef Anderson did not give James feedback immediately after the coaching session. He just left James after explaining it to James and then expected James to continue on his own. James did not know if he was doing it correctly, but he assumed that because Chef Anderson did not say anything, he was doing it right. James was too scared to ask, as Chef Anderson often screams at people and that makes the other chefs in the kitchens scared of Chef Anderson and also too scared to ask him for help, or for feedback with regards to their work. They hope that they are doing the preparation and cooking correctly, otherwise they will be shouted at. That is the only way they will know when they are wrong.

**incorrect Feedback**



David (on the left) is a mathematics student at the university and has asked his personal coach to look at his work before he submits it for marks. Brian (on the right) is David’s coach and does not have any mathematical knowledge at all. He looks at David’s work and then tells him it is right. Thereafter Brian asks David if there was anything else that David wanted to know, because he had to go another class. David asked Brian if the calculations were correct and if he used the formulas in their correct places, but all Brian said was “Yes” and then left.

The main reason people coach and are coached, is because they would like to become better at something they do. By sitting and thinking how you can become better, gives you ideas of how to achieve your goals. Working with your coach, you can get expert advice on what you will need to achieve those goals, but you will also need to have an action plan in place to make sure that you stay on track with your progress, so that you can measure your progress, all the way to achieving your goal.

Developing such action plans, one has to be very sure of what the role of each member of the team (you and your coach) is. Misunderstanding the roles will lead to you venturing off the path, thus taking extra time in achieving your goals.

It is not only miscommunication that can lead to this disastrous outcome, but also not understanding and clearly defining each party’s role and responsibility in the plan. Therefore you must consult with your coach, work- and agree on the action plan and then implement it. Let’s quickly look at the roles and responsibilities of the coach and coachee. This is a very basic guide and it will change from one situation to another as they all have individual needs from each party, depending on the outcome desired.

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| **Roles** | |
| **Coach** | **Coachee** |
| This is the experienced member of the team with the knowledge of reaching the outcome desired | This is the student member of the team, with the need to reach the desired outcome. |
| Gives advice on the steps to be taken to achieve the outcome the coachee wishes | Provides the coach with the relevant details to the outcome he/she wants to achieve |
| To assist and guide the coachee | Use the guidance to improve the outcome |
| “Talker” | “Do-er” |
| **Responsibilities** | |
| **Coach** | **Coachee** |
| Assesses the coachees’ ability to perform the task, then provides feedback with regards to the required performance | Demonstrates the tasks to the coach to show the current competence. Then agrees to the improvements required. |
| Draws up the action plan to assist with the improvement of skills | Agrees to the action plans the Coach has drawn up |
| Assists with the implementation and achievement of goals in the action plan | Follows the action plan to enhance the skills and meet the goals of the action plan |

What are the basic principles of coaching?

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Why is it important that you (as coach) use the correct questions and questioning techniques?

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Give three examples of questions that you would ask your coachee. (Focus on using the correct phrasing)

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What is the difference between coaching and training?

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What method will you use to identify the need for coaching with your coachee?

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How will you prepare for a coaching session?

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How will you arrange with the person requiring coaching, for a coaching session?

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How will you give feedback? (What will your feedback be based on?)

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How will you communicate the theory and knowledge of the task to the learner?

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How will you monitor the progress of the learners?

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What problems do you foresee with coaching in your workplace?

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What changes can you make that can correct the problems, as mentioned above?

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How will you develop a plan for individual coaching, when you have to take the needs of the team into account?

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**You are now ready to go through a check list. Be honest with yourself.**

# Tick the box with either a √ or an X to indicate your response.

* **I am able to** **select a first line manager for a specific position.**
* **I am able to** **plan the coaching process of a first line manager.**

# I am able to coach the selected first line manager.

# I am able to mmonitor and measure the results of coaching sessions.



# You must think about any point you could not tick. Write this down as a goal.

# Decide on a plan of action to achieve these goals. Regularly review these goals.