

Lesson 4.10

QUANTITATIVE, CONTEMPORARY AND EMERGING VIEWS OF MANAGEMENT

Quantitative Approach to Management:

The **quantitative approach** involves the use of quantitative techniques to improve decision making. This approach has also been labeled operations research or management science. It includes applications of statistics, optimization models, information models, and computer simulations

How Do Today's Managers use the quantitative approach?

The quantitative approach has contributed directly to management decision making in the areas of planning and control. For instance, when managers make budgeting, scheduling, quality control, and similar decisions, they typically rely on quantitative techniques. The availability of sophisticated computer software programs to aid in developing models, equations, and formulas has made the use of quantitative techniques somewhat less intimidating for managers, although they must still be able to interpret the results.

The quantitative approach, although important in its own way, has not influenced management practice as much as the next one we're going to discuss—organizational behavior—for a number of reasons. These include the fact that many managers are unfamiliar with and intimidated by quantitative tools, behavioral problems are more widespread and visible, and it is easier for most students and managers to relate to real, day-to-day people problems than to the more abstract activity of constructing quantitative models.

Branches in the Quantitative Management Viewpoint:

There are three main branches in the Quantitative **Management Viewpoint**: management science, operations management, and management information systems

Management science (or operations research as it has been called) is an approach aimed at increasing decision effectiveness through the use of sophisticated mathematical models and statistical methods. This is NOT a term to be used synonymously with either the term “Scientific Management” described earlier featuring Taylor and others or “The Science of Management,” a term that usually refers broadly, to a deliberate, rational approach to management issues.

Operations Management is the function or field of expertise that is primarily responsible for the production and delivery of an organization's products and services.

Management information systems (MIS) is the name often given to the field of management that focuses on designing and implementing computer-based information systems for use by management

Contemporary viewpoints:

This school of thought or view point about management includes those major ideas about managing and organizations that have emerged since the 1950s. Some of the ideas, systems theory for example, are rooted in experiences gained during World War II.

The systems theory approach is based on the notion that organizations can be visualized as systems of interrelated parts or subsystems that operate as a whole in pursuit of common goals. This will be discussed in more detail in the next session.

Contingency Theory is the view that appropriate managerial action depends on the particular parameters of each situation. This approach is in marked contrast to the earliest universal approach stemming from the classical management school which suggested that there was one, and only one, best

decision for managers to make which applied in all cases and to all organization, big or little, for profit, or not-for-profit, etc. The generalized corollary to the universal approach is that the secret to successful managing was just to keep looking until that one best solution was “found.” “it all depends”, would be the slogan of contingency theory. The contingency approach applies particularly well in such areas as environmental factors, strategy, organizational design, technology, and leadership.

Emerging views: Now that you’ve got a good understanding of the evolution and past history of management theories and practices, what current concepts and practices are shaping today’s management history and changing the way that managers do their jobs?

A. Globalization. Organizational operations no longer stop at geographic borders. Managers in all types and sizes of organizations are faced with the opportunities and challenges of globalization.

B. Entrepreneurship refers to the process whereby an individual or a group of individuals uses organized efforts and means to pursue opportunities to create value and grow by fulfilling wants and needs through innovation and uniqueness.

1. Three important themes stand out in this definition:
 - a. The pursuit of opportunities
 - b. Innovation
 - c. Growth
2. Entrepreneurship will continue to be important to societies around the world.

C. Managing in an E-Business World.

1. **E-business** (electronic business)—a comprehensive term describing the way an organization does its work by using electronic (Internet-based) linkages with key constituencies in order to efficiently and effectively achieve its goals.
2. **E-commerce** (electronic commerce) is any form of business exchange or transaction in which the parties interact electronically.

D. Need for Innovation and Flexibility.

1. The constant flow of new ideas is crucial for an organization to avoid obsolescence or failure.
2. Flexibility is valuable in a context where customers/ needs may change overnight, where new competitors come and go, and where employees and their skills are shifted as need from project to project.

E. Quality Management Systems.

1. **Total quality management** is a philosophy of management that is driven by customer needs and expectations and focuses on continual improvement in work processes
2. TQM was inspired by a small group of quality experts, of whom W. Edwards Deming was one of the chief proponents. He has also developed and presented his quality philosophy and theory of profound knowledge.
3. TQM represents a counterpoint to earlier management theorists who believed that low costs were the only road to increased productivity.
4. The objective of TQM is to create an organization committed to continuous improvement.

F. Learning Organizations and Knowledge Management.

Managers now must deal with an environment that is continually changing. The successful organizations of the 21st century will be flexible, able to learn and respond quickly, and be led by managers who can effectively challenge conventional wisdom, manage the organization’s knowledge base, and make needed changes.

1. A **learning organization** is one that has developed the capacity to continuously adapt and change.
 2. **Knowledge management** involves cultivating a learning culture where organizational members systematically gather knowledge and share it with others to achieve better performance.
- G. Theory Z : William Ouchi's** Theory Z combines positive aspects of American and Japanese management into a modified approach aimed at increasing managerial effectiveness while remaining compatible with the norms and values of society and culture.