Business Policy & Strategy Dr. Richard C. Insinga, April 2011

Lecture #4

Plan for Lecture #4

- Key points from Lecture #3
- Topics for tonight
 - Supplement Evolution of Management Theories
 - Porter's Chapter 8 Industry Evolution
 - Book Bright's Practical Technology Forecasting
 - Porter's Chapter 13 Competition in Global Industries
 - Book Porter's The Competitive Advantage of Nations

Key Points from Lecture #3

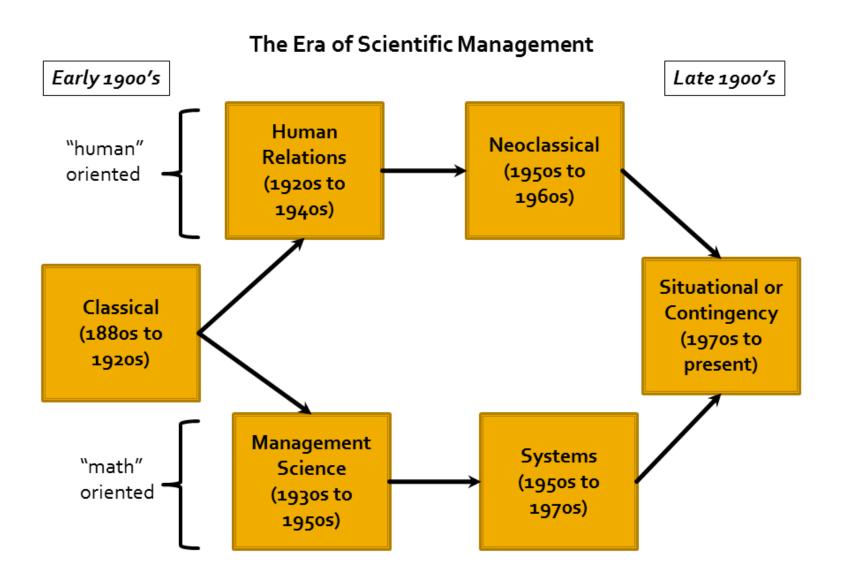
- Competitor analysis how to do it
- Competitive moves
 - Oligopolistic behavior
 - Cooperative or nonthreatening moves
 - Threatening moves
 - Lags in retaliation
- Schilling's strategy games tacit and non-tacit bargaining
- Sun Tzu's guide to strategy formulation and implementation
- Sources of competitive advantage

Dr. Richard C. Insinga 2011

Evolution of Management Theories in the 20th Century

Evolution of Management Theories In the 20th Century

- This description of the evolution of management theories (i.e., schools of management thought) was prepared to identify the major schools and briefly describe each.
- While the schools are shown as leading from one to another, all of the schools still exist and are useful to management at the present time.
- The diagram on the next slide identifies the major schools of management in the 20th Century.
 - The periods shown are those in which the concepts of each school were most actively formulated, though the concepts and the schools continue to the present time.



Classical

- The Classical School began in the 1886 with a paper ("Engineer as Economist") given by Henry Towne at a conference of the American Society of Mechanical Engineers (ASME).
 - The paper discussed the concept of Scientific Management.
 - That is, applying scientific methods to the evaluation and development of management theories.
 - Frederick Taylor was in attendance and liked the concept.

Classical (cont'd)

- Many methods were created in this School, for example:
 - Process charts based on time-and-motion studies
 - Gantt charts for scheduling
 - THERBLIGS for analyzing time based on motions
 - Organization forms
- Major contributors were Frederick Taylor, Lillian and Frank Gilbreth, Henry Fayol, and Max Weber.

Classical School (cont'd)

- The Classical School is sometimes also called the school of "scientific management," which implies that scientific management is the same as the classical school.
- Taylor popularized the term "scientific management" and would say that its goal is the "one best way to manage."
 That is not correct. <u>All</u> of the schools shown
- That is not correct. <u>All</u> of the schools shown on the evolution slide use scientific methods to evaluate and develop management theories and are therefore part of the scientific management movement.

Human Relations School

- The Human Relations School began with the Hawthorne studies led by Elton Mayo.
 - Western Electric's Hawthorne plant was the site of a series of experiment during the period from 1924 to 1932.
 - Western Electric is the manufacturing subsidiary of American Telephone & Telegraph (AT&T)
- The studies concluded that the effect of psychological and sociological factors were more significant than physical factors in terms of increasing worker productivity.

Human Relations School (cont'd)

- Famous parts of these studies are the Lighting experiments and the Relay Room experiments.
- The "Hawthorne Effect" is a term that was coined in 1950 by Henry A. Landsberger when analyzing the Hawthorne experiments.
 - The Hawthorne Effect means that subjects in an experiment improve or modify an aspect of their behavior which is being experimentally measured simply in response to the fact that they are being studied, not in response to any particular experimental manipulation.
- Another major contributor to this School was Mary Parker Follett.

Human Relations School (cont'd)

- The findings of the Hawthorne experiments led to minor changes in organizations at first, but stimulated those in the fields of psychology and sociology, and other social sciences to apply their approaches to the field of management.
 - The main initial change was in the thinking of managers and in the creation of a position and office of industrial psychology in many organizations.

Management Science School

- The Management Science School (which is not to be confused with the School of Scientific Management) was the path taken by the Classical School after the split with the Human Relations School.
- Methods in the Management Science School are mathematics based.
- There are many contributors to the development of specific methods, but no one person stands out as a developer of the "concept" or philosophy of this school.

Management Science School (cont'd)

- Some of the many methods developed in this school were:
 - Operations research
 - Logistics
 - Load-distance analysis of layouts and locations
 - Queuing theory
 - Linear Programming
 - Project management
 - Quality control
 - Aggregate planning of staffing and resources

Neoclassical School

- The Neoclassical School developed from the contributions of the social scientists who joined the field, stimulated by the Human Relations movement.
- In addition to its social sciences research, a school philosophy has been championed by Chris Argyris.
 - Argyris argues for a new relationship between management and workers that is more open and less structures.

Neoclassical School (cont'd)

- Many of the new concepts of this school have been applied to the management of organizations, especially to those that are involved in intellectual or creative works.
- Major contributors, besides Argyris, are Chester Barnard, Abraham Maslow, and Douglas McGregor.

Systems School

- The systems school focuses on the organization as a whole and its interaction with the environment.
- The Systems School analyzes problems using a systems analysis approach, that is, based on the simple model of a process which is shown here.



Systems School (cont'd)

- There are many contributors to this school.
- Among its major contributors are Kenneth Boulding and Peter Senge.

Situational or Contingency School

- The Situational School is sometimes called the Contingency School, where contingency is a synonym for situational.
- The essential concept of this school is the recognition that there is no universal theory of the best way to manage.
 - The best way to manage depends on the situation.

Situational or Contingency School (cont'd)

- There are many contributors to the Situational School.
- Among those who made major contributions are Frederick Herzberg, Kurt Lewin, Rensis Likert, Victor Vroom, Fred Fiedler, Paul Hersey and Ken Blanchard, and James March.