

LECTURA 1.

GLOBAL COMPETITION: THE NEW REALITY.

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In the 1960s, the formula for global success, according to researchers at Harvard, Columbia, Wharton, and other business schools was that products had a predictable "international" life cycle. The introduction stage is domestic, having its orientation in the country where the product was developed, typically and industrialized country such as the United States. Exports to other industrialized countries may support scale economies (the more you produce, the lower your cost). During the growth stage, exports increase, and foreign investments in manufacturing plants and marketing organizations are made in countries with and expanding demand for the product. In the maturity stage, when major markets are saturated and the product is standardized, manufacturing is relocated to countries with low labor costs (generally newly industrialized countries - NICs - and developing countries). Finally, in the stage of decline, manufacturing, and in some cases, even demand, leaves the industrial country which was home to the original innovation.

This "international product" lifecycle model was also acceptable to economists and finance experts who sought to predict the direction and extent of foreign investment; many of them advised large multinationals to make major foreign investments. The opinion of these experts was that multinational corporations (MNCs) needed to invest overseas primarily to realize immediate returns through advantages arising from location (e.g., access to markets, natural resources, low-cost labor, transportation). As a result, they generally recommended locating overseas only if there were substantial market access or cost-based advantages. And since this precept was based on some of the principles of classical economics, such as comparative advantage theory (some nations have inherent advantages such as available labor or mineral resources), both managers and academics felt they were on firm ground!

The "truths" were false.

These two "truths" of global competition - the international product lifecycle, and theory of foreign direct investment - appeared to hold true for a while, but the 1970s were not friendly to either academic theories or managerial intuition. First, Japanese production put U.S. industry into a defensive position, with the result that many U.S. companies were forced to go overseas in search of low-cost labor. Naturally, this low-cost position was not defensible for long, as renewed innovations in quality and productivity by a select set of U.S. and Japanese companies made it even more difficult to compete. Furthermore, the "hollowing out" of the U.S. rustbelt - the heart of industrial America for more than a half a century - led to a further decline in U.S. competitiveness.

Second, the reactive style of foreign investment by most American and European companies meant that the overseas factories in countries such as Taiwan, Thailand

Malaysia, Hong Kong, and Indonesia had few capabilities to sustain them, let alone contribute to the development and growth of the parent country. Even the host countries did not gain as much as they had hoped. Sure, foreign investors created new jobs, and many of them paid higher wages than traditional jobs. But, as any development economist would tell you today, the means of self-sustaining growth were lacking!

The World Today.

Today, the 60s model is looking rather tattered. Look at the most recent Fortune 500. Two facts stand out. First, there are several non-U.S., non-European, non-Japanese companies on the list. Korean, Hong Kong, and even a couple of Taiwanese companies are there. Second, if you research the foreign operations of some of these best companies, you'll find that they have truly invested in their foreign subsidiaries. Many of their research centers, leading-edge factories, innovative advertising, and best managers are in countries outside the usual circle of industrialized countries. Examples? Colgate-Palmolive has research centers in Brazil and Singapore. Whirlpool and Electrolux have centers of excellence in Singapore and India. Intel has leading-edge research labs in Taiwan and India. Microsoft has made surprisingly large investments in China and India. The list goes on.

Look at it another way. Technology is everywhere. For example, thousands of Chinese farmers use cellular phones. What this means is that users in some of the least developed countries in the world won't accept outdated technology. And, with the Internet breaking down boundaries, no one wants second class products anymore.

Is management the greatest strength of the U.S. and Europe? If you look at some of the well-managed Asian factories, or talk to some of the savvy managers, in Asian and African countries, you'll realize the fallacy of this perception. Sure we have the largest number of business schools. But, management knowledge is now a "free" resource; we train several thousand foreign managers every year. And that doesn't even begin to include the abundance of local managerial wisdom in some of the small firms in many so-called developing countries.

National governments have become noticeably more involved in attracting foreign investments. They know that their economies are important to multinationals. And they are no longer naive enough to accept second-hand technology.

How Did This Happen?

Several trends and events have contributed to the change. On the resource side, whereas industrialized countries have traditionally sought natural resources or low cost labor (i.e., those resources in which their countries may be disadvantaged), several developing countries have recognized the reinforcing effect of technology and have made special efforts to acquire it. Over time, firms from NICs, LDCs and developing countries gradually acquire technology and skills, and if they have the opportunity, often achieve higher performance than industrialized countries.

The 1950s and 1960s were a period of great "brain-drain" to the west, especially from countries such as Taiwan, Singapore, Korea, and India. However, in the past two

decades, several countries have been able to reverse this drain through special efforts by their governments. Engineers, scientists, and managers, trained in U.S. and European universities and companies, have been gradually returning to their home countries, and helping in the rise of many fast-growing companies.

No country now has a really sustainable lead over others as far as managerial talent and practices are concerned. Further, while an educational and managerial infrastructure helps, the continual diffusion of management practices, e.g., total quality management - through education, books, and consultants - quickly levels the field.

For example, the authors of "The Machine That Changed the World" (Womack & Roos, 1990), while presenting the results of the International Motor Vehicle Program (IMVP) research on the auto industry, state that the traditional view, whereby the "... world economy advanced by moving the production of standardized, low-priced products - such as small automobiles and trucks - to new mass-production factories in newly industrializing countries..." clashes with the push towards lean production worldwide.

This, they predict, will lead to a new world economic order in which there will be greater equality, and as a result, an increased flow of products, but overall a regional balance of trade flows.

They cite the example of the Korean auto industry. Starting as low - cost exporters, Korean auto producers now compete, on quality and performance, and have established production facilities in the U.S. and Europe."... The idea of a company from a developing country building a major manufacturing facility in a highly developed, high-wage country would have been unthinkable (a few years back)..."

Government incentives work, and very well sometimes. In a recent business bestseller, "Competing for the Future," Professors Gary Hamel and C.K. Prahalad argue that somewhat equitable economic progress is now to be expected in a world where capital, technology, and managerial talent are internationally mobile. In the context of the dramatic progress in some parts of China, they argue that "... The unfettered capitalism of the Chinese Diaspora in Taiwan, Hong Kong, and southern China has produced an economic miracle every bit the equal of Japan's..."

A View through the Picture Tubes.

Over the years, I've been studying several global industries, and I have very explicit data from one of these industries, the global picture tube industry (the ubiquitous component of television sets and computer monitors). During the past four years, I've gathered data from virtually every company and plant in the world involved in manufacturing color picture tubes - nearly 20 companies and 54 plants.

When I looked at plant performance, I found an interesting distribution. First of all, all couple of the best plants in the world were owned and located in Taiwan; several others were located in Singapore, Thailand, and Korea.

As a next step, I divided the 54 plants into three groups. Technology leaders were those plants which were playing a key role in the development of new products and technologies. Quality improvers were making minor improvements in quality and productivity, though they were focused on improving management practices, too. The defender plants appeared to be quite "confused", and lagged behind in performance. An analysis of the global distribution of these plant groupings was revealing.

A large number of technology leaders were located in Asian countries outside Japan. And several of them were located outside their "home" countries. Also surprising was the large number of defenders in industrialized countries.

So, What Does Global Competition Mean?

It is no longer the prerogative of industrialized countries in North America and Europe to be leaders in the use of new product technology, production competence, management excellence, and the adoption of new products by consumers.

Competitive advantage no longer appears to be based merely on comparative advantage. Instead, it stems from investments in technology, skills and managerial talent. The world has changed; take a look at the table below.

While there are many lessons from this comparison of competition, thirty years back with today's "state of the world", there are three key points for managers of existing and hopeful global companies:

Capabilities are everywhere. Contrary to the beliefs of the classical economists, comparative advantage is becoming an outdated notion. There is no dearth of technical and managerial skills in many parts of the world. New markets are emerging, and those companies with the ability to leverage their skills will emerge the victors.

In many cases, it does not matter where a particular facility (factory or R&D center) is located. The new global organization is a network of capabilities, and needs to be managed as such. While logistics costs are definitely important, and should figure in any analysis, management of the network - via exchange of technology, knowledge, and responsibilities - will be a key factor that distinguishes the successful multinational company from the also-rans.

Leadership in the technology is not enough. There are those managers who believe that since the U.S. has leadership in the Internet and the information highway, it will necessarily retain global economic leadership in years to come. True, the Internet will be a backbone of global commerce. But it will still be only a small part of the global economy. Such is the new reality of global competition.

GLOBAL COMPETITION: THE OLD REALITIES AND THE NEW

	OLD	NEW
Implicit Assumptions about Competition and Markets	<p>A. Governments are largely neutral</p> <p>B. "Sophisticated" consumers are only in developed countries</p> <p>C. Higher skills are found mainly in developed countries</p> <p>D. Technological adaptation follows a predictable pattern</p> <p>E. Product life cycles are long enough to enable internationalization process models to manifest themselves</p> <p>F. MNCs are centralized; headquarters control knowledge and information, and are all-powerful</p>	<p>A. Governments are active participants in defining which, how, and where products are made and sold</p> <p>B. Many countries have both "sophisticated" and "unsophisticated" consumers</p> <p>C. Highly skilled people are found in significant numbers in many less developed countries and low skilled workers are found in large numbers in developed countries</p> <p>D. Both product and process technological adaptation can leapfrog</p> <p>E. Product life cycles for many products are very short</p> <p>F. MNCs are a network of differentiated capabilities.</p>
Theoretical Predictions and Realities	<p>A. Use sophisticated process technologies at home, outsource low tech labor intensive operations to less developed countries; move mature technologies to less developed countries</p> <p>B. Treat plants as stand-alone or as part of vertically integrated chain</p> <p>C. Sell the most recently developed and sophisticated products at home, sell mature and simpler products in less developed countries.</p>	<p>A. Use sophisticated process technologies at home and abroad; intentionally leapfrog when justified</p> <p>B. Treat plants as part of a network</p> <p>C. Sell most recently developed "global" products globally; leapfrog product classes when conditions justify</p>

Fuente: Anil Khurana, "Global Competition: The New Reality"; en Revista The Manager, Boston University School of Management, Spring 1997, pp. 25-27

LECTURA 2:

TOTAL QUALITY MANAGEMENT: WILL WE EVER LEARN?

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"This approach is rooted in a comprehensive grasp of the concepts and skills for total quality management"

That is the final sentence of our School's three-sentence vision statement, prepared in 1991. Back then, we carefully avoided capitalizing the words "total quality management" because, we believed, it would be only a matter of time before America grew tired of the expression "TQM", if not bored with the idea itself. On that score, our hunch was correct.

The popular business press, over the past two years, has generally debunked the notion of Total Quality Management. We've moved on, so we read, to the newer concepts of "Process Reengineering", "Intelligent (or Learning) Organizations", "Mass Customization", "Integrated Supply Chain Management," "Time-based Management" and other (many of which, ironically, derive from the principles of Total Quality Management).

Considering the drumbeat of criticism that Total Quality Management is ridiculous, too formulaic, or management by sloganeering, I was fascinated by the scholarly research undertaken by Professors George S. Easton and Sherry I. Jarrell of Emory University. In an upcoming Journal of Business article that addresses the effect of Total Quality Management on financial performance, they present very powerful evidence that belies the current disaffection with TQM.

Based on a comprehensive study of 108 firms that began implementation of TQM during a ten-year period, Easton and Jarrell found that "performance measured by profit margin, return on assets, asset use efficiency, and excess stock returns is improved for the sample of firms that adopted TQM". They go on: "For firms with more advanced TQM systems, the improvement in financial performance is notably and consistently stronger." The researchers went so far as to measure the association between performance and changes in number of employees to determine if downsizing was a key driver of the improved performance. Their conclusion: "The data do not support this hypothesis".

Well !

Last October, our School of Management's Manufacturing Roundtable published its most recent U.S. Manufacturing futures Survey. Professor Jay Kim, its author, reported that the 134 respondent companies are seeing declining impact from their continuous improvement efforts ("continuous improvement" being a key pillar of total quality management). That same survey, ironically, reported that the 320 Japanese and European companies that

were surveyed "report healthier progress in their manufacturing improvement". That Futures Survey continues, "Leading Japanese manufacturers improved their productivity and cost measures at much higher rate over the last two years, a remarkable payoff for their effort to overcome the difficult business environment created by the recent recession and unfavorable exchange rates. "(Witness the spate of recent press reports about the reignited "car wars" in the United States resulting from the Japanese manufacturers new price competitiveness.)

This is specially telling because the Japanese, in particular, have been working assiduously under the management principles embodied in the Total Quality Management ethic since the mid 1940's -and apparently are not yet bored with the idea; In contrast, American companies attempted to embrace some or all the principles of TQM for about fifteen years, 1980 to 1995, before seeming to lose interest.

In America, our interest in TQM dates to a 1980 NBC television special entitled "If Japan can , Why Can't We?" That program served to introduce to American business the then 80 year-old American statistician and management expert, W. Edwards Deming. Relatively unknown in his own country until that time, Dr. Deming had worked in Japan in the late 1940's and 1950's, invited by General MacArthur's post-war reconstruction team. It was Dr. Deming who brought to Japanese industry the statistical concept of continuous improvement, first to manufacturing process and then to other aspects of business. He espoused the notion that quality could not be "inspected in", it had to be "designed and factored in." The Japanese have *institutionalized* much of Dr. Deming's thinking.

Total Quality Management, if incorporated into the culture of an organization, doesn't need a name. It simply becomes the way things are done. (In fact, Dr. Deming himself eschewed the expression "Total Quality Management.") Recent findings of our Manufacturing Futures Survey suggest that Japanese managers continue to emphasize the fundamentals despite their exchange rate difficulties and Japan's domestic recession.

If we can step back from the slogans and revisit the simple principles embodied in the management approach that has been given the name "Total Quality Management," it might be instructive. There are five essential concepts, most succinctly labeled by our SMG colleague, Professor George Labovitz:

- Customer Focus
- Management by Facts
- Continuous Improvement
- Total Involvement
- Systemic Support

Customer Focus: Every business exists, in the final analysis, to meet some customer need for a product or service. No customers, no business. Focusing on the customers, no business. Focusing on the customer means understanding his/her lifestyle (or business needs, in the case of an industrial customer). It means understanding how your business's technology or specific competence can help the customer, usually in ways the customer couldn't anticipate.

Dr. Deming was fond of saying that no customer ever asked for a microwave oven, or a Walkman or a laser printer. The customer wouldn't know how to describe these products nor would the customer be familiar with the technology that makes them possible. The customer could, of course, express an interest in a faster cooking device, or a mobile entertainment system, or a quiet and speedy printer. "Only producers invent, not customers," the late Dr. Deming would say. That kind of focus on the customer is one element of this first principle of Total Quality Management.

Another has to do with the notion of internal vs. External customers. Every worker and every manager has internal customers, namely others in the organization impacted by their work. In a truly customer-driven organization, there is intense attention not only to the final, end-user customers, but to the impact of one's work on his/her internal customers as well. And there are statistical means of assessing and tracking that impact. Very few organizations, business or otherwise, when measured against this standard, can claim to be truly customer-focused.

Too often, firms initiate regular customer satisfaction surveys (as desirable as they may be) and assume that they are therefore turned into their customers. Such surveys are only a baby step toward becoming a truly customer-focused organization.

Management by facts: Management as a practice is always dealing with facts, data, information. This principle of TQM has to do with the "essential" facts. What are the absolutely key drivers that make for success in an organization? The answer to that question is not always self-evident. It takes serious management discipline (and often study) to identify the really critical indices in a virtual sea of data. Having been identified, those indices, and the facts which drive them, become the central focus of management energy and attention.

Continuous improvement: Once the key facts are identified for each element of an organization, it is possible to apply statistical techniques to monitor continuous improvement. The basic notion is that every process can be continuously improved. On the assumption that mere mortals cannot expect to achieve perfection, approaching perfection becomes the goal. Through the use of statistical methods, we can reduce variability, identify special causes, and improve the quality of the processes (and the resultant product or service).

The concept of continuous improvement can be applied across a wide spectrum of repeatable activities- in business, in government or non-profit organizations, and in health care. A dramatic example would be the Northern New England Cardiovascular Disease Study Group's eight-year data gathering effort which actually changed and improved cardiac surgical techniques for surgeons over a three-state area.

Total involvement: In an organization that is truly customer-focused- including both internal, and external customer -one would expect that every member of the organization should be committed to, and involved in, the company's success. Under this rubric, employees at all levels are assumed to be hired for their hearts, minds, and spirits, not simply for their arms and legs. No one in management usually knows a job as well as the

person doing it. Unless each worker believes that an essential part of his/her responsibility is to improve both one's own job and the overall organization's performance, operating results will invariably fall far short of optimum.

Total involvement also suggest a more integrated relationship with suppliers as well as with all other "stakeholders" including the community and the wider society served or affected by the firm.

The increasing attention to "teaming" in American industry reflects the growing realization that traditional management systems cannot produce the essential compromises necessary to optimize the organization's results. But teams can be effective only if the participants have a real sense of involvement and if they are supported by management systems which encourage and reward the compromises required to optimize the overall company performance. That brings us to the final principle of TQM

Systemic Support: Reduce to its simplest, a "management system" is

a)What is measured, b) how rewards are meted out, and c) what "signals" are given off by management behavior. None of the initiatives of Total Quality Management can be successful if there is not a management system supporting what the organization has set out to achieve. For example, senior management can proselytize endlessly about the importance of quality, but if the management system focuses on cost, the organization will choose to manage cost before quality. Ironically, a true focus on quality should reduce real costs in ways that traditional cost control systems fail to do. Our School's latest Manufacturing Futures Survey bears out that reality.

Systemic support is also important because managing for total quality is not simply a matter of good intentions. The annals of bankruptcy are replete with stories of good intentions. Intentions need to be supported by management systems that measure the right things, focus on continuous improvement, and reward the behavior that produces the best overall company results. Developing and implementing supportive management systems should be the highest priority, if the single most difficult challenge, for any manager. It is, unfortunately, easily and often ignored. It's ignored because it is so difficult and because it challenges the comfort level of executives who feel they know well and can work with the existing management system. In my own experience, it seems patently true that every management system is perfectly designed to get the results it is getting. If that is so, and if too many firms are underperforming their potential, then it follows that most management systems are, in fact, not "supportive."

In reviewing these five principles of Total Quality Management, it's hard to imagine a time - or a place- where they would not apply. And it won't matter what name is given to them. Hence, when we speak of total quality management in our School '2 vision statement, it is because we are convinced that for centuries, the most effective leaders will always want to manage for total quality. And, of course, effective leadership, which provides the "what" of strategic direction, continues to be essential even in an environment where TQM provides the "how" of execution.

"Total quality" translates to products or service that meet or exceed customer needs and represent good value. It also means that internal customers are satisfied, and that meet or exceed customer needs and represent good value. It also means that internal customers are satisfied, and that as a consequence of meeting effectively the needs of the internal and external customers, shareholders are rewarded handsomely. That is, in fact, the key finding of the Easton Jarrel research.

In an environment of short attention spans and "flavor of the month" management theories, the key question remains : **will we ever learn?**

Louis E. Lataif

"Total Quality Management: Will We Ever Learn?" *Commentary*
The Manager, Boston University of Management
Spring 1997, pp 38-40.