4. Force or Direct

In this strategy, only suggestions from one party have been considered and enforced in project management accordingly. This technique is applied when viewpoints of one stakeholder is right, the gravity of the conflict is not so huge or there is no time to investigate and we need a quick fix. Applying this technique may lead to loss of other valuable viewpoints and this technique cannot be applied when all stakeholders of the conflict are powerful.

5. Collaborate or Problem Solve

In this method, people involved in the conflict come forward to discuss the problem at hand with a very open mind. They focus on resolving the conflict and finding the best alternative/solution for the team. It is used to incorporate multiple views of influential stakeholders and distribute responsibility equally.

This is a real problem-solving technique that provides a solution to the conflict. This leads to a win-win kind of an outcome. Here everyone collaborates. When situations need a quick solution, this method cannot be used. It can only be used for conflicts that may severely affect the main system.

3.9 PLACE OF ANALYST IN MIS ORGANIZATION

MIS (Management information systems) analysts are analytic professionals that help organizations enhance their current information systems or to create a new one from scratch. They can help an organization to identify and create solutions that will move its processes from manual to digital capabilities and paperless through their technical and analytical skills. for this,the MIS analyst examine how an organization's staff members utilize information; the tools they have available and ways they intend to improve their methods and then carry out further investigations through industry documentation and consulting with different stakeholders to identify the best solutions to existing systems. Such improvements may be in terms of hardware technology and software applications.

Before diving into the role of System Analyst let us recall what a system is.A system is an association of interconnected components for attaining a specific goal. So there should be someone who is responsible for analysing, designing and implementing a full system with its interconnected components to fulfil organizational goals and this person is called a system analyst.A system analyst is a person who conducts a methodical study and evaluation of an activity such as business to identify its desired objectives in order to determine procedures by which these objectives can be gained.In simple words,a system analyst manages the systems of an organization to achieve the desired goal.

3.3 ROLE OF SYSTEM ANALYST

From the discussion above, we can clearly state that the primary role of a system analyst is to analyse the requirements of an organization and the problems associated with those requirements in order to determine what procedure and information technology can be combined together to bring improvements in the organization. A system analyst helps system users and other stakeholders to define their requirements for new or enhanced information services.The analyst must be able to work with people of all disciplines and be experienced in working with information technology. The analyst plays many roles,but three primary roles of the systems analyst can be summarized as consultant, supporting expert, and agent of change.

(a) System Analyst as Consultant

The system analyst frequently acts as a system consultant within an organization and consults its work force and its businesses to curate appropriate information systems for users working in the organization through systematic design approach.

(b) System Analyst as Supporting Expert

In this role, the analyst manages computer hardware and software and suggest their efficient uses in the business of the organization.In this role, system analyst is merely a supporting entity in the entire project, he/she is not a part of project management for the system.

(c) Systems Analyst as Agent of Change

The main role of a system analyst in an organization is that he is the agent of change. An agent of change can be defined as a person who serves as a catalyst for change, develops a plan for change and works with others in facilitating those changes. As an analyst, the main task is to develop a new system or enhance an existing system; but in both cases, a system analyst brings changes to the organization.

An organization requires system analysts as business managers have only knowledge of business problems but they do possess the detailed technical knowledge to determine information-based solutions that are possible for their business problems. A system analyst bridges the gap between the business problem and business system through his/her different roles.

Let's consider one example of the types of organizational problems you could face as a systems analyst. Suppose you work as a system analyst in the information department of a university. The current ERP (Enterprise Resource Planning) System does have the capability to mail student marks sheets. Now it is your duty to devise a plan to enable this capability to the existing system.

3.4 INTERPERSONAL SKILL

From the foregoing descriptions of the roles of a system analyst, it is clear that a system analyst must interact with all stakeholders of a system.So, one of the important skills for a system analyst is Interpersonal Skill. It helps working with end users as well as with other analysts and programmers. As a systems analyst, one plays a major role as a liaison among users, programmers and other systems professionals.

The interpersonal skills required by a system analyst are:

- **Communication**: The analyst needs to be a very good communicator to understand and communicate to the user group as well as to the technical specialists. Sometimes the users may not be able to communicate their needs fully to the analyst, but the analyst must be able to understand their needs from incomplete communication of the users.

used in conflict resolutions in project management. Let's discuss this strategy in detail. This strategy is mainly comprised of 5 techniques:

1. Withdraw of Avoid

In this conflict resolution technique, we will avoid the conflict or retreat from it and we assume that in due course of time the conflict will resolve by itself. This technique is used if conflicting parties are not influential stakeholders in the project or there is not enough information to apply other techniques. This technique is good for low-level disagreements as it gives ample opportunities for preparation in case of re-emerging conflicts. But withdrawing or avoiding is not really a resolution conflict which may become stronger over time. It may weaken the position of system analyst giving false idea of unfair biasness and lack of conflict resolution skill.'

2. Smooth or Accommodate

In this conflict resolution strategy, we will try to smooth out the rough edges of a tough decision and try to circumvent it. This technique shows a considerable view and tries to accommodate all parties on board. This strategy is applied when there is time constraint or there is immediate need of a temporary solution.

This conflict resolution strategy is effortless, easy to implement and ignores unnecessary clashes. Situations can be handled simply showing harmony and goodwill to the situation which provide enough time to more permanent solutions. But if the approach is not balanced and becomes biased to one party due to more consideration then the other party involved may not be happy and conflict may rise again.

3. Compromise or Reconcile

In this conflict management strategy, we evaluate all suggestions from all parties involved and partially satisfied them. This technique is useful when the stakeholders involved have equal status, need a win situation for all parties, Collaborative and forcing techniques have failed, a temporary solution is must needed. This technique brings quick result and keeps all parties satisfied until a permanent solution has surfaced. In this strategy, all parties are partially satisfied and hence partly unsatisfied also. In long run, conflict may resurface again.

to these conclusions. He/She also helps in user training and motivation to use a new system

3.7 USER INTERFACE ANALYST

A user interface is the part of the system with which the users interact. It includes the graphical displays that comprise of navigation tools to navigate the whole system.It may also include methods for capturing data like user input forms or methods for viewing required data also. A user interface must be simple,easy to understand and navigate and complete.

The role of the User Interface Analyst is to design and plan a new user interface from scratch or to enhance an earlier interface. This includes capturing user requirements through collaboration with business analysts, leading and participating in testing sessions, and coordinating final implementation of the GUI based on feedback.



CHECK YOUR PROGRESS

Q 4: List out the role of a systemanalyst?

Q 5: What are the academic qualifications needed to become a system analyst?

3.8 CONFLICT RESOLUTION

A system analyst must interact with different people during the SDLC of the system. He often may find two or more stakeholders which may have different opinions or interests on the same system and when two people have alternative views on the same topic conflict or clashes occurs. Some of the common ground for such clashes are scarce resources, limited technical knowledge, different priorities and personal issues etc. But whenever a conflict occurs, it lowers the efficiency and productivity of organization, which results in development of low-qualitysystems. That's why we have to resolve conflict during system development.

There are lots of conflict resolution strategies. One of them is known as Thomas-Kilmann's five approaches to resolving conflict which is often

- **Foresightedness and vision**: The analyst must have foresight and vision, so that they can factor in the future requirement of the users even if they have not factored that in the design. The analyst must also have vision with regard to the technological changes. He/she must be able to predict where the business needs and technological capabilities/constraints will be in the future. They should also clearly communicate that the design holds good not only for the short term but also the long term.
- **Adaptability and flexibility skills**: The analyst may be new to the environment of the particular business but he/she has to be quick on the uptake and adapt fast to the culture and environment of the organization. Some flexibility in the understanding of problems is also required along with the flexibility to come up with alternative solutions.
- **Selling**: The analyst needs to have flair to sell their ideas and solutions to the users. Sometimes this may be difficult as the users and clients might not know what solution will serve them best. The analyst needs to employ his selling skills to convince the users on the suitability of a solution.
- **Patience and rationality**: The analyst need to be patient and rational so that he/she does not rush to a solution. If they make haste then they might miss critical information about the problem/opportunity and end up promoting a wrong solution for the users. Rationality is also a virtue for the system analyst, as this will help them in analysing the problem/opportunity with a clear mind without prejudice.
- **Sound temperament**: The analyst needs to remain calm in the face of adverse situations. Most of the time the critical data that the analyst seeks is hard to come by and may be late in coming. The analyst will have to put up with all this and be calm in such situations. Thus, the temperament that he/she exhibits will help him/her in devising an appropriate solution for the client.

- **Management skills**: These skills are an absolute necessity for any analyst. The system analyst has to deliver in spite of several constraints hence they must have good management skills to manage time and resources at their disposal.



CHECK YOUR PROGRESS

Q 1: Who is a system analyst?

Q 2: What do you mean by the term "Agent of Change"?

Q 3: Which one of the following is not an interpersonal skill:

a. Communication b. Adaptability

c. Sportsmanship d. Management Skill

3.5 ACADEMIC AND PROFESSIONAL QUALIFICATION

An organization requires system analyst as business managers who have only knowledge of business problems but they do possess the detailed technical knowledge to determine information-based solutions that are possible for their business problems. A system analyst bridges the gap between the business problem and business system through their skills.Therefore, people who understand the full software development life cycle and are able to integrate new and legacy systems and have knowledge of software documentation are preferred for the role of system analyst.

The most direct route to gain this knowledge is to earn a bachelor's degree in computer or information science; however, some system analyst holds bachelor's degrees in another discipline and add computer experience through specialized classes or hands-on experience. For role of system analyst, one must have keen analytical skill and sound technical skill along with academic qualification.

Analytical skills help a system analyst to understand the cohesion and coupling between organization and its functions so that he can identify opportunities and problems and come up with suitable solutions. This type

of analytical skills is called systems thinking because it enables a person to view organizations and information systems as one system.

Technical skills allow a system analyst to understand potential and the limitations of information technology so that he can efficiently implement an information system that will help the users to solve problems and that will guide the system's design and development. Knowledge on different programming languages, various operating systems and computer hardware platforms also help in making informed decision about systems.

3.6 MULTIFACETED ROLE OF SYSTEM ANALYST

A system analyst is a person with multifaceted role who has to deal with each and every function of a system. He is involved in the process right from the development of the software to deployment of it. No other professionals in an organization are so much involved in all processes of a system. A system analyst may play the role of programmer, hardware engineer, project manager as per organizational or business need in design and implementation phase of a project. That's why the role of a system analyst is called a multifaceted role. Let's us discuss these roles briefly.

(a) **Persuader**: A system analyst is an agent of change. He/She persuades or imposes different changes to a system during its development phases or may suggest changes to legacy systems for its enhancement. They must be able to persuade others to bring those changes.

(b) **Investigator**: A system analyst must investigate to find the real problem from existing systems and deduce effective measures to solve them. He/She also monitors programs in relation to time, cost and quality.

(c) **Architect**: Analyst should be able to deduce system design from user's requirements. He/She is the person who helps customers to suggest information systems according to their requirements.

(d) **Manager**: Analyst plays the managerial role as he interacts with different stakeholders of the systems and draws conclusions from these interactions. He/She manages time and resources according