Cooperative Extension College of Agriculture Washington State University Pullman, Washington 99164

AGRIBUSINESS MANAGEMENT

MANAGEMENT: FROM CLEOPATRA TO HENRY FORD

In the epilogue of Tolstoy's War and Peace, he maintains that, "If the will of every man were free, that is, if every man could act as he chose, that whole of history would be a tissue of disconnected accidents."

But in the world we know, man's will has always been somewhat constrained. Society places on each newborn a set of standards which they deem acceptable. Each day in the life of this child is, therefore, fashioned by a series of ancestral decisions. The history of mankind is, thereby, generated in a pattern not as disconnected as Tolstoy considered.

Not unlike the history of man, the history of the management profession depicts a sequence of constrained and loosely interconnected incidents. When confronted with the vast volume of contemporary management literature, one is led to believe that management is one of the new sciences such as cybernetics or ecology. Yet this could not be further from the truth as almost every basic managerial principle has a definite historical link. Governments, armies, and religions have all contributed much to the origin of managerial principles. Their impact on the profession of management is both significant and pervasive.

I am not a historian. Nor is this paper designed to comprise a chronicle of all that which has nurtured the profession of management. I merely maintain that a better knowledge of the historical background of one's profession will enhance his appreciation of his own occupation. The sole purpose of this paper, therefore, is to illustrate how basic managerial principles do have specific links with history. Hopefully, the reader will develop a better understanding of the management principles, themselves, and a greater respect for his own profession's historical background.

A Comparison

When comparing the modern manager with his historical counterpart, one could argue that there are only two basic differences separating the two. First, the basic objective of modern day managers is the attainment of quality output at least cost. Some may argue that quantity is sometimes substituted for quality. But regardless, the managers of earlier times, while cognizant of the "least cost" concept, were (as will be illustrated) little concerned with the human or non-salary cost of a project. This was particularly true of some military managers. Second, modern managers have a much greater awareness of their operational environment than did their predecessors. Advancements in communications technology account for much of this difference. Beyond these two areas, however, true differences become miniscule or totally nonexistent.

Three Basic Principles

Span of control, managerial decentralization and delegation of authority are three well-known principles relating to managerial supervision. In an earlier issue of *Agribusiness Management* (*Jethro's Wisdom*), it was shown how Jethro became

known as history's first management consultant. In a mere 14 verses of the bible, Jethro wisely advised his son-in-law, Moses, in the proper ways of governing his followers. Jethro's counsel contained the first recorded reference to the discovery that: 1)--a manager's span of control has distinct limits, 2) supervision of the masses is added through decentralization, and 3) in larger organizations, the delegation of authority may be the only way in which a manager can maintain his effectiveness (and sanity). Each of these principles is as relevant and as often employed now as in the times of Jethro and Moses.

Human and Physical Compatibility

In this modern, technology-conscious world, managers rapidly discover that human and physical resources must be compatible before their combined employment will prove effective. A pipe wrench becomes burdensome in the hands of an electrician, and a physician becomes ineffective when asked to operate a metal lathe. This basic management principle also has a distinct historical link. Using a military example, Alexander the Great appears to be the first to have recognized the advantages associated with the proper employment of human and physical resources. Now Alex was no slouch of a manager. In fact, by the age of 26 he had gained control of a big slice of the known world. He was a specialist of sorts, and devoted most of his managerial skills to winning wars. An innovator of the first rank, Alex introduced a new military formation called the Macedonian Phalanx. The Phalanx involved the employment of human and physical resources in a manner never before thought of. His army was positioned in the form of a wedge with its front line composed of 1,200 to 2,000 mounted noblemen. Behind them could be found, in extended lines, the infantry, shoulder-to-shoulder with each carrying a long spear extended in front of his shield. On the flanks were positioned the archers. The entire formation was supported by catapults (which, incidentally, were invented by King Phillip, Alex's father). Those of the enemy not toppled by the catapults were taken care of by the archers. The few survivors were then speared by the infantry or trampled by the cavalry.

Like Jethro, Alex also believed in managerial decentralization. After conquering a new territory, Alex placed a native of the vanquished country in the position as governor and gave him extensive authority. The basic governing policy was, thereby, laced with a small amount of practical psychology.

Mismanagement; Planning

History books are filled with accounts of superb managers. Julius Caesar, for example, employed a maximum of only 11 legions (or 66,000 men) and yet governed an extensive territory with a dominance of administrative power never to be forgotten. Other successful managers worthy of note include King Arthur, Charlemagne, Catherine the Great, and Disraeli.

But the history books also relate a few examples of mismanagement. King Louis IV of France, for example, did not excel in his activities as a manager. In 1248, during the seventh Crusade, Louis decided that he wished to become a reputable leader of warriors. Furthermore, Louis selected the Saracens of Egypt as his likely first victims. The Saracens were a nomadic tribe which wandered between Syria and Arabia. Forgetting entirely the golden rule of management (i.e., adequate advance planning), Louis plunged hastily into a full-scale attack on the Saracens.

But the Saracens were a lot better managers than were their descendants (who lost the Six Day War with Israel). They fought in well-disciplined companies with a chain of command from a single leader (which Louis considered unnecessary). Their generals were able to convey battle orders rapidly to men in the field (Louis was not so equipped). Finally, the Saracens employed the contingency principle of having one unit held in reserve for every two units committed to battle (Louis hadn't taken the time to organize this). In the end, the poor Frenchmen lay exhausted, confused, and thoroughly defeated.

Individual Performance

Perhaps the greatest downfall of our historical managers was their devotion to getting the job done, no matter what the cost. With an expansive labor source available to them, the loss of a human life was of little consequence. Yet even on this point, there were a few notable exceptions. For example, Catherine the Great is said to have had a feeling towards human welfare which transcended the temper of her times. There was also a textile manufacturer by the name of Robert Owen who states, "If then due care as to the state of your inanimate machines can produce such beneficial results, what might be expected if you were to devote equal attention to your vital machines (employees), which are far more wonderfully constructed?" From this thought-provoking statement arose management's humanist philosophy.

Excellence in individual performance, as all managers know, is an always sought after goal. Yet the formula for achieving high individual performance is a relatively simple one, i.e., Performance = Ability x Motivation. As we all know, Charles Darwin had some difficulty distinguishing between men and monkeys. Late in the 19th century, however, Charlie surmised that, " . . . there are more people than we realize with brains, but the problem lies in their lack of enthusiasm." In simple terms, Charlie believed that people (monkeys, too, perhaps) do have far more ability than they're given credit for. Hence, according to our formula, the problem lies with the manager's failure to create motivation, i.e., the desire to exercise one's own ability in a manner which will assure top individual performance. Because it is so important, let's take a moment and review how some basic principles of managerial motivation are linked to history.

Motivation

From a manager's point of view, the question of motivation is one of how he can get his employees to behave in such a way that they exert a positive influence on the progress of the business. Julius Caesar once thought he had the answer to this question. If his troops hadn't done too well on the battlefield and he desired higher individual performance, he merely lined up his soldiers and ordered that every tenth man be executed. Yes, Julius became known as an effective motivator, but further study reveals that Julius' technique had short-lived results!

Cleopatra, at the age of 20, was also a well-known motivator. As an effective manager of men, she used another type of motivational device. Her technique was a bit more subtle than that of her friend, Julius, i.e., she used herself. So effective was she in her ability to motivate others, that William Shakespeare was even touched by the results. Of Cleopatra, Bill wrote:

> "Age cannot wither her, nor custom state
> Her infinite variety: other women cloy
> The appetites they feed, but she makes hungry,
> Where more she satisfies."

Temujin, better known as Genghis Kahn, leader of the Mongol horde, used some rather crud and inhuman techniques to motivate his men. Yet Genghis was not totally unreasonable and was known to have conveyed some positive motivation through a fair and equitable system of dividing up the spoils.

Diversion has long been used by managers as a performance motivator. The management principle states that if you encourage employees to divert their own attention away from their unpleasant or menial tasks to something more pleasant, their work performance will improve. This principle, no doubt, evolved in the days of the Egyptian pharaohs. Back in those days, the funeral homes employed corpse washers whose job it was to repeatedly dip their clients in a solution of salt and lye and attend to such matters as detaching the brain and drawing it out through the nose with pincers; rinsing out the entrails and placing them in jars; and various and sundry tasks. Needless to say, the tasks of the corpse washer were somewhat unpleasant and likely to foster motivational problems. But the high priests of the day allowed the boys a little diversion to keep them happy and motivated. The system was very simple. When the body of a young woman was brought in, rather than immediately throwing it into the bath of salt and lye, the corpse washers were allowed to draw lots to determine who might share, for one night, the lady's favors!

You will, no doubt, argue that pay is now the most commonly used method for encouraging employee motivation. While this is probably true, and while history is full of pertinent illustrations, pay is undoubtedly the least imaginative motivator. For this reason, I prefer to make only a passing note of pay and move on to the concept of "direction" as a motivator. Sometime around the mid-1800's, managers began to discover that by telling a person what to do, where to go, when to do it, and how to do it, some improvement in quantity and quality of workmanship would result. Frederick Taylor practiced this direction concept in a classical manner. As an employee of one of our nation's largest steel companies, Fred eventually became known as the father of scientific management. Fred discovered that steel yard employees were paid on a day work basis and, therefore, performed in a slow and phlegmatic manner. Through a series of directives, employees were assigned specific tasks to be performed on a piecework basis and paid accordingly. This combination of direction and reward for performing as directed did prove to motivate employees and the piecework incentive system still exists today as proof of its workability.

Henry Ford devised a system for employee motivation based on what management specialists now refer to as underutilization or work simplification. Henry believed that through the reduction of individual jobs to the fewest number of the simplest tasks, production could be increased. His theory was built on the assumption that employees are intellectually limited, so the simpler the task, the less likely they are to make mistakes. And, those employees making fewer mistakes will be happier and more highly motivated. Much contemporary research, however, is now showing that Henry's ideas are no longer universally applicable.

Mass Production

Ask any foreigner to characterize American industry and he will surely respond with a description of the principle of mass production. The management of our industrial complex is very much dependent on mass production and its underlying bases.

Was the concept of mass production born in the mind of a single man and then improved on with the passage of time? History will answer, "no." In fact, history shows us that mass production is not a singular concept, but a combination of four basic managerial principles, each of which evolved at different times.

One hundred years before the time of Henry Ford, Eli Whitney introduced the all-important **interchangeability of parts** principle. According to one historian, our country needed 10,000 muskets in a hurry because of an impending war with France. To achieve this production, machines would have to take the place of gunsmiths and their highly individualistic work. Eli disassembled 10 machine-made guns before a group of our military officers and astonished them all by assembling a musket with parts selected at random from various piles.

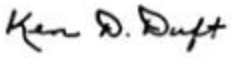
A second important principle of mass production -- **the automatic conveyance of work to and from the worker** -- was developed by Oliver Evans in 1783. Oliver invented three basic types of conveyors (belt, screw, and bucket) and applied them in grain mill production whereby two men could operate an entire mill.

The **division of labor** -- a third important element in mass production -- was first applied for high volume purposes by Elihu Root. As an employee of Samuel Colt (the famous gun maker), Elihu set up a factory in New Haven, Connecticut in 1849 which more than doubled Colt's output. This was accomplished when Elihu took a simple operation and made it even simpler and easier to do by inventing new machines to handle all non-craftsman tasks.

As already mentioned, Frederick Taylor came up with the fourth essential element in mass production, i.e., **the elimination of individual waste motion**. In those days, production was limited by the speed of the workers and not by the speed of the machines. With his handy little stopwatch, Fred became the first "efficiency expert" and found ways to eliminate wasted employee motion.

Summary

This paper professes no point of argument. It proposes no new management concepts nor answers any questions. It does little more than relate to the reader a series of historical incidents. Yet inherent within the historical review is an attempt to establish the origin of various managerial principles. Such principles as span of control, resource compatibility, contingency planning, work simplification and others are shown to have distinct historical links. It is hoped that through a better understanding of these historical links, agribusiness managers will develop a greater appreciation for their own profession.



Ken D. Duft
Extension Marketing Economist