

Analytics for Decision Making

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Introduction

Competition in today's world can be seen among companies producing similar products or among the companies using the similar kind of technologies. Product differentiation, Unique geographical location, or Protective regulation could not give companies the needed competitive edge. Break through innovation in products and services are becoming more and more difficult with the passage of time. The only base left for competition is to improve the business processes that work efficiently and effectively and to make right business decisions in quickest possible time

Thomas Devonport in his book titled, "competing on analytics: The new science of winning", claims that significant proportion of high performance companies have high analytical skills among their personnel. As the ability to make better decisions improves with analytical skills, it is all the more important for the personnel involved in decision making to acquire good analytical skills not only to improve the business performance of the organizations through fact based decision making but also to improve one's salability in the competition fierce markets.

Thus taking decision based on the facts and figures have become the order of the day. Having the skills needed for the same has become the need of the hour. Thus a Management development programme on Analytics for Decision making was coined.

Objectives

The objectives of the programme are

1. To equip the participants with analytical tools for decision making
2. To make them learn the art of converting a general management problem into a well defined mathematical form
3. To prepare executives with analytical tools to better their decision making skills.
4. To provide executives hands on experience of using analytical tools to solve practical problems in the areas of manufacturing, service, retail, software, banking and finance, sports, pharmaceutical, aerospace Industry etc

Contents

The following topics will be covered (but will not be limited to) in the programme

- Transforming a general business management problem into well defined mathematical form which can be approached via Quantitative analysis
- Linear programming, Integer programming and their application in solving product mix, blending, cutting stock, capital budgeting problems
- Stochastic models, Markov models, and their Application in solving Brand switching, loyalty modeling, and market share estimation.
- Poisson process, cumulative Poisson process. Applications of Poisson and cumulative Poisson in operations, marketing and insurance.
- Forecasting: Moving average, exponential smoothing, Trend, cyclical and seasonality components, ARIMA (autoregressive integrated moving average).
- Application of predictive analytics in retail, direct marketing, health care, financial services, insurance, supply chain etc.

Who May Participate

The programme is suitable for functional executives in the areas of Marketing, Manufacturing, Finance, Human Resource and General management who are involved in decision making process. The executives from the domains of Manufacturing, Service, IT, Pharmaceutical, Retail, Quality Assurance, Banking and Finance and Government finds the programme to be suitable. Faculty members and Researchers who are keen in making careers in Analytics find the programme to interesting and informative and useful.