Business Analysis Practice

Shelomeya De Lima

Chapter One

Introduction to Business Analysis

- The origins of business analysis
- The development of business analysis
- The scope of business analysis work

Business Analysis

- a relatively new discipline that promises to offer great benefit to organizations by ensuring that business needs are aligned with implemented business change solutions.

- in the absence of a standard definition of business analysis and a standard business analysis process model, problems have arisen:
- Organisations have introduced business analysis so as to make sure that business needs are paramount when new information technology (IT) systems are introduced.
- Some business analysts were experienced IT systems analysts and have been less comfortable considering the business requirements.
- Many business analysts come from a business background and have a limited understanding of IT.
- Some business analysit Have felt that they could offer beneficial advice to their organisations – but a lack of understanding of their role has caused organisations to reject or ignore this advice.

- Business analysis is the practice of enabling change in an enterprise by defining needs and recommending solutions that deliver value to stakeholders.
- Business analysis enables an enterprise to articulate needs and the rationale for change , and to design and describe solutions that can deliver value.

THE ORIGINS OF BUSINESS ANALYSIS

- Developments in IT have enabled organisations to create information systems that have improved business operations and management decision-making

What can IT do to exploit business opportunities and enhance the portfolio of products and services?'

- the technology enables the development of information systems, but these often fail to meet the requirements of the business and deliver the service that will bring competitive advantage to the organisation

THE DEVELOPMENT OF BUSINESS ANALYSIS

- The impact of outsourcing
- Competitive advantage of using IT
- Successful business change
- The importance of the business analyst
- The use of consultants

The impact of outsourcing

- Many organizations have outsourced their IT services rather than employ their own internal IT staff.
- The communication and clarification of requirements is key to ensuring the success of any IT
- The outsourcing business model has undoubtedly been a catalyst for the development of the business analysis function as more and more

Competitive advantage of using IT

- A parallel development that has helped to increase the profile of business analysis and define the business analyst role
- three factors need to be present IT systems to deliver competitive advantage
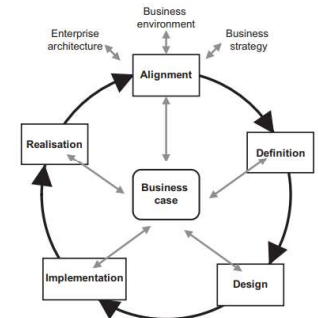
the needs of the business must drive the development of the IT systems	the implementation of an IT system must be accompanied by the necessary business changes	the requirements for IT systems must be defined with rigour and accuracy

Successful business change

- Business Change Life Cycle
- 1-2 analysis of the organization and its business needs and requirements, in order to determine new ways of working that will improve the organization's efficiency and effectiveness
- 3 – change design and development
- 4-5 after implementation, acceptance testing benefits ,review and realization

- Clearly, extensive analysis is required throughout the life cycle if the change are to be successful to deliver the desire benefits.

- The lack of clarity and alignment can result in development that fail to deliver business benefits and waste investment funds.
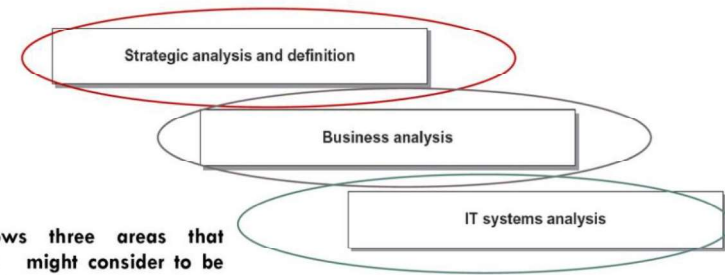
The importance of the business analyst

Who is a Business Analyst?

- business analyst is any person who performs business analysis tasks, no matter their job title or organizational role.
- Help Organizations to finding potential solutions to business issues and opportunities
- delivering the business benefits predicted for business change

External Consultants

Many organizations use external consultants to provide expert advice throughout the business change lifecycle, 'as-needed

criticized, because of the lack of accountability and the absence of any transfer of skills from the external consultants to internal staff

Cost is also a key issue

Business Analysts

Many business analysts have argued that they can provide the same services as external consultants

lower costs,
,include speed, retention of knowledge within the organization

Business Analysts = internal consultants

THE SCOPE OF BUSINESS ANALYSIS WORK

• The range of analysis activities

Strategic analysis and definition

Business analysis

IT systems analysis

shows three areas that we might consider to be within the province of the business analyst.

Strategic analysis and definition

• is typically the work of senior management
• Business analysts often have to define the tactics that will deliver the business objectives and strategy, typically the process and IT solutions.
• while strategic analysis work is not core to business analysis, business analysts will need a good understanding of how strategy is developed and the impact upon the work of the IT and business change functions.

IT systems analysis

• IT systems analysts are responsible for analyzing and specifying the IT system requirements in sufficient detail to provide a basis for the evaluation of software packages or the development of a bespoke IT system.
• IT systems analysis work involves the use of techniques such as data modelling and process or function modelling. This work is focused on describing the software requirements, and so the products of systems analysis define exactly **what data the IT system will record, the processing that will be applied to that data and how the user interface will operate.**
• in some organizations the term 'IT business analyst' or System analyst.

Business analysis

- It highlights the potential scope and extent of business analysis work.
- Business analysts will usually be required to investigate a business system where improvements are required but the range and focus of those improvements can vary considerably.
  - to resolve a localized business issue.
  - requires investigation into several issues, or perhaps ideas, regarding increased efficiency or effectiveness.
  - to focus specifically on enhancing or replacing an existing IT system in line with business requirements.
  - working cross-functionally, taking a value delivery approach.

- It may be that the analysts are asked to resolve a localized business issue
- investigation into several issues, or perhaps ideas, regarding increased efficiency or effectiveness
- is asked to focus specifically on enhancing or replacing an existing IT system in line with business requirements
- More senior business analysts may working cross- functionality. Require analysis of a work stream and activities.

What is the difference between System Analyst and Business Analyst

Realizing business benefits

- defining the business case is only part of the picture; the delivery or 'realization' of these business benefits once the solution has been delivered is also gaining increasing focus.
- predicted business benefits have been delivered is a key element of the role.

Taking a holistic approach

Do the system support the business requirements? Do they provide the information needs? Do the staff have the info to conduct their work ?

Are jobs and responsibilities well defined ? Is there a collaborative ?

They have a good skills? How motivate are they ? Do they understand the objectives ?

Well defined communication ? Good IT support ? Is there delay ?

Organisation

Information & Technology

People

Processes

Supporting business change

- The implementation of business change may require extensive support from business analysts, including tasks such as:
  - writing procedure manuals and user guides;
  - training business staff in the use of new processes and IT systems;
  - defining job roles and writing job role descriptions;
  - providing ongoing support as the business staff begin to adopt the new, unfamiliar approaches.

Chapter Two
The Roles and Functions of the Business Analyst

Subtopics:

- The role and responsibilities of a business analyst
- The business analysis maturity model
- Professionalism and business analysis
- The future of business analysis.

THE ROLE AND RESPONSIBILITIES OF A BUSINESS ANALYST

The core BUSINESS ANALYST ROLE define as:

- the responsibility for investigating business situations, identifying and evaluating options for improving business systems, defining requirements and ensuring the effective use of information systems in meeting the needs of the business.
- investigate business systems
- evaluate actions to improve the operation of a business system
- document the business requirements
- Elaborate requirements.

## The guiding principles for business analysis are:

- Root causes, not symptoms
- Business improvement, not IT change
- Options, not solutions
- Feasible, contributing requirements, not all requests
- The entire business change lifecycle, not just requirements definition
- Negotiation, not avoidance

## THE BUSINESS ANALYSIS MATURITY MODEL

- ☐ The model uses two axes: the **scope** of the work allocated to the BA and the BA's **authority** level
- ☐ **The scope** may be very Specific or defined at an overview level
- ☐ **The authority** of the BA can also vary considerably, ranging from a very limited level to the ability to influence and guide at senior management level.
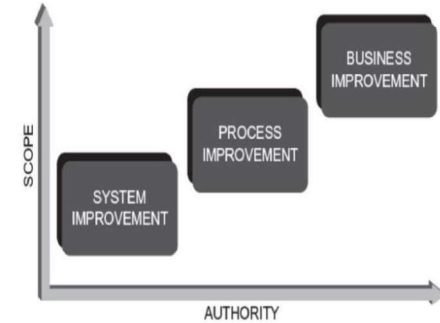
- The first of these level is where the business analysis work is concerned with defining the requirements for an IT system improvement
- The next level is where the business analysis work has moved beyond a specific area or project, so that the analysts work cross functionally on the business processes that give rise to the requirements
- The third level is where the scope and authority of the analysts are at their greatest, working with senior management to do this.
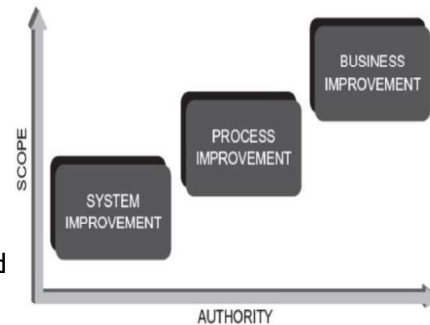
- These levels of maturity apply to three perspectives on business analysis: the individual analysts, the business analysis community within an organisation, and the business analysis profession as a whole.
- At each level, the application of techniques and skills, the use of standards, and the evaluation of the work through measures, can vary considerably. One of the points often raised about the BAMM is the link to the Capability Maturity Model Integration (CMMI).
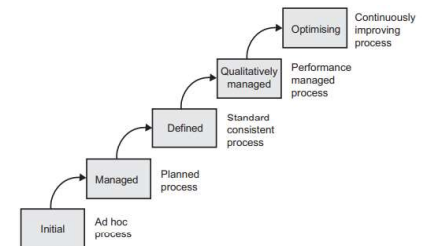
Professionalism And Business Analysis

- Qualifications: that determine the standard of skills and abilities of the individual professional
- Standards: techniques and documentation standards that are applied in order to carry out the work of the profession.
- Continuing professional development: a requirement for the continuing development of skills and knowledge - recognition of the need for the continuing development of skills and knowledge in order to retain the professional status
- Professional body: a body with responsibility for defining technical standards and the code of conduct, promoting the profession and carrying out disciplinary action where necessary. This might require the removal of members where they do not reach the standard required by the code of conduct.

Do you think the business analysis is important for the organization? And Why

Discuss

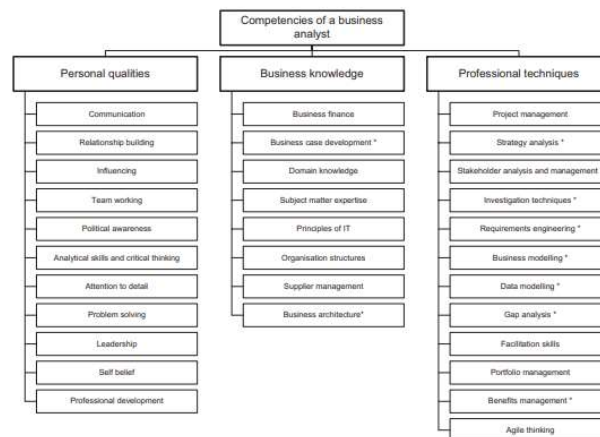Thank You

Business Analysis Practice

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The Competencies of a Business Analyst

- Personal qualities
- Business knowledge
- Professional techniques
- The right skills for the right situation
- How can I develop my skills?
- Industry skills frameworks
- Industry qualifications

INTRODUCTION

- Good business analysts can make the difference between a poor and a great investment in business and IT improvements.

- They can also help to resolve issues without jumping to premature conclusions.

Competencies of a business analyst

Personal qualities	Business knowledge	Professional techniques
Communication	Business finance	Project management
Relationship building	Business case development *	Strategy analysis *
Influencing	Domain knowledge	Stakeholder analysis and management *
Team working	Subject matter expertise	Investigation techniques *
Political awareness	Principles of IT	Requirements engineering *
Analytical skills and critical thinking	Organisation structures	Business modelling *
Attention to detail	Supplier management	Data modelling *
Problem solving	Business architecture*	Gap analysis *
Leadership		Facilitation skills
Self belief		Portfolio management
Professional development		Benefits management *
		Agile thinking

The Competencies of a Business Analyst

- **Personal qualities** are concerned with how you think and how you interact with the people around you. They are not specific to business analysis but are general skills that are important for developing and progressing in any business environment.

- **Business knowledge** which helps to develop a good understanding of their organization and the business domain or sector within which it operates. This knowledge is vital if the business analyst is to offer advice and insights that will help improve the organization's performance.

- The **professional techniques** are those specific to the business analyst role and differentiate business analysts from other roles.

PERSONAL QUALITIES

These are the interpersonal skills and characteristics that are useful for a business analyst.

Communication:
- it encompasses a wide range of areas such as building rapport, listening, influencing and building empathy.
- Poor communication skills are often cited as the root cause of problems during discussions between business and IT staff. The key issues involve the use of technical and business jargon, and failing to understand the other party's point of view during such discussions.

Relationship building:

- This is an extension of communication skill and concerns the ability to get on well with people, at a working if not social level.
- Those who seem best able to build good working relationships demonstrate a genuine interest in the other person and offer open discussions which build mutual trust and respect. This is the basis for successful relationship building.

Influencing

- Business analysts are often involved in suggesting options and, possibly, recommending a course of action.
- Successful influencing requires careful consideration and a concerted effort. We need to understand the stakeholders and factors that will play a part in the decision.
- Identifying the stakeholders and understanding the amount of power they exert over the decision-making processes will allow you to target and influence the decision-makers most effectively
- Some are obvious such as the project sponsor, project manager, governance committees, project boards and other steering groups. Some are hidden – networks of colleagues, personal agendas, hidden information.

Team working

- The nature of business analysis work requires collecting information from and collaborating with many groups such as business colleagues, suppliers, project team members and management.
- As a result, the ability to work in a team is very important.
- An appreciation of what makes successful teams work will benefit the business analyst who should be able to make use of their analytical skills to identify any issues and opportunities that will improve how the team works.
- Key factors for consideration are vision, commitment, trust, capability, accountability, principles, creativity, responsiveness and recognition.

Political awareness

- this means the ability to work out what is and is not politically acceptable in an organisation and being able to use the right organisational levers to get things done.
- This requires an analyst to know the sources of power and information within the organisation, understanding what is acceptable or not, and tailoring the approach accordingly.
- Having political awareness, emphatically does not mean accepting the status quo; it does mean being astute and using resourcefulness to get results, even in the face of opposition.

Analytical skills and critical thinking

- It means not settling for the obvious, not accepting things at face value and not jumping to premature conclusions.
- It means digging deeper and deeper until the true situation is uncovered and the real problem has been defined.
- It involves sifting through often conflicting data and determining which is relevant and which are not, and presenting the results of the analysis in a form suitable for the relevant stakeholders.

Attention to detail

- Several aspects of the business analyst's work require detailed investigation. Whether it is uncovering the root causes of problems, defining the costs and benefits associated with a proposed option, defining business requirements and rules or identifying the impacts of proposed changes, the business analyst has a responsibility to ensure that key information is not missed. The key competence here is to have an attention to detail when necessary and to be able to identify when this is required.

Problem solving

- This focus on understanding the problem before rushing towards a solution is a key tenet of business analysis, – this is where significant value can be delivered. It could be said that a business analyst is at heart someone who likes to solve business problems.
- There is a need for a problemsolving mindset, requiring curiosity, tenacity and analytical ability plus an open mind that seeks out and evaluates options. Pragmatism is also key to successful problem solving.

Leadership

- the fundamental characteristics of leadership – developing a vision, taking ownership of that vision and ensuring the actions to achieve that vision are implemented – can be applied to all types of work.
- No two projects are the same. Each project has different objectives, constraints and stakeholders, and hence the required approach, skills and resources will differ. It is important to assess each situation on its own merits, decide what is needed and then design the analysis process
- The business analyst needs to consider all aspects of the organisation or business area within which they work, including people, culture, processes, commercial and technical aspects

Self-belief

- It means having sufficient self-confidence – in yourself, in the quality of your analysis, in the relevance of your approach – to be able to withstand pressure, challenge proposals, analyse impacts and sustain your arguments. Self-belief is a key competence for working effectively with stakeholders across the broad range of situations likely to be encountered by business analysts
- 'locus of control'. This is the degree to which individuals themselves believe they control events and affect them. - the individual believes they can influence the events that happen.

Professional development

- A continuous improvement mindset is also critical for the business analyst. This should apply to personal development as well as enabling colleagues and the organisation to develop. This will assist the organisation to focus on ongoing learning, enabling it to adapt to new challenges in today's fast moving business and IT environment. This competence may be demonstrated through various activities such as coaching, mentoring, training delivery, contribution to professional forums and applying for business analysis awards.

BUSINESS KNOWLEDGE

considers the range of business knowledge and understanding which is essential as a background and foundation for the business analyst's work.

Business finance:
- finance plays a key role in deciding what funds are available and what can and cannot be done.
- As a result, the business analyst needs to have a good working knowledge of the basics of business finance. This includes a general understanding of aspects such as the balance sheet and income statement (profit and loss account), financial analysis tools like ratio analysis, budgeting and cash flow, the nature of profit or surplus, and the principles of costing products and services.
- Without this understanding, it is not possible for an analyst to evaluate suppliers, deliver well-thought-through process improvements or evaluate options in business cases.

Business case development

- To develop the business case, a basic understanding of finance, as described above, is required. Business analysts involved in business case preparation will need to understand investment appraisal techniques such as break-even analysis and discounted cash flow.

Domain knowledge

- Domain knowledge involves a good general understanding of the business domain, or sector, in which your organization operates.
- It enables you to communicate with the business people involved in the project, using language with which they are familiar – the personal qualities of communication and relationship building also help here.
- It will help you to understand what would, and would not, be acceptable or useful to this business domain; issues of profit, for instance, are unlikely to be of interest when working in a social security department.
- It may enable you to use ideas and experiences – particularly those relating to best practice from an organization, typically but not necessarily within the same business domain, and apply them elsewhere

Subject matter expertise

- Subject matter expertise is more specific, taking the domain knowledge to a lower level of detail. If working on a particular area such as a specific product line or service, a good understanding of the terminology, processes and constraints is important to establish credibility with the customer

Principles of information technology

- original conception of business analysis was as a 'bridging' role, enabling the communication between the business and IT staff
- a general understanding of IT and software development approaches is necessary

Possess an understanding of IT fundamentals, including areas such as:

- how computers work including operating systems, application software, hardware and networks;
- systems development lifecycles, for example the unified process or the 'V' model;
- systems modelling approaches such as the Unified Modeling Language (UML);
- systems development approaches, for example, the Dynamic Systems Development Method (DSDM) and Scrum;
- the relative pros and cons of developing systems instead of buying them off the shelf;
- trends and new opportunities that IT brings such as big data, software as a service, visualization, mobile technologies, and how these impact systems and business development.

Organization structures

- As improving processes and IT, many business analysis projects involve restructuring divisions or teams – to a greater or lesser degree – in order to remove hand-offs, centralize tasks or improve the customer service.
- good understanding of the various organization structures that may be encountered – functional, project, matrix and so on – and of their relative strengths and weaknesses.

Supplier management

- Many organizations use external suppliers to deliver their IT systems, either on an ad-hoc basis or perhaps through a more comprehensive outsourcing arrangement which may cover whole business processes or even an entire business function.
- As a minimum, business analysts should be aware of the different contractual arrangements that are available, for example:
  - Time and materials – where the contracted party is paid on the basis of the time worked; this is not the elapsed time on the project but the amount of effort employed.
  - Fixed price delivery – where the contracted party is paid the price that they agreed for the delivery of the work in line with the original specification.
  - Risk and reward – where the contracted party has agreed to bear some or all of the risk of the project, for example, by investing resources such as staff time, materials or office space, but where the potential rewards are greater than under other contractual arrangements.

Business architecture

- Business architecture concerns the knowledge and understanding of how organizations behave with particular emphasis on the systems, processes, management structures, culture and people.
- Often used in the role of business architects, this 'big picture' insight helps set the overall strategic context and vision within which business and IT change projects operate.

PROFESSIONAL TECHNIQUES

considers the range of business analysis techniques that may be applied during assignments.

Project management

- The PMI (Project Management Institute) publishes a body of knowledge that lists several areas of project management activity: the project management context and processes; scope management; integration management; time management; cost management; quality management; human resource management; communications management; risk management; procurement management.
- Association for Project Management (APM) has a body of knowledge that comprises four sections describing the work of a project manager.

Strategy analysis:

- This covers a range of techniques that can be used to understand the business direction and the strengths and weaknesses of an organisation – or part of an organisation.

Stakeholder analysis and management:

- It involves the ability to identify, analyse and develop management strategies for stakeholders.

Investigation techniques

- to get to the root of a business issue, the analyst will have to have a range of techniques within their toolkit in order to undertake an effective analysis of the area.

Requirements engineering:

- This is the set of practices and processes that lead to the development of a set of well-formed business requirements, from which the business and IT solutions can be developed

Business modelling:

• Business modelling is an approach to visualising business systems through the creation of conceptual models. Whereas a business system model looks at the entire business system in overview, more detailed process models are used to map and analyse how the business processes actually work and to help identify opportunities for process improvement\

Data modelling:

• Analysing the data held and used within a business system affords valuable insights into how a business system operates.

Gap analysis:

• The ability to conduct gap analysis is core to the business analyst role. There are many situations where gap analysis is required. For example, comparing 'as is' and 'to be' process models or higher level business activity models with the current situation, evaluating an off-the-shelf package against the defined requirements, and evaluating capability needs against those currently available.

Benefits management

• Benefits management is concerned with the active planning, monitoring and evaluation of benefits predicted in a business case for a business change initiative. Ultimately, business analysis has the objective of delivering business value which involves ensuring investment is spent wisely, products that deliver value to the organisation are delivered and predicted returns on investment are realised. Benefits management provides structure and insight to projects and programmes, ensuring that the delivery of benefits is planned and monitored so that the value to the organisation is delivered

Agile thinking

• The development of Agile software development approaches has highlighted the need for business analysts to develop competency in supporting projects where Agile has been adopted. However, there is an additional skill required of business analysts; the ability to enable business agility in order to support the effective use of resources and the delivery of value by their organisations.

Facilitation skills:

• The interpersonal skills required for effective facilitation — usually exhibited within the context of a workshop — are those described above. However, there are other qualities that provide the basis for effective facilitation including an awareness of the facilitation process, in particular workshop preparation, plus the ability to apply a range of relevant techniques. The techniques include such approaches as dialogue mapping, day in the life of (DILO), open space technology, brainstorming, mind-mapping, the various uses of 'Post-It' notes, Edward de Bono's (2009) Six Thinking Hats and so on

Portfolio management

• Portfolio management concerns the development of a management delivery framework through evaluation, prioritisation and delivery of a portfolio of projects required to deliver business strategies. Analysis skills come to the fore here in assessing how portfolios of work fit together, and where the priorities lie, to deliver benefits to the organisation.

THE RIGHT SKILLS FOR THE RIGHT SITUATION

• A key task for the management of business analysts is to ensure that there is a good fit between the skills needed for the analysis to be carried out. Putting a junior analyst in a situation where higher level skills are required can be demotivating and the reverse is also true where an analyst is over-skilled for the work

Skills analysis matrix
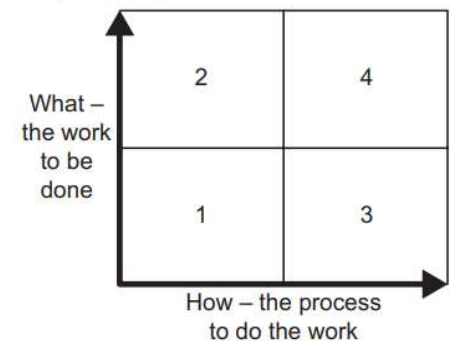
- **In quadrant 1**, the analysis work to be done is well understood as is the process for doing it. So this would be the starting point for a new or inexperienced analyst.
  - For example, defining the requirements for a system where the scope has already been agreed.

- **In quadrant 2**, the analysis that needs to be done is not clearly understood although there is a standard approach setting out how it should be done; this would be allocated to a more experienced analyst.
  - For example, a new collaborative/social media technology might be introduced into the organisation which has a pre-defined way of being deployed. However, the organisation is not sure which are the high value areas in which it should be deployed and have engaged a business analyst to conduct a feasibility study.

- **In quadrant 3**, the analysis that needs to be done is understood although it is not clear how it is to be done. As with quadrant 2, this would be work for a more experienced analyst.
  - For example, the organisation may want to move from a variety of packaged systems solutions to a single ERP system, however, the way to achieve this may not be clear if the organisation has never attempted this before.

- **In quadrant 4**, neither the analysis to be done nor how it is to be done are understood. This type of work is for the highly experienced and skilled business analyst and may require the analyst to adopt a consultancy role.
  - In this example, the brief can be as vague as 'we need to reduce costs', 'we need to improve sales', 'we need to innovate more' etc. As a result, the analyst may need to define how the work is to be performed, manage senior stakeholders through the process and facilitate the organisation to think about what it is trying to achieve.

HOW CAN I DEVELOP MY SKILLS?

- The first step in developing as a business analyst is to understand the skills required of a business analyst in your organization.
- This should include an assessment of both the current and future skills required.
- Essentially, there are four ways in which business analysts can develop their competencies:
  - Training
  - Self study
  - Work place experience
  - Industry engagement

- **Training** : This is particularly useful in developing professional techniques, business knowledge and, to some extent, personal skills. Classroom-based training can be an efficient approach to acquiring skills and knowledge and enables learners to practise their application in a relatively safe environment, with a tutor on hand to offer support, guidance and encouragement. It also allows participants to share knowledge and experience which helps to enrich the learning experience.

- **Self-study** : Self-study is an excellent way for analysts to develop their business and professional knowledge. There is a wide variety of reference books available, including many on topics relevant to business analysis such as process modelling and requirements analysis.
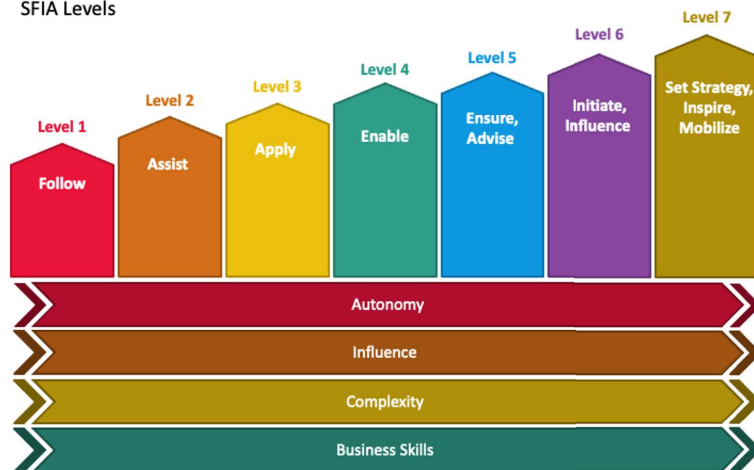
- **Workplace experience:** This provides an opportunity to use and improve techniques and to deepen business knowledge and it is also the best arena for a business analyst to develop their personal skills. The performance of most analysts improves over time as their experience grows but this can be heightened and accelerated if working within an organization that operates a formalized skills development programme using coaching or mentoring.

- **Industry engagement:** The business analysis profession has expanded rapidly in recent years resulting in the development of professional bodies that offer services to support business analysts.

INDUSTRY SKILLS FRAMEWORKS

- SFIA is the major framework setting out the definition of skills, and levels of competence, for the information systems industry.
- The framework includes six categories of skill including strategy and architecture, business change, and solution development and implementation.
- Each category contains definitions of relevant skills with between one and seven competency levels for each skill; these definitions can be used to build descriptions of the skills required by a job role such as business analysis, at the required number of levels.
- The levels are numbered 1 to 7:
- level 1 is Follow, 2 is Assist, 3 is Apply, 4 is Enable, 5 is Ensure, Advise, 6 is Initiate, Influence, 7 is Set Strategy

SKILLS FRAMEWORK FOR THE INFORMATION AGE (SFIA)

SFIA Levels

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7
Follow	Assist	Apply	Enable	Ensure, Advise	Initiate, Influence	Set Strategy, Inspire, Mobilize

Autonomy

Influence

Complexity

Business Skills

Skills Framework for the Information **Age (SFIA)**

- SFIA is owned and maintained by The SFIA Foundation, a not-for-profit organisation whose members are:
  - BCS, The Chartered Institute for IT (BCS);
  - e-skills UK – the Sector Skills Council for Business and Information Technology;
  - Institution of Engineering and Technology (IET); y Institute for the Management of Information Systems (IMIS);
  - the IT Service Management Forum (itSMF).

- SFIA is used worldwide in all sectors of industry and government as the **preferred framework for defining the skills required of IT professionals.**
- The license to use the framework is free of charge, though the Foundation requires a royalty from those using it to support a commercial offering such as consultancy services.
- The SFIA Foundation accredits consultants and partners, and provides training in the use of the framework.

The Business Analysis skill

- The Business Analysis skill in SFIA is part of the 'Business Change' skill category of the SFIA framework. The SFIA description of the Business Analysis skill is:

- The methodical investigation, analysis, review and documentation of all or part of a business in terms of business functions and processes, the information used and the data on which the information is based. The definition of requirements for improving any aspect of the processes and systems and the quantification of potential business benefits. The creation of viable specifications and acceptance criteria in preparation for the construction of information and communication systems.

- Business analysis skill levels are defined at levels 3, 4, 5 and 6. SFIA provides a more detailed definition of the skill requirements for each competency level of a given skill. For example, Business Analysis level 5 is described as follows:

- takes responsibility for investigative work to determine business requirements and specify effective business processes, through improvements in information systems, information management, practices, procedures and organization change;

- applies and monitors the use of required modelling and analysis tools, methods and standards, giving special consideration to business perspectives;

- conducts investigations at a high level for strategy studies, business requirements specifications and feasibility studies;

- prepares business cases which define potential benefits, options for achieving these benefits through development of new or changed processes, and associated business risks;

- identifies stakeholders and their business needs.

- Other skills in the SFIA framework that are likely to be used to describe the skill requirements for business analysts include:
  - business process improvement;
  - stakeholder relationship management;
  - requirements definition and management.

INDUSTRY QUALIFICATIONS

- There are two examination bodies offering professional qualifications in Business Analysis in the UK. These are BCS and IIBA.

- BCS, The Chartered Institute for IT

- BCS Foundation in Business Analysis: covers the broad range of BA principles and techniques

- BCS International Diploma in Business Analysis

- IIBA CBAP/CCBA The International Institute of Business Analysis (IIBA®)

Business Analysis Practice

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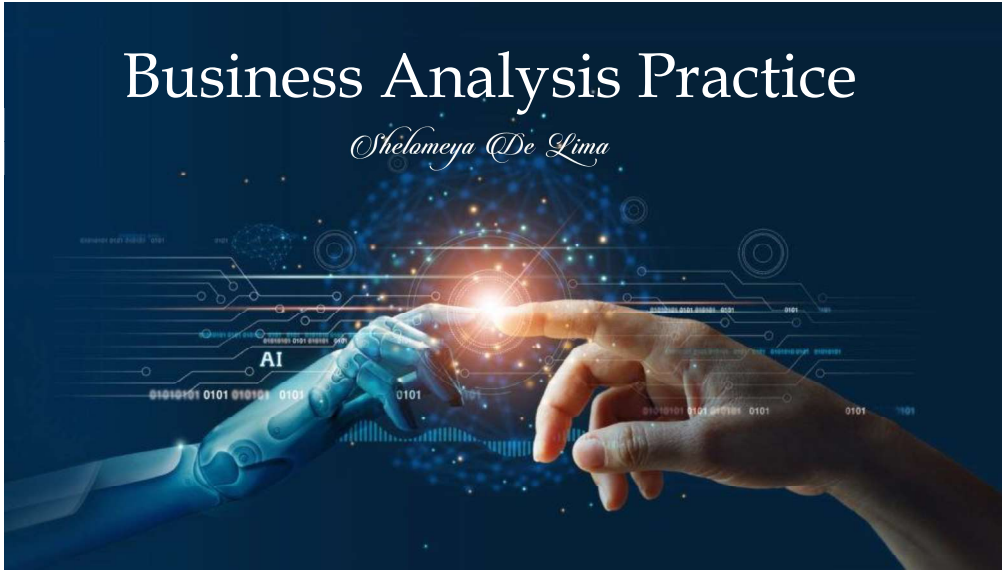
The context for strategy

There are some big changes that organizations face and that strategy development tries to moderate

- There are the changes to the ways that we are employed.
- Society has changed.
- Organizations are responding to these changes by doing everything they can to increase their flexibility and responsiveness.
- The world is full of contradictions.
  - Global versus local.
  - Centralized versus decentralized organization structures
  - Hard and soft management.

What is strategy

- Expect to deal with,
- The goal or mission of the business. In strategy terms this is often referred to as the direction.
- The time frame. Strategy is about the long term. The problem here is that it differs widely across industries, with petrochemicals and pharmaceuticals at the really long end and domestic financial services products at the short end.
- The organization of resources such as finance, skills, assets and technical competence so that the organization can compete.
- The environment within which the organization will operate and its markets

Definition

- Strategy is the direction and scope of an organization over the long term, which achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations.
  - Johnson, Scholes and Whittington (2008)
- helpful definition of the issues to be considered during strategy analysis. These are:
- the long-term direction of an organization;
- the scope of an organization's activities;
- advantage for the organization over competition;
- strategic fit with the business environment;
- the organization's resources and competences;
- the values and expectations of powerful actors.

Typical levels of strategy

- Corporate Strategy that is concerned with the overall purpose and scope of the business. Strategies at this level are influenced by investors, governments and global competition.
- Business Unit Strategy. Below the corporate level are the strategic business units (SBUs). These are organizational units for which there are distinct external markets that are different from those of other SBUs. SBU strategies address choice of products, pricing, customer satisfaction, and competitive advantage.
- Operational Strategy focuses on the delivery of the corporate and SBU strategies through the effective organization and development of resources, processes and people.

Strategy development

Fundamental questions:
  - How do I start to develop a strategy?
  - Where does strategy development come from?
  - How do I know what kinds of strategy to develop?
- Strategy may be formulated in different ways
  - Strategy associated with an individual, often the founder of a business
  - strategy may develop from the experiences and views of internal managers.
  - generation of innovative ideas from within the organization so that the strategy emerges from the people who do the work.
  - y by adopting a formal, carefully planned, design process

We can view an organization as a political system that manipulates the formation of strategy through the exercise of power.

- This power comes from five main sources
- Dependency – departments are dependent on those departments that have control over the organization's resources. The power of the human resources (HR) department increases if all new staff requisitions have to be authorised by HR.
- Financial resources – where are the funds to invest in the development of new ideas, products or services? Who has these funds? What financial frameworks constrain or give freedom to different groups?
- Position – where do the actors live in the organization structure and how does their work affect the organization's performance?
- Uniqueness – no other part of the organization can do what the powerful group does.
- Uncertainty – power resides with people and groups can cope with the unpredictable effects of the environment and protect others from its impact.

Once a strategy has been developed, it is important to provide a written statement of the strategy.

- it provides a focus for the organization and enables all parts of it to understand the reasons behind top-level decisions and how each part can contribute to its achievement;
- it provides a framework for a practical allocation of investment and other resources;
- it provides a guide to innovation, where new products, services or systems are needed;
- it enables appropriate performance measures to be put in place that measure the key indicators of our success in achieving the strategy;
- it tells the outside world, especially our outside stakeholders and market analysts, about us and develops the expectations that they hold.

External environment analysis

Internal Component — COMPONENTS OF ENVIRONMENT ANALYSIS — External components

PESTEL Analysis

POLITICAL, ECONOMIC, SOCIAL, TECHNOLOGY, ENVIRONMENT, LEGAL — PESTEL

There is a framework to help organizations assess their broad environment. It is the PESTLE analysis – sometimes called a PESTEL or just PEST analysis

Political influences	• The stability of the government or political situation
	• Government policies – such as on social welfare
	• Trade regulations and tariffs
Economic influences	• Interest rates
	• Money supply
	• Inflation
	• Unemployment
	• Disposable income
	• Availability and cost of energy
	• The internationalisation of business

Socio-cultural influences	• Demographics – such as an ageing population in Europe
	• Social mobility – will people move to find work or stay unemployed where they are and rely on state support? This may also be seen as a political issue with an enlarged Europe enabling a freer movement of labour across the community
	• Lifestyle changes – such as changes in the retirement age and general changes in people's views about work/life balance
Technological influences	• Technological developments
	• Government spending on research, the quality of academic research, the 'brain drain'
	• The focus on technology; demand for invention and innovation
	• The pace of technological change, the creation of technology enabled industries

Legal influences	• Legislation about trade practices and competition
	• Employment law – employment protection, discrimination etc
	• Health and safety legislation
	• Company law
	• Financial regulation
Environmental influences	• Global warming and climate change
	• Animal welfare
	• Waste, such as unnecessary packaging
	• Environmental protection legislation such as new laws on recycling and waste disposal industries

Michael Porter's Five Forces model

An analysis tool that helps to evaluate an industry's profitability and hence its attractiveness is Michael Porter's Five Forces model (Porter 1980).

New entrants

- New entrants may want to move into the market if it looks attractive and if the barriers to entry are low. Globalisation and deregulation both give new entrants this opportunity but there are barriers to entry that organizations build. These include:
- Economies of scale. This may be difficult to achieve for a new entrant.
- Substantial investment required. A new entrant may have difficulty in obtaining sufficient funds for investment.
- Product differentiation. If existing products and services are seen to have strong identities, which are supported by high expenditure or branding, then new entrants may be deterred from entry.
- Access to distribution channels. Existing distribution channels may be booked by existing suppliers requiring new entrants to find new and different distribution channels.
- The existence of patented processes.
- The need for regulatory approval, for example, in the financial and defence sectors.

Supplier power

Supplier power limits the opportunity for cost reductions when:

- there is a concentration of suppliers and when supplying businesses are bigger than the many customers they supply;
- the costs of switching from one supplier to another are high. This may be because of clauses in supply contracts, interacting IT systems between the organization and its suppliers, supply logistics or the inability of other suppliers to deliver;
- the supplier brand is powerful, for example, the power of 'Intel Inside';
- customers are fragmented so do not have a collective influence.

Customer power

Customer power – or the bargaining power of buyers as Porter called it – is high when: y

- there are many small organizations on the supply side. For example, in the supply of food products to supermarkets;
- alternative sources of supply are available and easy to find;
- the cost of the product or service is high, encouraging the buyer to search out alternatives;
- switching costs are low.

Threat from substitute

The threat from substitute products is high when:

- product substitution from new technologies is more convenient;
- the need for the product may be replaced by meeting a different need;
- it is possible to decide to 'do without it'!

Competitive rivalry

All of these forces impact on the competitive battleground in some way. There may also be high competitive rivalry when:

• there are many competing firms;

• buyers can easily switch from one firm to another;

• the market is growing only slowly or not growing at all;

• the industry has high fixed costs and responding to price pressure is difficult;

• products are not well differentiated or are commoditised so there is little brand loyalty;

• the costs of leaving the industry are high

Internal environment analysis

MOST analysis

• **MOST analysis** examines the current mission, objectives, strategy and tactics and considers whether or not these are clearly defined and supported within the organization.
  • Mission: A statement declaring what business the organization is in and what it is intending to achieve.
  • Objectives: The specific goals against which the organization's achievements can be measured.
  • Strategy: The medium to long-term approach that is going to be taken by the organization in order to achieve the objectives and mission.
  • Tactics: The detailed means by which the strategy will be executed.

Resource Audit

• The Resource Audit can help us to identify core competences or may highlight where there is a lack of competence that could undermine any competitive moves.

• There are five key areas to examine, the first three being sets of tangible resource:

1. **physical resources** that the organization owns or has access to and includes features such as buildings, plant and equipment, land and so on. These may be modern and cost-effective or old-fashioned, unreliable and incur high maintenance costs.

2. **financial resources** that determine the organization's financial stability, capacity to invest in new resources and ability to weather business fluctuations and changes.

3. **human resources** and their expertise, adaptability, commitment, etc.

- intangible resources such as the

1. **know-how** of the organization which may include actual patents or trademarks, but this may also be derived from the use made of resources such as information and technology;

2. **reputation** of the organization, for example the brand recognition and the belief that is held about the quality of the brand, and the goodwill – or antipathy – that this produces.

Portfolio analysis – Boston Box

- A company's strategic business units (SBUs) – parts of an organization for which there is a distinct and separate external market – are identified and the relationship between the SBU's current or future revenue potential is modelled against the current share of the market.

High	Wild Cat (or Problem Child)	Star
Market growth		
	Dog	Cash Cow
Low	Low Market share High	
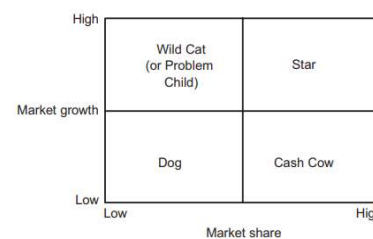
The **Wild Cats (or Problem Children)** are unprofitable but are investments for the future; the **Stars** strengthen their position in a growth industry until they become the big profit earners. The **Cash Cows** are the mature products or services, in markets with little, if any, growth. The Stars and Cash Cows provide the funding for the other segments of the matrix. The **Dogs** have low market share in markets with low growth and are often the areas that are removed or allowed to wither away.

SWOT analysis

- The SWOT (strengths, weaknesses, opportunities, threats) analysis is often used to pull together the results of an analysis of the external and internal environments.

	Positive	Negative
Internal	Strengths	Weaknesses
External	Opportunities	Threats

- **Strengths** Strong product branding – market research shows a high awareness of our brands compared with the competition. We secure 'best space' in all branches of the top five retailers.
- **Weakness** We have poor cash flow. Against industry benchmarks we are in the bottom quartile. We exceed our overdraft limits on 19 days every quarter.
- **Opportunity** Demographic change in Europe and the US will provide a greater market for our products.
- **Threat** Low market growth will see increased concentration of business through acquisition. The poorest performing businesses will fail.

Executing strategy

- Executing new strategies implies risk because it involves change. There are three particular aspects of implementing strategy – the context for the strategy, the role of the leader and two tools that we can use – the Balanced Business Scorecard and the McKinsey 7-S Model.
- There are five contextual issues to be considered.
  - Time – how quickly does the new strategy need to be implemented? What pace of change is needed?
  - Scope – how big is the change? Is the new strategic direction transformational or incremental?
  - Capability – does the organization have the required resources for the change? is the organization adaptable and able to change? Are the experiences of change positive or negative?
  - Readiness – is the whole organization, or the part of it to be affected, ready to make the change?
  - Strategic leadership – is there a strategic leader for the change?

Strategic leader will have the key role

- Challenges the status quo all the time and sets new and demanding targets, never being prepared to tolerate unsatisfactory behaviour or performance.
- Establishes and communicates a clear vision of the direction to be taken, why it has to be taken and how the journey will be made. This means establishing the new mission, setting out objectives, identifying the strategies for achieving them and defining the specific tactics to deliver them. The leader also clearly communicates the values that underpin the business.
- 'Models the way' or 'Walks the walk'. He or she demonstrates through their behaviour how everyone else should behave and act in order to deliver the strategy.
- Empowers people to deliver their part of the strategic change within the vision, values and mission that have been set out. The leader cannot be everywhere, so others need to play their part.
- Celebrates success with those who achieve it.

McKinsey's 7-S Model

- The 7-S model supposes that all organizations are made up of seven components. Three are often described as 'hard' components – strategy, structure and systems, and four as 'soft' – shared values, style, staff and skills.
- These are the seven levers that can be used in the implementation of strategic change and they are all interlinked.
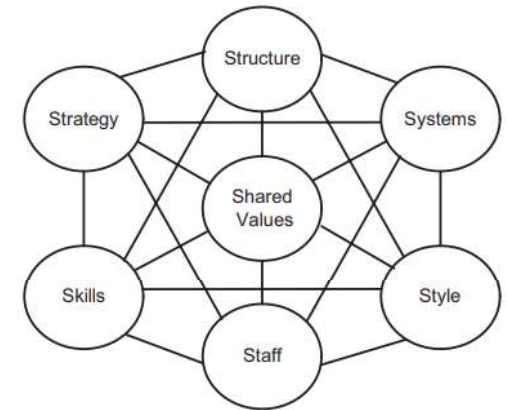
- All seven need attention if the strategy is to be executed successfully, because if there is a change with one, others will be affected.
- The structure – the basis for building the organization will change to reflect new needs for specialization and coordination resulting from the new strategic direction.
- Formal and informal systems that supported the old system must change.
- The style or culture of the organization will be affected by a new strategic direction. Values, beliefs and norms, which developed over time, may be revised or even swept away.
- The way staff are recruited, developed and rewarded may change. New strategies may mean relocating people or making them redundant.
- Skills – competences acquired in the past may be of less use now. The new strategy may call for new skills.
- Shared values are the guiding concepts of the organization, the fundamental ideas that are the basis of the organization. Moving from an 'engineering first' company to a 'customer service first' company would change the shared values.

The Balanced Business Scorecard

- The Balanced Business Scorecard (BBS) can be thought of as the strategic balance sheet for an organization as it captures the means of assessing the financial and non financial components of a strategy
- The emphasis of the scorecard is to measure aspects of performance in a balanced way. Not only financial but all four aspects
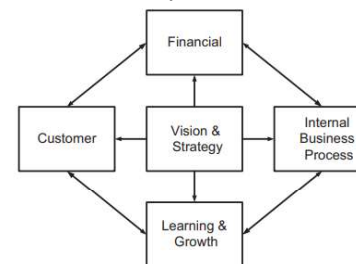
- Financial – what level of income has been generated? How profitable is the business?
- Customer – how will we assess our customer satisfaction?
- Learning and Growth – how will we measure our ability to change and improve so that we constantly keep ahead of the competition?
- Internal Business Processes – how effective are the business processes that we must excel at to deliver customer value?

Thank You

# Business Analysis Practice

Shelomeya De Lima

The Business Analysis Process

- An approach to problem solving
- The business analysis process model
- Investigate situation
- Consider perspectives
- Analyse needs
- Evaluate options
- Define requirements
- Deliver changes

An approach to problem solving

- Creative problem solving is vital in the business world as, increasingly, organizations need to develop innovative ideas in order to respond to changes in the business environment including actions from competitors.
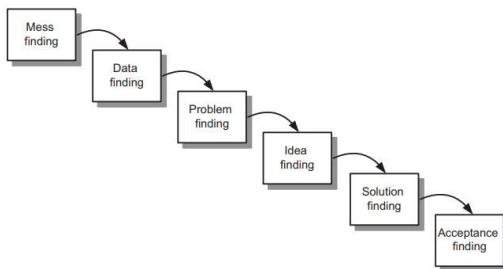
- Mess finding: concerned with finding out about the complexity of the problem situation. - starting point in this model - need to gain some understanding about the complete situation before diving into options and solutions.

- Data finding: concerned with analysing the opinions, concerns, knowledge and ideas uncovered in the previous stage, in order to identify where this information can be quantified and supporting data obtained. It is often useful to examine the rich picture, mind map or fishbone diagram to clarify our thinking about the situation.

- Problem finding: uses the work of the previous two stages to help uncover the heart of the problem.

- Idea finding: try to generate a wide range of ideas - Analysts often use brainstorming approaches to uncover ideas but this can be difficult as it requires a group to generate ideas 'cold'. - Two examples of techniques
  - 1. 'Assumption Reversal' – where assumptions about a situation are listed and reversed – and
  - 2. 'Random Words or Pictures' – where unrelated words or pictures are used to generate different ideas about a situation
- Solution finding: Business analysts are often expected to deliver solutions quickly, yet here we can see that it is important to resist the pressure to develop solutions at too early a stage.
- Acceptance finding: concerned with gaining business acceptance of the solution. This aspect is critical to the success of any change project.

The business analysis process model

- A particular project business analysts may need to apply several techniques and analyze a number of different stakeholder views.
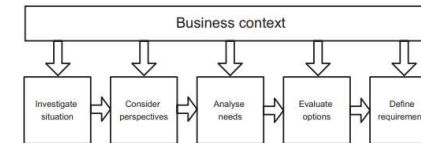
- Model shows the importance of understanding the business context. Within this context, we need to be aware of the Mission, Objective, Strategy and Tactics (MOST),
- The process model sets out the key stages for a business analysis project with each stage representing the areas that need to be considered.
- One of the most important aspects of a business analysis project is to decide what the focus is and which areas need to be investigated.

Investigate situation

- concerned with uncovering issues and problems. The terms of reference for the project, or possibly a more detailed project initiation document, are needed in order to set out the context within which the business analysis work will take place. The OSCAR mnemonic can be very useful when clarifying the terms of reference if none exist.
  - Objectives The business and project objectives to be achieved.
  - Scope The area of the business to be investigated and the required deliverables.
  - Constraints The time, budgetary and policy constraints within which the work must be conducted.
  - Authority The person who is responsible for receiving the deliverables and agreeing that the work has been completed.
  - Resources The resources, both human and physical, available to the project.

- Investigation techniques - interviewing, observation and workshops, fact-finding techniques, document analysis, scenario analysis or prototyping.
- Documenting business situations – 'rich picture, Mind map, Fishbone diagrams.

Procedure
- Study background material – project initiation document, terms of reference
- Carry out initial investigation with key stakeholders
- Document the results of the investigation – using meeting reports plus diagrams such as a 'rich picture', mind-map or fishbone diagrams

Inputs
- Terms of reference or project initiation document
- MOST, statement of business values

Outputs
- View of the existing business situation, including meeting reports and diagrams such as rich pictures, mind maps and fishbone diagrams
- List of issues/problems

Techniques
- Investigation techniques such as interviewing, observation and workshops
- Quantitative investigation techniques such as surveys, sampling and document analysis
- 'Rich pictures' (from Soft Systems Methodology, developed by Checkland (1999))
- Mind maps (Buzan and Buzan, 2009)
- Spaghetti maps
- Fishbone diagrams (Ishikawa – these are also known as Ishikawa diagrams after their inventor Kaoru Ishikawa (1985))
- Business process models

Consider perspectives

- concerned with analyzing stakeholders and their perspectives on the business situation.
  - Stakeholder identification and analysis - people or groups with varying levels of interest and power – Direct/Indirect; Strong views/opinions.
  - Stakeholder perspectives - often have different views on what is important about a business system; important that we are aware of the potential for such conflicts and are alert to situations where these might arise.
  - Business activity modelling - stakeholder perspectives can be analysed further by considering the business activities; This approach, developed from Checkland's work, and extended by Wilson (1990)

- allows analysts to build a conceptual model of a business system as envisaged by a particular stakeholder
- events organisation should focus on quality then there would be an emphasis on activities such as:
  - the recruitment and development of highly skilled staff;
  - the introduction of customer-focused processes;
  - monitoring of customer satisfaction levels.
- An alternative view could be that the focus should be on 'no frills' events and in this system the emphasis would be on the following activities:
  - keeping costs low;
  - monitoring the number of attendees at events.

Objectives

The objective of this stage is to take stock of the range of stakeholder perspectives about the business system under investigation. These perspectives may then be analysed to uncover stakeholder values and beliefs, and developed into business activity models. However, where there is a narrow remit for the business analysis work, for example if we are concerned primarily with improving a particular process, while it will be important to identify and manage the stakeholders, consideration of the entire business system may be beyond the scope of the business analysis work.

Procedure

- Identify key stakeholders whose perspectives are important to the business analysis project
- Investigate the values, beliefs and priorities of the key stakeholders
- Develop and analyse the stakeholder perspectives
- Build conceptual models of activities to fulfil the stakeholder perspectives
- Explore and resolve conflicts between stakeholder perspectives
- Synthesise conceptual models into one view of the desired business system

Inputs

- Terms of reference or project initiation document
- Business values and MOST
- Identified stakeholders (from the documentation of the existing business system)

Outputs

- Power/Interest grid
- Stakeholder perspectives
- Business activity models based upon stakeholder perspectives
- Consensus business activity model

Techniques

- Investigation and negotiation techniques
- Stakeholder identification and analysis
- CATWOE
- Business Activity Modelling

Analyse needs

- focus of this stage is to identify where improvements can be made to the business system. The approach used is known as 'gap analysis'.
- Analysing activities - This analysis allows us to identify where there are issues that need to be addressed in any solution that we recommend.
- Analysing business processes - Whereas the activities modelled on the business activity model show a conceptual view of what activities should be within the desired business system, the business process models allow us to consider how the work is carried out.
- The approach we take to this work is to model the current business process and then to consider possible changes to the process before finalising the required process. Hence, we develop a current or 'as is' model that provides a basis for developing the required or 'to be' model.

Objectives

To explore the differences between the current and desired situations. To identify the opportunities for business change by analysing these differences or 'gaps'.

Procedure

- Examine the activities on the business activity model
- Consider how well each activity is carried out in the current business system and how well it is supported by the organisation's information systems
- Identify the key business events to be handled within the business system; develop 'as is' business process models for the key business events
- Develop 'to be' business process models for the key business events
- Analyse the gaps between the existing and the desired business systems. Use these as a basis for identifying potential business system improvements
- Ensure any potential improvements align with the business architecture

Inputs

- Agreed business activity model
- View of the existing business system
- Business values and MOST

Outputs

- Analysis of activities, including identified areas of weakness
- 'As is' and 'to be' business process models
- List of potential improvements to the business system

Techniques

- Gap analysis
- Activity analysis
- Business process modelling

Evaluate options

- concerned with examining the potential improvements identified so far, developing some business options and evaluating them for acceptability and feasibility.
- Identify potential options - identify possible options by considering where improvements might be made and which ones would result in the greatest potential benefits.
- Assess feasibility - All of the options that are to be considered in detail need to be evaluated for business, technical and financial feasibility.

Objectives

The objective of this stage is to collect together the range of potential changes into packages of improvement actions. These packages form the basis for developing a set of options that are then developed and documented in further detail. They are then presented to business managers for consideration.

Procedure

- Identify range of business options
- Explore acceptability of options and reduce to a shortlist
- Develop and document each option in detail. In particular, consider the business, technical and financial feasibility of each option
- Develop business case, including presenting options and recommendations to business managers

Inputs

- Project initiation document/terms of reference
- Business values and MOST
- List of potential improvements to the business system

Outputs

- Shortlist of business options
- Business case including options, feasibility assessment and recommendations

Techniques

- Business options identification
- Cost–benefit analysis, including quantification of costs and benefits; investment appraisal techniques
- Impact analysis
- Risk analysis

Define requirements

- concerned with gathering and documenting the detailed requirements for changes to the business system.
- These changes may be to any (or all) of the four aspects of a business system: the business processes, the supporting IT systems, the people carrying out the work and the organisation structure.
- Requirements engineering - developed as a response to the lack of rigour often found in requirements documentation. Requirements engineering proposes a framework to help analysts improve their requirements work by highlighting the need for proactive analysis, organisation, documentation and management of stated requirements.
- Modelling systems - These techniques originate mainly from systems analysis and design approaches such as the Unified Modeling Language (UML). Each modelling technique provides insight into a particular aspect of the IT system.

The objective of this stage is to produce a well-formed requirements document setting out the business requirements for the new business system. This document must include clear textual descriptions of the requirements and sufficient information to trace each requirement from its origin through to its resolution. Modelling techniques may be used to represent the process and data requirements diagrammatically and hence improve the rigour and clarity of the requirements definition.

Procedure
- Gather the requirements:
  - elicit and analyse the business requirements for the new business system;
  - document and manage the requirements;
  - validate the documented requirements.
- Document the requirements for the new business system, including as appropriate:
  - business process models;
  - catalogue of business requirements;
  - models of the IT processing and data;
  - glossary of terms.

Inputs
- Selected option for revised business system
- Business values and MOST
- Terms of reference/project initiation document

*Outputs*
- 'To be' process models
- Job definitions

- Revised organisational structure
- Validated requirements document including:
  - requirements catalogue;
  - models of business process and system requirements;
  - glossary of terms.

Techniques
- Business process modelling
- Job design
- Investigation techniques
- Requirements elicitation, analysis and validation
- Requirements documentation and management
- IT systems modelling techniques

Deliver changes

- Once the business analysts have investigated and analysed the situation, considered the stakeholders and their perspectives, developed options for improvement and defined the requirements to be fulfilled, it is important to consider how the business changes will be delivered and implemented, and the business benefits realised.
- Extended business analysis process model
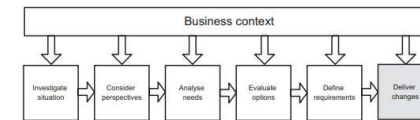
- Delivering the requirements - The requirements will need to be developed into the business change solution. This solution may include process, people, organisational and IT system change. The lifecycle and approach to be adopted to develop and deliver the changes will need to be determined.
- Implementing the business changes - The delivery of the business solution will need to consider aspects such as the emotional impact of change and the realisation of the business benefits.

Procedure
- Decide the lifecycle and approach to be adopted
- Design and develop the business change solution
- Support the planning and implementation, in particular the development of the required learning materials and the delivery of training for the business staff
- Review the predicted benefit
- Identify any actions required to realise the benefits

Inputs
- Business change process and organisation design
- IT software solution
- Business case

Outputs
- Business change plan
- Communication plan
- Training approach and materials
- Revised job roles and descriptions
- Benefits plan
- Benefits review document

Techniques
- Use case descriptions
- Decision tables
- State charts
- Benefits planning

Thank You

Business Analysis Practice

Shelomeya De Lima

Chapter Eight

Modelling Business Processes

- Organizational context
- An alternative view of an organization
- The organizational view of business processes
- Value propositions
- Business process models
- Analyzing the 'as is' process
- Improving business processes
- Process measurement
- Business Process Model and Notation
- Six Sigma

Introduction

- The business processes are the means by which an organization carries out the internal operations and delivers its products and services to its customers.

- There are many reasons for creating business process models:
  - To understand how the existing process works.
  - To explain to those working on the process what they do and how their task relates to the others working on the process.
  - To help ensure consistency of approach, so that everyone follows the same process and customers' experiences are not wholly dependent on who is dealing with them, in other words the 'luck of the draw'.
  - To identify the problems and weaknesses of an existing business process with a view to developing and implementing an improved one.

ORGANISATIONAL CONTEXT

- A typical organization has many processes, many of which could be improved in some way or other.
- The costs and benefits of such improvement projects will vary massively and, before embarking on a business process improvement project, it is useful to examine the organizational context in which the business processes take place.

Functional view of an organization
- Useful for the internal management and staff to see how the organization is structured and where they fit within it.

- The static nature of the functional view contrasts sharply with the process view.
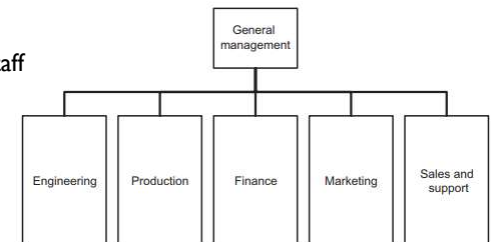
AN ALTERNATIVE VIEW OF AN ORGANISATION

- Paul Harmon (2007) developed the organization model that provides an alternative view of an organization, providing a representation of both the internal processes and the external world with which the organization operates.
- The model is often developed in two stages:
  - firstly, the external factors that influence the organization are considered
 - and then the internal business process is analyzed.
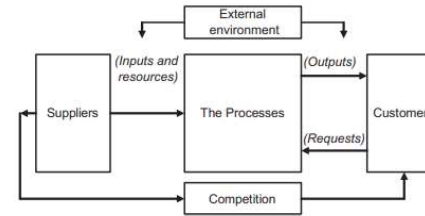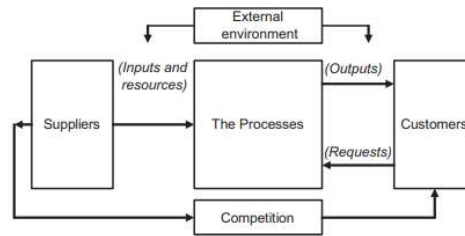
- Analyzing the external context on the organization model encourages the business analyst to think carefully about the context for the organization.

- The suppliers of the resources required by the business processes. This covers not only the supply of physical materials but also external suppliers of finance, people and ideas.
- The beneficiaries from the organization. While we always include the customers who purchase the products and services within this group, it is also important to take a broader view and include other types of customer.
- The competitors operating within the same industry or business domain. Traditionally, this is interpreted to mean other organizations with whom we are competing in specific markets.
- The generic factors that may affect the organization such as changing regulation, economics or green issues. These are the type of factors covered by a PESTLE (political, economic, socio-cultural, technological, legal and environmental) analysis.

THE ORGANISATIONAL VIEW OF BUSINESS PROCESSES

- An organizational business process map is formed from a high-level set of activities carried out in order to deliver benefit or value to the customers.
- the process receives an input and produces an output.
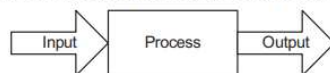
Distinguish process maps and business process models.

- Process maps show sets of related processes, and their interactions, in a single diagram. Each process set is shown as a box and the arrows between them show their interdependencies. Business process models show a more detailed view of each of the processes within a higher level set.

Out line process map
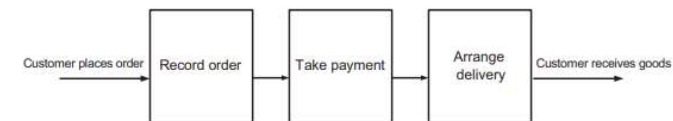
- It is useful to begin by considering:
  - the core operation at the heart of the entire process, for example, taking bookings or selling goods;
  - the processes that provide input to the core process, for example, scheduling events or making goods;
  - the processes concerned with delivering products or services to the customer, for example, issuing event confirmation or delivering goods;
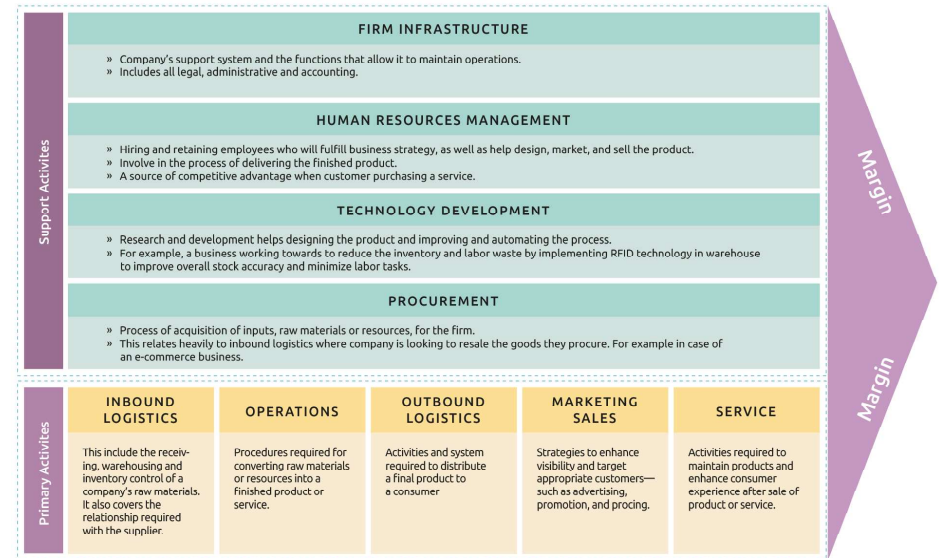 - any sales, marketing or customer service processes

- An alternative approach to building a process map is to look at the products and services and consider what processes are required to deliver them.
- Michael Porter's value chain is a useful technique here because it helps us to structure our thinking and possibly identify areas of process that we may have missed.

Value Chain model

The value chain provides a means of analyzing the activities performed by an organization.

Figure 7.7 Example value chain activities for a manufacturing organisation
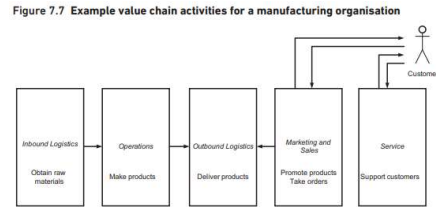
- It identifies key areas of primary and support activity that will be required to deliver value to the organization's customers and potentially differentiate the organization from its competitors.
- Concept of a value chain can be used to develop high-level process maps for the organization

FIRM INFRASTRUCTURE
» Company's support system and the functions that allow it to maintain operations.
» Includes all legal, administrative and accounting.

HUMAN RESOURCES MANAGEMENT
» Hiring and retaining employees who will fulfill business strategy, as well as help design, market, and sell the product.
» Involve in the process of delivering the finished product.
» A source of competitive advantage when customer purchasing a service.

TECHNOLOGY DEVELOPMENT
» Research and development helps designing the product and improving and automating the process.
» For example, a business working towards to reduce the inventory and labor waste by implementing RFID technology in warehouse to improve overall stock accuracy and minimize labor tasks.

PROCUREMENT
» Process of acquisition of inputs, raw materials or resources, for the firm.
» This relates heavily to inbound logistics where company is looking to resale the goods they procure. For example in case of an e-commerce business.

INBOUND LOGISTICS	OPERATIONS	OUTBOUND LOGISTICS	MARKETING SALES	SERVICE
This include the receiving, warehousing and inventory control of a company's raw materials. It also covers the relationship required with the supplier.	Procedures required for converting raw materials or resources into a finished product or service.	Activities and system required to distribute a final product to a consumer	Strategies to enhance visibility and target appropriate customers—such as advertising, promotion, and pricing.	Activities required to maintain products and enhance consumer experience after sale of product or service.

VALUE PROPOSITIONS

- A value proposition is a definition of an organization's product or service that will demonstrate to customers that we understand and can satisfy their needs.
- Moreover, it differentiates organizations from their competitors. Unfortunately, many organizations produce poor value propositions which are bland descriptions of their products rather than being closely aligned with the needs of their customers.
- In order to overcome the problem of inappropriate value propositions, Kaplan and Norton (1992), the architects of the Balanced Scorecard, have identified the main attributes that make up successful value propositions.
- These are the drivers that lead to increased customer satisfaction, acquisition and retention.

- The proposition attributes cover three areas:
  - product/service attributes that define the product itself;
  - customer relationship aspects;
  - image and reputation aspects.

Elements of value proposition
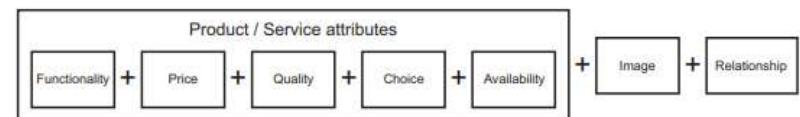
- The product attributes are:
  - Functionality – or what the product does.
  - Price – what we charge for the product.
  - Quality – or how well the product performs.
  - Choice – do we simply provide a standard product or can it be tailored to the specific needs of the customer?
  - Availability or timing – for example how quickly can we respond to customer requests and do we introduce new products at the most appropriate time?
- The image may be that of the product, built up through extensive advertising and supported by the product attributes in order to generate customer loyalty.
- value propositions define what the organization believes it needs to deliver to its customers, the business processes being the delivery mechanisms of the organizations' value propositions

- An organization can differentiate itself in three ways:
  - by being the most efficient;
  - by having the best products;
  - by providing the best customer service.
- Efficiency here means high volumes, low costs (and hence, low prices)
- Helps the analysts to understand the focus and objectives of the business processes.
- An alternative view of the value proposition is to consider the customer's perspective. Customers usually know what they expect and will survey the industry to find the organizations that will meet their needs.

BUSINESS PROCESS MODELS

- A business process is triggered by a business event and includes five key components: the tasks that make up the process, the process flow, the decision points, the actors that carry out the tasks and the outcome of the business process.
- 'Process' refers to an entire set of activities that start with a triggering event and end with some output being delivered.
- 'Task' refers to an individual activity within the overall process; these are usually carried out by an actor at a single point in time.
- 'Step' refers to the activities carried out within an individual task. It is useful to show just the tasks on the process model rather than each individual step as this helps with the readability and clarity of the model. Task descriptions can then be produced where the steps within each task can be defined.

Business events

- There are three types of business event:
  - External – these business events originate from outside the organization or the business system under consideration.
  - Internal – these business events originate within the business system and typically involve business managers making decisions.
  - Time-based – these business events occur at a regular point in time.

Developing the business process model

- Business process models may be developed for many reasons, as we noted in the Introduction. During a process improvement project, it is common for the business analyst to produce an 'as is' model to show how the process works at the moment.
- There are many standards for modelling business processes. Two of the most popular are the UML activity diagram technique and the Business Process Model and Notation (BPMN).

Swim lane diagramming

- Business process models are often called 'swim lane diagrams' because the 'swim lanes' showing all of the tasks performed by a defined 'actor', form a key element of the models.
- Here, we will use the notation and structure from the UML activity diagramming technique to build swim lane diagrams.
- The swim lane diagramming technique includes the following elements:
  - the overall layout;
  - the symbols used;
  - the sequencing of the symbols.
- This enables us to identify the business 'actors' or 'roles'.
- Actors may be individual people, a group of people or an organization, or may be an IT system.
- The tasks carried out by each actor are shown in a separate band or 'swim lane' and arrows are used to show the flow of the work between the different swim lanes.
- Swim lanes usually appear on the diagram in the same sequence as the actors' involvement in the process, although it is an informal convention that the customer swim lane is placed at the top.
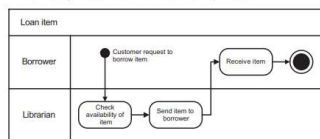

7.9 **Business process model for 'Loan item' process**

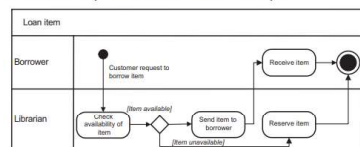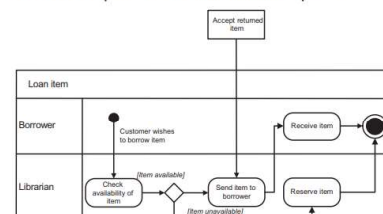ure 7.10 **Business process 'Loan item' with alternative paths**

ure 7.11 **Business process model with link from another process**

A major advantage of a business process model is that each actor can easily see their contribution to the overall process. As discussed earlier, we are trying to provide a summarized view of the business process at this stage of the analysis. As a result, the tasks reveal minimum detail. A rule of thumb is to show a separate task for a piece of work done by an actor at a particular point in time. Each task should be shown as a single action, receiving an input from the preceding actor and handing over to the succeeding actor; this flow of work from one actor to another is known as a 'hand-off'. It is important to analyze where this occurs as hand-offs often cause problems.

Analyzing tasks

- The swim lane diagram shows the work carried out within the business process including actors and the flow of the work. This may be sufficient to identify problems with the 'as is' process but often we have to go into more detail in order to really understand how the process works and what is going wrong. A more detailed approach is to analyze each task (or box) shown on the business process model. We might consider the following aspects for each task:
  - The trigger or business event that initiates the task.
  - Inputs to the task. This may include the trigger but there is also likely to be additional information required to carry out the task
  - Outputs from the task.
  - Costs relevant to this particular task.
  - Measures and standards applicable to the task.
  - Detailed breakdown of steps within the task.
  - Business rules to be followed in performing the task.

Hierarchy of process models

- The set of process models – from organization-level to swim lane diagram to task analysis – provides an organized, clear definition of the business processes and procedures.
- This multileveled approach to business process modelling will necessitate an iterative approach to the analysis. As the lower level task analyses reveal more detail, it is inevitable that the higher level business process models will have to be updated.

Figure 7.12 Process model hierarchy
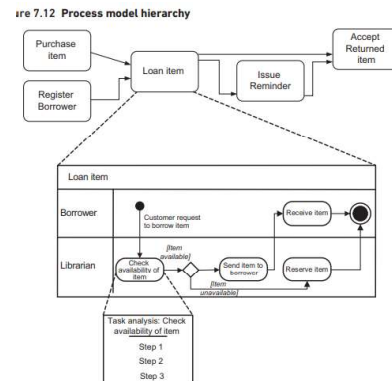
Beginning and ending the process

- The start of a process can be represented in various ways. It is usual for the swim lane of the process initiator, such as the customer, to be at the top of the model. The variations between the different approaches determine how much detail is shown in that particular swim lane.
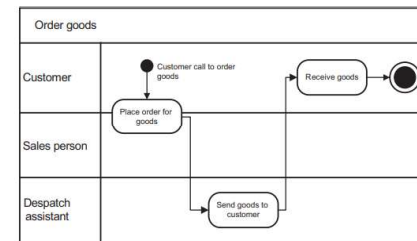

In a different situation, the business may work more closely with the initiator. Imagine, for example, a customer ringing up a call centre to place an order. The customer and the call centre sales person are working together to record the order details. This could be represented as a single task involving both actors and thus shown on the boundary between the customer and sales person swim lanes.

- The end of a process is represented by a bullseye symbol.
- Usually processes have multiple pathways and hence multiple ways in which they can end.

ANALYSING THE 'AS IS' PROCESS

- processes are constantly changing to reflect the different environment in which they operate. Unfortunately, many of these changes occur in an ad hoc and uncontrolled way.
- Identifying problems: In order to identify problems with an, as is, process, we need to find out how well it supports the business. Are the customer-facing processes good enough to satisfy the customers and ensure that they come back and spend more money? The ordering process must be fast, accurate and efficient so that it does not cost too much.

- Analyzing the hand-offs: One of the frequent problems found with business processes involve 'hand-offs', where one actor passes the work to another actor. Clear representation of hand-offs is a major advantage of this diagramming technique and is particularly beneficial when we are trying to improve processes. Hand-offs account for many of the problems experienced by traditional processes as they can cause delays, communication errors and bottlenecks to occur.
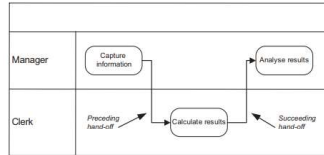
- Queues form at hand-offs because the two actors have not synchronized their work. In some situations, attempts to optimize work in one task can actually make the performance of the whole process worse.
- A further cause of delays at hand-offs is where there is inadequate resource capacity to handle the throughput and queues develop. Queues can behave in an odd way, especially when the transactions arrive in a random fashion. Queuing theory tells us that attempts to increase the utilization of the workers under these circumstances will cause the queues to build up dramatically

- **Analyzing the processing:** When analyzing business processes it is important to look for the following possibilities:
  - Duplication of work. Some tasks may be carried out despite the fact that they duplicate other actors' tasks or record the same information.
  - Redundancy. Work and/or data that was necessary when the process was first designed may no longer be required.
  - Lack of standardization. Previously, organizations were less aware of the need for effective processes and hence there was less emphasis on carrying out processes in a standard way. Remote locations such as branch offices and depots were allowed flexibility in the way that they interpreted and implemented their processes. This may have worked in a decentralized business but now that there is greater control and centralization, all the different parts of the business are expected to operate in an integrated fashion.
  - Incompleteness. New requirements may have been identified of the process since its original design. These may have been ignored because they were too difficult or costly to incorporate in the existing process or they may have been handled by a work-around.
  - Inconsistent measurement or control. The business process approach has increased the emphasis on measuring the standard of work and the service provided to customers. Where a process has developed over time the measures may not be relevant or may be inconsistent with other measures.

- Other factors causing inadequate performance of a process:
  - The staff working on the process may not have the right skills, training and motivation to produce the desired results.
  - The resources made available to run the process may be insufficient to handle the volume of transactions received. This could include both staff and equipment resources.
  - The process may not be managed appropriately. This is a particular problem when a process crosses many organizational boundaries and there is no single owner to manage the whole process.

IMPROVING BUSINESS PROCESSES

- Improving the business process is about removing the problems that have been identified in the 'as is' process.
- It might reveal that the real cause of the delay is excessive rework. A more appropriate solution to this situation would be to implement tighter controls, reduce the rework and eliminate the delays without incurring the cost of increased resources.
- Business rules: 'It's the way we do business here' – but sometimes it is useful to consider whether there is an alternative approach available.
- Business rules are categorized in two ways:
  - Constraints – these are the business rules that have to be applied and restrict how a process or task is performed. The constraints may be enforced upon the organisation, for example they may be legal or regulatory constraints. Alternatively, they may result from internal policies or strategies.
  - Operational guidance – these are the business rules that determine how procedures are conducted within the organisation. For example, there may be rules governing cancellation fees for hotel bookings or postage charges for delivering orders

Some commonly used approaches to improving processes

- Simplify the process
- Extend the processing
- Remove bottlenecks
- Change the sequence of tasks
- Redefine process boundary
- Automate the processing
- Redesign the process

PROCESS MEASUREMENT

- There are two perspectives on performance measurement: measurement for internal management purposes and measurement by our external customers.
- **Internal measures:** Internal measures are often derived from organizational objectives, critical success factors and key performance indicators. These measures are usually defined at an organizational level, cascaded down to departmental level and then further to the operational level.
- **External measures:** The other aspect to performance measurement is concerned with what the customer expects to have delivered. There are three major areas to think about:
    - the time it takes to complete a process or task;
    - the financial measures such as costs or prices;
    - the quality measures that are concerned with accuracy and effectiveness.

- **Process and task measures:** the process may be made up of several individual tasks, each of which will need to be allocated performance measures. The task-level performance measures should be aggregated such that the product or service is delivered within the overall performance measures for the process.
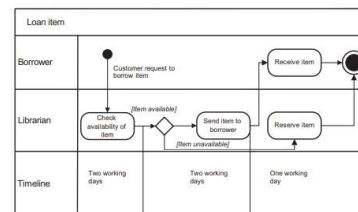
Estimating the timeline for a process will depend on a range of factors including:
- the length of time taken by each task within the process;
- the resources available to support the tasks;
- the number of transactions to be processed and how this varies over time;
- the variety and mix of different transaction types;
- the amount of rework caused by errors;
- the delays and queues at each of the hand-offs
- the quality and productivity of the staff;
- other work that could interrupt the process.

- However, it is important to consider how much the resource will cost and whether or not the reduced time/higher performance will justify that extra expenditure.
- **Performance issues:** Measures and targets need to be chosen with care especially when managers are given incentives to achieve those targets. Targets will change the way that people behave – that is what they are designed to do. It is possible that the behaviour could be inappropriate if we have not thought through the implications of the targets.

BUSINESS PROCESS MODEL AND NOTATION

- provides a standardised way of drawing business process models that is comprehensive and unambiguous. It is based on work that first appeared in 2004 as the Business Process Modelling Language.
- Lot of interest in BPMN. two main reasons for this.
  - BPMN allows users to represent process models in an industry-standard way so that they are portable across a range of modelling tools.
  - Users of BPMN can specify very precise process logic that can be understood and executed by workflow or process engines that control many business processes. The notation used in BPMN is extensive and very powerful.
- Process modelling using BPMN is useful in two different, but related, aspects. The first concerns business analysts when working with the business to understand the problems with the current processes and consider how they may be improved.
- The basics of BPMN look similar to UML activity diagrams with tasks shown in swimlanes, and connected by process flows that also link with initiating events and outcomes. There is a great deal of additional notation that could be used by the business analyst, including pools, gateways and messages.

SIX SIGMA

- An alternative approach to process improvement is embodied in the Six Sigma approach developed by Motorola in the 1970s and based on ideas from statistical process control.
- First used in manufacturing industries in the reduction of product defects, it is now used in a range of organisations including those in the pharmaceutical industry, local authorities, food processing, hospitals, the military, logistics, NASA and financial services.
- Its purpose is to eradicate performance deficiencies in processes that are critical to achieving customer satisfaction. These processes might include complaint handling, order fulfilment or delivering a package to a customer's house.

- To achieve process improvement, Six Sigma follows a five step approach known as DMAIC:
  - Define the problem.
  - Measure the data.
  - Analyze the problem.
  - Improve the process by removing the root causes of the problem.
  - Control to prevent the original problem from reoccurring and to maintain the benefits of the changes made.
- Define the problem. What is going wrong? Is it one problem or many? What is the visible evidence? Where is it and where does it come from? How serious is it? Is it organization wide or localized? What will be done about it? What is the objective of this investigation?
- Measure the data. This means obtaining the data to identify the symptoms; do they occur all the time or from time to time? Produce a map of the process that is producing the problem. Concentrate on the symptoms doing the most damage.
- Analyze the results so far. Be creative and prepare theories about the causes of the problems. Document the theories and test them. Identify the root causes.
- Improve the process. Assess alternative improvement methods. Design and test the chosen method. Implement the chosen method.
- Control the new process and monitor its effectiveness.

Thank You

Business Analysis Practice

Shelomeya De Lima

Chapter Nine

Defining The Solution

- Gap analysis
- Formulating options
- Defining business requirements
- Introduction to business architecture
- Definition of business architecture
- Structure of a business architecture
- Business architecture techniques

Introduction

- One of the key activities conducted by business analysts is the analysis of the gap between where the business is currently and where it needs to be in terms of its processes and systems.
- There are two aspects regarding the development of options for business change:
1. Analyzing the gap between the current and desired business systems.
2. Ensuring the alignment of any proposed actions with the business architecture.

GAP ANALYSIS

- gap analysis requires the business analyst to explore the differences between a current state and a desired future state.
- gap analysis may be used to examine any of the following areas:
    - the 'as is' and 'to be' business process models;
    - the competencies held by an individual and those required for a particular role;
    - the IT system requirements and the features offered by an off-the-shelf software package.

- **Identifying areas of concern:**
- Three categories may be used for the activities:
  - operating satisfactorily – no immediate action;
  - some issues to be addressed – action required;
  - not in place – urgent consideration.
- Once we have an idea of the areas requiring most attention, we can conduct the gap analysis at a more detailed level, focusing on 'how' the work is conducted.
- **Framework for gap analysis:**
- The holistic approach adopted by business analysts helps to avoid such issues. When taking a holistic approach, the analysts ensure that they consider aspects such as the organisation's structure, culture and management style in addition to examining the business processes and IT systems.

The POPIT model
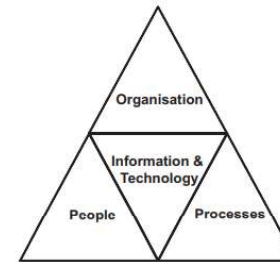
The POPIT model, can help considerably with this investigation as it provides a framework and aide-memoire that helps ensure that the analysis considers all of the required elements.

McKinsey's 7-S model
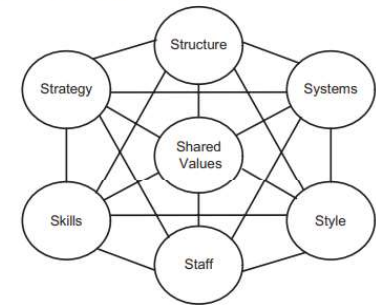
The 7-S model sets out the aspects of the organization that need to be considered if a change is to be introduced successfully. I

FORMULATING OPTIONS

- Once we have an understanding of the gaps to be addressed, we can begin to formulate the options for change. As in all business changes, we need to ensure that any proposals are feasible from the financial, business and technological perspectives.
- The key is that the options are holistic.
- no use putting forward proposals that change one or two elements of the POPIT model while not considering the others;

DEFINING BUSINESS REQUIREMENTS

- The outcome from the gap analysis is a list of business requirements that need to be delivered. These requirements are likely to be at the 'what' level rather than dictating the precise ways in which they will be met.

INTRODUCTION TO BUSINESS ARCHITECTURE

• Any proposed business change must align with the business architecture.

• A business architecture begins to evolve when two or more business areas (including those from outside the scope of the specific business itself) are thought of as an integrated set of capabilities that delivers value.

• The business architecture helps to provide increased visibility and effectiveness.

• Business architecture provides a bridge between the organisation's defined strategy and the execution of the strategy.

DEFINITION OF BUSINESS ARCHITECTURE

• The Business Architecture Guild (2014) defines business architecture as:

A blueprint of the enterprise that provides a common understanding of the organization that can be used to align strategic objectives and tactical demands.

• This definition encapsulates the important role that the business architecture plays as an interface between strategy and the implementation of change.
  • the strategy drives changes to the business architecture;
  • the business architecture informs and refines the strategy;
  • the business architecture translates the strategy for execution;
  • the strategy execution enables and generates improvement to the overall business architecture

A business architecture has three primary objectives:

1. To promote organizational health: to ensure the longevity and well-being of the organization, generating an ability to be flexible and agile in the delivery of change.

2. To help fulfil unrealized opportunities: promoting appropriate reaction to external influences and proposed initiatives, and identifying the areas of the business which would most benefit from any transformation.

3. To aid organizational performance in a competitive market place: implementing best practice, encouraging reuse, monitoring business metrics and focusing on those areas of the business that deliver the most value to the end customer.

Business architecture:

• The scope of a business architecture is the scope of the business.

• A business architecture is not prescriptive.

• A business architecture is developed iteratively.

• A business architecture is reusable across business units and businesses.

• A business architecture is not about the deliverables, it is more concerned with reflecting the underlying philosophy and values

STRUCTURE OF A BUSINESS ARCHITECTURE

- There are many models and documents that could be included as artefacts within a business architecture; in effect they would provide many different views of the business. For example, the artefacts of a business architecture might document any of the following:
  - capabilities;
  - values;
  - information;
  - products;
  - suppliers and partners;
  - motivations;
  - business units;
  - policies.

- Evolving best practice has shown that the key elements of a business architecture represent the following areas:
  - business motivations;
  - business capabilities;
  - value streams (which can be mapped to more detailed business processes);
  - organizational business units;
  - information concepts
- the business capabilities and the value streams that enable them, are widely regarded as the essence of an effective business architecture.

BUSINESS ARCHITECTURE TECHNIQUES

- There is a wide range of techniques that can be employed when defining the business architecture.
- These techniques vary from those that focus on the bigger picture of the business architecture, such as business model definition, business motivation analysis and capability modelling, through to more detailed techniques such as value stream analysis, value network analysis and information mapping.
- The two key techniques from this list that form the essence of an effective Business Architecture are:
  - business capability modelling;
  - value stream analysis

Business capability modelling

- Capability models represent, at a high level, what the organization needs to be able to do in order to deliver value to customers. While these initial capabilities can be decomposed to a number of levels, they should never reflect how delivery is actually achieved in practice.
- A capability is a particular ability to achieve an outcome and reflects something a business is able to do that creates value for a customer. A full business capability model usually investigates and models the whole organization across a number of business strata (layers). The main strata found on a typical business capability model would be:
  - strategic or direction setting;
  - core or customer facing;
  - supporting.

Table 8.1 Examples of foundation level business capabilities

| Stratum	Foundation capabilities
Strategic	Business planning
	Capital management
	Policy management
Customer facing	Distribution
	Customer service
	Product development
	Account management
Support	Staff recruitment
	Procurement
	Vendor management

- It should be noted that the following rules apply when producing a business capability model:
  - capabilities should be defined in business terms;
  - capabilities should be named as nouns not verbs;
  - capabilities are static (value streams show movement);
  - capabilities should be unique across the entire capability model;
  - capabilities are enabled via value streams
- Organizations that document and maintain business capabilities can change more quickly and effectively than those that do not. It is also invaluable when working with external suppliers or partners if the organization has a view of the capabilities needed to deliver the required value to customers.

Value stream analysis

- The value stream approach is one of the most powerful when used as part of a business architecture.
- A value stream is an end-to-end collection of high-level linear stages that create an outcome of value to a specific customer group.
- Value streams are used to identify, map and analyze the value exchanged between an organization and various stakeholders (internal and external) that interact with it.
- They focus on the delivery of value and may not reflect the way the work is done in practice.

- Value stream considers all the stages needed, regardless of how many organizations or business units may actually be involved in delivering the value.

Figure 8.3 Example value stream for mortgage application
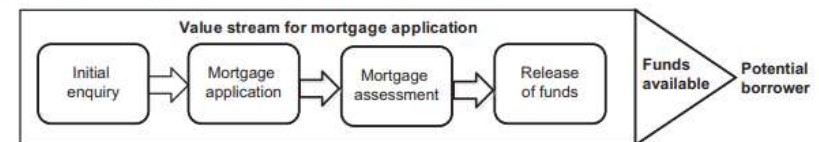
Key guiding principles when producing a value stream .

- Value streams should:
  - be stakeholder focused;
  - take a holistic view;
  - be customer centric;
  - facilitate further decomposition;
  - help identify which business capabilities help achieve stakeholder value
- Organizations that understand the value streams within which they operate, and who appreciate their role in delivering value, are well placed to promote the effective delivery of value to the recipients of their products and services.

Thank you