

THE SEEDS OF MANAGEMENT THOUGHT

I. Evidence of Management in History

Throughout man's history there has been evidence of management. The ancient public works, the pyramids, aqueducts and the acropolis certainly required both planning and the coordinated efforts of many men. Most management was exercised in government bound together by laws and strength of Armies. Mobilizing armies like those of Alexander the Great, Caesar, Hannibal, and Napoleon required great management skills. Certainly the Catholic church is a prime example of great organizing skills. Thus, it is certain that the management skills of planning, organizing, directing, and control have been exercised throughout history, but no efforts were made to systematize it as a skill to be learned. Management was a function of the leaders charisma, laws, use of force, and/or some divine precept as in the case of the church, and it was exercised over men who were not free to reject it lest they lose their life. The principles of governance identified in Nicolo Machiavelli's The Prince exemplify this (16th Century). It was not until the dawn of the industrial age that the need to exercise management on a mass scale over free men in economic as well as political organizations occurred.

II. The "Fertile Environment" For a Management Movement in U. S. is based essentially on a free society with a dynamic economy.

A. Values of Society - based on the so-called "natural laws" propounded by early socio-political theorists like John Locke of England: individualism, property rights, competition, limited State, and Specialization.

1. Rugged individualism developed from 18th Century age of reason where men like Voltaire, Rousseau, Franklin, and Jefferson identified the supreme importance of man and that man could become perfect through logic and reasoning.

Rugged individualism developed from the pioneer spirit - Frederick Jackson Turner

2. Protestant ethic - material success evidence of God's favor - derived from

- reformation and Luther's critic of religious dogma which stimulated protestantism.
- John Calvin's, the french theologian, the virtues of work - those predestined for external salvation - were identified by their devotion to work.

3. Social Darwinism

- Darwin's biological concept of survival of fittest.
- Applied to social activities by Herbert Spencer who noted that monopoly and accumulation of wealth was evidence of Darwin's principle in social undertakings.

4. Property Rights

- reinforced in 1891 by Pope Leo XIII Rerum Novarum written as a counter to Marxism. It reaffirmed every man's right to hold property and approved of the service and profit motives of economic entities.

5. Intellectual Curiosity

- derived from intellectual freedom and curiosity.
- Newtonian physics indicated that the universe was something that could be studied and identified.
- Rene Des Cartes Discours Sur La Methode 1637. development of rational thinking - using facts, dividing problems into parts, proceed from simple to complex, and validate findings.

6. Social Conscious of American businessmen as exhibited by

- socially reform minded businessmen like the abolitionists William Lloyd Garrison.

7. Egalitarianism

- equality of all peoples derived from early works of John Stuart Mill and in the Declaration of Independence.

B. Social - a free society protected by Constitutional "Bill of Rights" and economic rather than class distinction.

1. Migration

- unrestricted immigration throughout the U. S.
- immigration from abroad helped population grow from 31 to 92 million between 1860-1916.

2. Free Education

- stimulated eagerness to learn and equipped individuals to learn.
- 1867 legislation - free public schools to all and the
- Morrill Act established land grant colleges and universities for public education.

3. Factory System with increased mechanization of industry demonstrated

- innovativeness of American people.
- organizational genius of business leaders.

4. Progressivism

- concerned with improving plight of urban working class.

5. Social Mobility

- based on egalitarianism and a classless society.
- Horatio Alger Myth - it was possible to rise from rags to riches - at least one was free to try.

C. Political - Democracy based on a Constitution protecting individual rights from state.

1. Nationalism increased competitive spirit between nations.

2. Limited Government

- Lockean principle of "the best government is the least government" a reaction to medieval monarchies.
- preserved in U. S. Constitution by system of checks and balances and by giving to the states and the people all other power not specifically stated in Constitution.

3. Little regulation of business

- Sherman anti-trust act 1890 - to preserve competitive nature of business.

D. Economic - Capitalism's free enterprise stimulated entrepreneurship by providing economic freedom and incentive to develop innovative ideas and produce them.

1. Free enterprise system derived in part from

- Repeal of English "Corn Laws" 1846 which reinstated free enterprise regarding grain trade. Centralized decision-making of this trade had proven wasteful and inefficient.
- Jeremy Bentham's felicific calculus gave rise to utility theory of economics which is one of the basis for the incentive value of the profit motive.

2. American bent for Commerce and industry derived from

- Mercantilism, wherein, national strength came from having a positive trade balance. It created allegiance to nation rather than national origin, and of course the prime motivator for colonizing of America.

3. Specialization of fields derived from

- Newtonian Concept of Mechanics "if we attend to the parts, the whole will take care of itself."

- Adam Smith's Division of labor as a means to increase labor productivity.
- 4. Rise of Corporate Forms of Organization - improved business risk taking by limiting individual liability - derived from
 - 1600 East India Co. - first economic organization designed for exploration for commercial rather than political purposes.
 - 1819 Chief Justice John Marshall's ruling that the Dartmouth College Charter with the state of New Hampshire was a legal contract - 1st U. S. Corporate charter legally recognized.
- 5. Reduced Economic Volatility - with reorganization of national banking system after the Civil War.
- 6. Development of Organized Labor as an economic bargaining agent forced improved management practices towards human resources.
 - This gained impetus from the British "Charterist Movement" in 1838 which developed the "People's Charter" aimed at reforming employer-employee relations. Lessons learned were: labor was not a commodity; the need to involve employees in the decision process; and the collective power of labor.
- E. Technological - increased industrialization proved that applied reasoning could make the world a better place to live. This was stimulated in U. S. by the following:
 - 1. Civil War
 - encouraged mass production of commodities like steel.
 - national banking system reorganized after war.
 - war time national debt provided expansion capital and credit.
 - 2. Large supply of national resources:
 - energy sources like coal, petroleum, and hydroelectric power.
 - metals for producing machinery.
 - 3. Expansion of Transportation
 - railroad mileage increased from 30,620 miles in 1865 to 257,567 miles in 1915.
 - 4. Expansion of Communications with the
 - telegraph
 - and an improved postal system

5. Large labor supply due to immigration from Europe.
6. A predominately Domestic Market for U. S. goods which increased the standard of living and purchase power which in turn fed the growth of industry.
7. Abundance of Capital - mostly from reinvestment of corporate profits.
8. Technological innovation derived from
 - standardization of parts permitting mass production.
 - electricity.

III. Early Management Literature - focused on certain techniques for improving the management of factory system.

- A. Charles Dupin's Discours Sur les Sort des Ouvriers 1831, examined labor conditions in factories and ways to improve them.
- B. The first comprehensive book on industrial management is Charles Babbage's On the Economy of Machinery and Manufacturers. The book examined the use of substituting machinery for manual power as a means of achieving economy and efficiency. Babbage also recognized the service objective of business.
- C. An early book on personnel management was the Philosophy of Manufacturers by Andrew Ure. His principle of mechanical, moral, and commercial relate to the current concept of service, social, and profit objectives of industry.
- D. Management principles were applied to war by the Russian General Carl Von Clausewitz in his Principles of War 1832.

IV. Seeds of Management Movement in the U. S. - developed primarily from engineers and industrial managers in 1880's and 1890's who were concerned with eliminating waste and inefficiency.

- A. Towne's "Spark" - Henry R. Towne, president of Yale and Towne Lock Company addressed a meeting of ASME in 1886 in which he called for the development of management as a discipline. "The matter of shop management is of equal importance with that of engineering" "The management of work is unorganized, is almost without literature, has no organization or medium for the interchange of experience" "The remedy must not be looked for from those who are businessmen . . . it should come from those whose training and experience has given them an understanding of both sides (mechanical and the clerical) of the important questions involved."
- B. Captain Henry Metcalfe - 1885 published a book on accounting methods in which he also discussed the art of administration and the need for records to make it effective.

C. Principles of improved management introduced during this period were:

1. incentive wage payments derived from
 - the British experience at Speenhanden in 1795 during the enactment of "Poor Laws" where it was learned that the doling of bread to poor based on work was more an effective and a less abusive system of reward.
2. Control methods for record keeping and production.
3. Search for technical improvements in production.

V. Seeds of Management Education

- A. 1st Business School - Wharton School of Finance and Commerce at University of Pennsylvania, Philadelphia - founded by donation of Joseph Wharton a foundry executive.
- B. Development of professional societies dedicated to the improvement of the factory systems
 - 1881 American Society of Mechanical Engineers
 - 1885 American Economic Associations
 - 1895 National Association of Manufacturers.

The rest of this collection is divided up chronologically by decade. In each section a factual rather than evaluative summary of the social, political, economic, and technological environment is presented along with a brief summary of the development of management thought and education. This is followed by a collection of information some of the individuals and their contributions to management thought of the period. This is by no means comprehensive, but attempts to present some of the highlights. The final section looks at the future of management.