Application of Mathematical Methods in Different Situations of Life

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Mathematics in today's multifaceted professional arena has facilitated man and all man-created system broadly. Be it a business, government, education or; in all aspects, it has done well. Now, it is a more dynamic concept as compare to past. Now we are highly interested in knowing those tools and techniques in mathematics, which can prove useful for human life and the society as a vast. We are in search of those methods of mathematics, which can assist our daily life by helping in achieving individual, group as well as institutional and commercial objectives. On this place where we have to make some decisions, we most depend upon some scientific and mathematical procedures to ensure accuracy in judgments. Quantitative techniques now become very important in the context of ever changing environment, where we have to make decisions in complex situation. In the modern content of business and society, decisions are made on the basis of premises that the assumptions made are explicitly stated and to the extent possible are widely expressed in quantitative terms along with intuitive decision methods, where decisions variables are difficult to express in quantitative terms and in unavoidable situations.

Revolutionary advancements have taken place in the field of quantitative analysis as a result of this, some modern mathematical techniques have been emerged in the form of Operations Research, Management Sciences, Systems Analysis, Decision Sciences, Expert Systems, Statistical Research, etc. Now, here we can see how these above mentioned streams of mathematics help in practical aspects of life as, business exploration, decision-making, etc.

OPERATIONS RESEARCH:

Operations research or Operational Research is a discipline that deals with the application of advanced analytical methods to help making better decisions. It is a sub-field of mathematics/applied mathematics. It has major interference in management science and decision science. Because of its emphasis on human- technology interaction and because of its focus on practical applications, operation research as overlap with other disciplines, notably industrial engineering and operation, management and draws or Psychology and organization science. Operation research is often concerned with data mining the maximum (of profit, performances or yield) or minimum (of loss, risk or cost) of some real world objective. Originating in military efforts before world-war II, its techniques have grown to concern in a variety of industries.

MANAGEMENT SCIENCE:

Management science is a very broad applied subject. As a stream, it in broader than operations research. Operation research is an_implicative technique, which has important dominance in management science. It covers all about management as a science. The scientific solution and process of management is studied in management science. It covers up ably to explain of each and every business phenomenon scientifically in advance our for future purposes.

Notably, operations research, business intelligence systems, expert system, decision support systems and techniques are the applicative tools by which management science runs.

SYSTEMS ANALYSIS:

Systems analysis is the study of interacting factors including computer systems analysis. This field is closely related to requirements analysis or operations research. It is also "an explicit formal inquiry carried out to help someone identify a better course of action and make a better decision than it might other wish have made.

The term analysis indicates 'to put together'. Here, system analysis enhances real life decision in business, computer science and so on. Systems analysis provides state-of-the-art provision for real life situations.

DECISION SCIENCES:

Decision sciences with the help of mathematical simulations creates a lot of support to have real life decisions.

It simulates mathematical and statistical models to make real life decisions, particularly when complex types of situational decisions will have to have. Decision sciences broadly studies, how to take appropriate business decisions in various multifaceted situations.

EXPERT SYSTEM:

Expert system enables the business practices enhanced in the expert manners, not in the ordinary one. It involves creating a lot of variables in perspectives and checking into it.

STATISTICAL METHODS:

Statistical methods help many ways to enhance business activities. It helps to foresee about the future possibilities of the business by using past data collection. It's useful applications are in the theory of probability and statistics in the area of quality control

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