

Module-7

Learning and Self Development

Knowledge Aspects

- Theoretical Knowledge
- Practical Knowledge
- Research Knowledge

Theoritical Aspects

- Webinar
- Hack-a-thon (online ex: Hacker Rank / offline ex: College Campus)
- Online Courses (Ex: NPTEL, Coursera)
- Short term courses (Summer / Winter Course)
- E-Book

Practical Aspects

- Hands-on session (or) workshop
- Video Tutorials

Research Aspects

- Attending Conference / Symposium
- Research article - IEEE Explore, e Gateway, Science Direct
- Paper Presentation in Conference

Importance of developing competence

- There is probably no more important skill in life than learning to learn.
- This skill is especially important IT professionals, because the field of Information technology **changes more rapidly than any other field.**
- Thus in the field of Information technology, if there is truly a skill that will propel one's career, then that is to learn **how to teach yourself and quickly acquire the knowledge** needed for the task at hand.
- Self-development is therefore, a **continual process throughout one's career.**

Benefits of continual learning and self-development

- It helps to stay relevant and **up to date of the changing trends** and directions in one's profession.
- It helps in becoming **more effective in the workplace**
- Builds a knowledge base that helps **identify different types of problems and generate solutions.**
- This assists in **advancing one's career and move into new positions**

Benefits of continual learning and self-development

- Can deliver a **deeper understanding** of what it means to be a professional, along with a greater appreciation of the implications and impacts of your work.
- Leads to **increased self confidence**
- Helps to stay interested and interesting by **stimulating the mind** to stay inspired and excited.
- Opens you up to **new possibilities, new knowledge and new skill areas.**

What is Competence?

- Competence can be defined as the **application of knowledge and skills to perform to the standards required**. In other words, it is the ability of a person to do a job properly.



Types of Competencies

1. Behavioral Competencies

- These refer to the **soft skills that affect a person's performance.**
- For **example**, customer focus is a very popular behavioral competency expected of an Information Security Analyst.
- He is expected to keep the needs of his customers in mind and ensure their satisfaction.

Types of Competencies

2. Technical Competencies

- These refer to **technical skills that help a person complete his job.**
- For **example**, project management is a very popular technical competency expected of an Information Security Analyst

Skills and knowledge required for the job

- Knowledge required to perform the job of an Information Security Analyst effectively
 - Knowledge Management
 - Knowledge of the Organization
 - Technical Knowledge

Skills and knowledge required for the job

- Skills required to perform the job of an Information Security Analyst effectively
 - **Human Skills**- The ability to work with people.
 - **Conceptual Skills**- The ability to work with ideas, or concepts.
 - **Core/ Generic Skills**- These are generic in nature that are common to most white collar jobs like reading, writing, listening and speaking.

Skills and knowledge required for the job

- Skills required to perform the job of an Information Security Analyst effectively
 - Professional Skills
 - Technical Skills

Formal avenues of self-development in an organization

- Knowledge, skills and attitudes can be developed through a range of methodologies
 - 1) Education or professional qualifications,
 - 2) Training by employers,
 - 3) On-the-job experience,
 - 4) Informal learning from peers, seniors and others.
 - 5) Self-study and practice

MODULE 7

Learning and Self Development

Formal avenues of self-development in an organisation

- Knowledge, skills and attitudes can be developed through a range of methodologies
 - 1) Education or professional qualifications,
 - 2) Training by employers,
 - 3) On-the-job experience,
 - 4) Informal learning from peers, seniors and others
 - 5) Self-study and practice

Some more Avenues for Learning

- Develop Your Own Pet Projects
- Learn from Online Courses
- Go to Technical Meetings
- Participate in Online Forums
- Read Technical Blogs
- See Presentation Slides
- Watch Videos
- Use Question-and-Answer Communities

Different types of learning styles and methods

- Three main cognitive learning styles:
 - visual
 - auditory
 - kinesthetics.

Visual Learners	
CLUES <ul style="list-style-type: none"> Needs to see it to know it. Strong sense of color. May have artistic ability. Difficulty with spoken directions. Overreaction to sounds. Trouble following lectures. Misinterpretation of words 	LEARNING METHODS <ul style="list-style-type: none"> Use graphics to reinforce learning - films, slides, illustrations, diagrams. Color coding to organize notes and possessions. Write out directions. Use flow charts / diagrams for note taking. Visualizing spelling of words or facts to be memorized.
Auditory Learners	
CLUES <ul style="list-style-type: none"> Prefers to get information by listening and needs to hear it to know it. Difficulty following written directions. Difficulty with reading. Problems with writing. Inability to read body language and facial expressions 	LEARNING METHODS <ul style="list-style-type: none"> Use tapes for reading and for class and lecture notes. Learn by interviewing/participating in discussions. Have test questions or directions read aloud or put on tape.
Kinesthetic Learners	
CLUES <ul style="list-style-type: none"> Prefers hands-on learning. Can assemble parts without reading directions. Difficulty sitting still. Learns better when physical activity is involved. May be very well coordinated and have athletic ability. 	LEARNING METHODS <ul style="list-style-type: none"> Experimental learning (making models, doing lab work, and role playing) Frequent breaks in study periods. Trace letters and words to learn spelling and remember facts. Use computer to reinforce learning through sense of touch. Memorize or drill while walking or exercising. Express abilities through dance, drama, or gymnastics

Planning for self-development

- Understand your **organization's procedures and guidelines** for developing your knowledge, skills and competence, and your role and responsibilities in relationship to this.
- Understand why you need to develop your knowledge, skills and competence and how it will **help your organization**.
- Apprise yourself of the **different methods used by your organization** to review skills and knowledge.
- Training Need Analysis

Planning for self-development

- **Skills Need Analysis**
- Understand the different types of learning and development activities available for your role and the process of availing those.
- **Making a plan**
- Understand how and what future avenues would open up post the training.
- Implement the plan, apply your new knowledge and skills in the workplace and take feedback.
- You need to make sure that you make this a process continuous.