SYSTEM ANALYSIS AND DESIGN

UNIT – 1

System Study and System Development Life Cycle

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Who is System Analyst?

- A systems analyst performs study. He finds activities (process / working methods) and goals and decides procedures to achieve goals.

- Like an architect he designs and implements the system. He is takes interest in the profit of the business of client from computer technology.

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Attributes of System Analyst

- He has unique skills of communication, computer technology, mathematics, statistics, commerce, law etc. He must be flexible and intelligent.

- He must have knowledge of people. He coordinates the efforts of different type of persons in an organization to achieve business goals.

- A system analyst defines the problem then after he tries to solve it, he talks with user, manager to determine problem and finds the solution from them and decides best solution.

- he does not takes decision himself but gathers ideas from all people and chooses the best solution or workable solution.

Attributes of System Analyst

- System analyst plans to achieve goals. After approval of solution he starts designing and coordinates in testing and helps to decide that new system is working as per requirement or not.

- System analyst works with people so he should know each of them, their working and he should motivate them. System Analyst may develop software in any area so he must possess the knowledge of that business. How it functions? Give details. He must take interest in product and profit.

- System analyst must be aware with limitation and benefits of computers. He must communicate with different level peoples so he must have communication skills. Flexibility of decisions makes more communicative. Conflicting needs and results can be resolved by him. He must be well educated and sharp minded.

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Role of System Analyst

- He defines problem of business. Requirement of a company or any business may be smooth functioning of business activities with profit maximization and cost minimization.

- He uses different techniques to gather information about business which can further used to find strength or weakness of business. He also communicates with different persons in organization for these.

- The systems analyst analyses details and prepare a plan to solve business problem. He finds best way of solving a problem by discussing with other people and refining their ideas and implement practically feasible solution.

- Systems analysts coordinate the process of developing solutions. Since many problems have number of solutions, the systems analyst must evaluate the merit of such proposes solution before recommending one to the management.

Role of System Analyst

- Systems analysts are often referred to as planners. A key part of the systems analyst's job is to develop a plan to meet the management's objectives.

- Systems analyst is responsible for designing so that profit of organization can be achieved. Design is a time consuming, complex and precise task.

- As per standard set prior, system analyst coordinates in testing of system.

- When System Analyst is working on system having bigger size then he can allot his work to his supporters and with co-ordination of them he can be able to design the system. So he allots designing work to System Designer and the work of quality control of coding is allotted to programmer analyst.

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Program Analyst

- Program Analyst performs time and cost ratio in terms of memory resource and processing time. He decides which solution (coding / algorithm) is better. To introduce a single variable may cause degradation of performance. So he always trace all memory resource and processing of each process.

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System Designer

- System Designer is responsible to design new system or current manual system. He performs the tasks how the system will generate the information. He consults with the information analyst for the output. System Designer generally designs the system and takes all responsibility about it. Design includes flow chart, algorithm etc.

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Information Analyst

- Information Analyst works upon data. He finds the source of data and he decides correct data flow for processing. He also optimizes storage and decides information receiver (external entities). He cares of Input validation. Information analyst calculates cost of each information produced by the system and make analysis for cost of inputs. Information analyst finalizes what output should be produced.

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