

## QUALITY PHILOSOPHY IS A COMPETITIVE ADVANTAGE

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### ABSTRACT

*Traditionally, the term "management" refers to the activities (and often the group of people) involved in the four general functions: planning, organizing, leading and coordinating of resources. Note that the four functions recur throughout the organization and are highly integrated. Emerging trends in management include assertions that leading is different than managing, and that the nature of how the four functions are carried out must change to accommodate a "new paradigm" in management. This topic in the library helps the reader accomplish broad understanding of management (including traditional and emerging views), and the areas of knowledge and skills required to carry out the major functions of management. Contemporary theories of management tend to account for and help interpret the rapidly changing nature of today's organizational environments. As before in management history, these theories are prevalent in other sciences as well.*

**Key words:** Quality, Management, Philosophy

### 1.INTRODUCTION

Systems theory has had a significant effect on management science and understanding organizations. First, let's look at "what is a system?" A system is a collection of part unified to accomplish an overall goal. If one part of the system is removed, the nature of the system is changed as well. For example, a pile of sand is not a system. If one removes a sand particle, you've still got a pile of sand. However, a functioning car is a system. Remove the carburetor and you've no longer got a working car. A system can be looked at as having inputs, processes, outputs and outcomes. Systems share feedback among each of these four aspects of the systems.

Let's look at an organization. Inputs would include resources such as raw materials, money, technologies and people. These inputs go through a process where they're planned, organized, motivated and controlled, ultimately to meet the organization's goals. Outputs would be products or services to a market. Outcomes would be, e.g., enhanced quality of life or productivity for customers/clients, productivity. Feedback would be information from human resources carrying out the process, customers/clients using the products, etc. Feedback also comes from the larger environment of the organization, e.g., influences from government, society, economics, and technologies.

This overall system framework applies to any system, including subsystems (departments, programs, etc.) in the overall organization. Systems theory may seem quite basic. Yet, decades of management training and practices in the workplace have not followed this theory. Only recently, with tremendous changes facing organizations and how they operate, have educators and managers come to face this new way of looking at things. This interpretation has brought about a significant change (or paradigm shift) in the way management studies and approaches organizations.

The effect of systems theory in management is that writers, educators, consultants, etc. are helping managers to look at the organization from a broader perspective. Systems theory has brought a new perspective for managers to interpret patterns and events in the workplace.

They recognize the various parts of the organization, and, in particular, the interrelations of the parts, e.g., the coordination of central administration with its programs, engineering with manufacturing, supervisors with workers, etc.

This is a major development. In the past, managers typically took one part and focused on that. Then they moved all attention to another part. The problem was that an organization could, e.g., have a wonderful central administration and wonderful set of teachers, but the departments didn't synchronize at all.

## **2. WORKING SMART**

As chaotic and random as world events seem today, they seem as chaotic in organizations, too. Yet for decades, managers have acted on the basis that organizational events can always be controlled. A new theory (or some say "science"), chaos theory, recognizes that events indeed are rarely controlled. Many chaos theorists (as do systems theorists) refer to biological systems when explaining their theory.

They suggest that systems naturally go to more complexity, and as they do so, these systems become more volatile (or susceptible to cataclysmic events) and must expend more energy to maintain that complexity. As they expend more energy, they seek more structure to maintain stability. This trend continues until the system splits, combines with another complex system or falls apart entirely. Sound familiar? This trend is what many see as the trend in life, in organizations and the world in general.

Business planning is often conducted when:

- Starting a new venture (organization, product or service)
- Expanding a current organization, product or service
- Buying a current organization, product or service
- Working to improve the management of a current organization, product or service

There are a wide variety of formats for a business plan. The particular format and amount of content included in a plan depends on the complexity of the organization, product or service and on the demands of those who will use the business plan to make a decision, eg, an investor, funder, management, Board of Directors, etc.

Overall, the contents of a business plan typically aim to:

1. Describe the venture (new or current organization, product or service), often including its primary features, advantages and benefits
2. What the organization wants to do with it (buy it, expand it, etc.)
3. Justification that the plans are credible (eg, results of research that indicate the need for what the organization wants to do)
4. Marketing plans, including research results about how the venture will be marketed (eg, who the customers will be, any specific groups (or targets) of customers, why they need the venture (benefits they seek from the venture), how they will use the venture, what they will be willing to pay, how the venture will be advertised and promoted, etc.)
5. Staffing plans, including what expertise will be needed to build (sometimes included in business plans) and provide the venture on an ongoing basis
6. Management plans, including how the expertise will be organized, coordinated and led
7. Financial plans, including costs to build the venture (sometimes included in business plans), costs to operate the venture, expected revenue, budgets for each of the first

several years into the future, when the venture might break-even (begin making more money overall than it has cost), etc.

8. Appendices (there are a wide variety of materials included in appendices, eg, description of the overall organization, its other products and/or services, its current staff, etc.)

Nonprofit readers might notice that a business plan is very similar to a well designed grant proposal. In addition to the above items, a grant proposal might include itemization of any deficits (when expected expenses exceed expected revenues), which indicates the need for funding from the particular funder to which the grant proposal is being submitted. Also, a break-even analysis usually isn't included in a grant proposal.

Quite often, an organization's business planners already know much of what will go into a business plan (this is true for strategic planning, too). However, development of the business plan greatly helps to clarify the organization's plans and ensure that key leaders are all "on the same script". Far more important than the plan document, is the planning process itself.

Businesses, whether for-profit and nonprofit, are facing change like never before. Numerous driving forces to this change included a rapidly expanding marketplace (globalization), and increasing competition, diversity among consumers, and availability to new forms of technology. Creativity and innovation are often key to the success of a business, particularly when strategizing during strategic planning, and when designing new products and services.

### 3. EXAMPLES OF EARLY SUCCESS

- Florida Power & Light (FPL) reduced customer complaints by 60% and improved reliability of electric services to customers by 40% in 1983. In 1987, the firm was rated by 156 utility CEO's as the best managed utility in the nation.
- In its remittance banking or lock-box business, First Chicago's accuracy rate is nearly three times the industry average.
- Xerox has started to regain its market share in copiers from the Japanese.
- Ford now has one of the most popular cars purchased by Americans, the Taurus

Many of the TQM concepts originated with the work of Dr. W. Edwards Deming, the American statistician, who guided the Japanese industry's recovery after World War II and who formed many of his ideas during World War II when he taught American industries how to use statistical methods to improve the quality of military products.

While the Japanese listened to Deming American industry did not. For nearly two decades, before and after World War II, American businesses were preeminent. In this period of little foreign competition, American management methods were unchallenged and in hindsight, costly practices of traditional hierarchy took hold.

Meanwhile, industrial leaders in Japan, burdened with a reputation for poor quality, invited Dr. Deming to teach them his methods. Deming urged them to find out what their customers wanted, then study and improve the design and production processes until the quality of their product was unsurpassed. He urged a new style of management that shifts the focus from profits to quality. He reasoned that employees could learn how to monitor, control and continually improve their work processes and systems with the application of a scientific approach. With the collective attention of people to their work processes and their interdependency, they are better able to produce products that meet customer expectations.

With total quality control (TQM), decisions are based on data gathered with scientific tools and approaches. Products and services are improved by improving how the work gets done (the methods) instead of what is done (the results).

Deming pointed out what he saw as flaws in the traditional model of "management by objectives" which emphasizes a chain of command in which objectives are translated into work standards or quotas. He cautioned that with MBO the performance of employees is guided and evaluated according to numerical goals. As a result, workers, managers and supervisors get caught up in protecting themselves. Looking good overshadows a concern for the customer or the organization's long-term success. Employees, desperate to meet quotas, lose sight of the larger purpose of work. A common example is when sales people are pushed to boost business and make promises production can't keep.

With the change in focus, the roles of workers and managers are reformed. A manager's role is to enable employees to do the best job possible foreseeing and eliminating barriers that get in the way. Workers learn to apply the expertise they have gained working with processes and customers on a daily basis

Deming predicted the Japanese adoption of these methods would put their products in demand throughout the world in five years. He was wrong; within four years the Japanese had gained large shares of some markets.

#### **4. CONCLUSIONS**

The world of printed circuit boards encompasses a very broad range of technologies, and it gets broader all the time--more than 32 layers, very tight traces and spaces, flexible circuit technologies, tiny holes and so on. Our challenge is to focus our efforts on the subsets of those technologies. We don't remain static, but we do focus on "regular" technology (e.g., two to 12 layers) that we know we can reliably provide in very small quantities in a very small timeframe. There's that "small" word again, this time applied to the size of jobs we do and the range of specifications we embrace. Business on the small side--small orders, quick turnaround, a small set of core competencies, small and continuous process improvements--has been very good to Advanced Circuits. Eleven years after the first offshoring alarm, managing capacity is still the name of the game. We know how to play it better now. The rules continue to change, but knowing how to take advantage of the "holes" in printed circuit board solutions provided by larger competition has enabled our company to resist the offshoring threat. It's also allowed us to compete effectively with other U.S. manufacturers. What do I know now about competing with offshore providers? For us, the recipe for success contains three ingredients: maintaining a strong customer focus, utilizing technology and investing in people. Offshoring created business pain and an unfair cost advantage in favor of offshore providers, but simultaneously offered a diverging path to success. For us, the business of "small" is very big business indeed.

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