Shifting Paradigms: The New Informated Business Architecture

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This paper explores shifting business paradigms and presents a new informated business architecture for global competition. The paper explores four graphic models of paradigm shifts in the scope of shifting: power, strategic resources, enterprise structure, and management control. Finally a new set of post-modern business rules is offered.

The playing field for business has increasingly expanded and now includes the electronic global village. The village is less polar and more driven by market demand rather than the military industrial complex. The key strategic resources are the knowledge workers who work locally but think and profit globally, within a borderless enterprise. The new paradigm requires imagination and applied knowledge within a vastly shorter time span. Business is effective only to the extent that its knowledge workers participate in the electronic global village.

Introduction

The fall of the Berlin Wall, the collapse of the Warsaw Pact and the disintegration of the Soviet Union as the 20th century nears its close are certainly monumental events in the history of the human race. Almost unnoticed, but just as monumental, are the evolutionary changes taking place in business organizations and in the managers who run them. The business community is shifting its paradigms and the manner in which it does business.

To avoid “Future Shock” one must look beyond the trends of the past and discover the rules that will govern business in the Twenty-First Century, the Information Age. By knowing the nature of such changes and how to anticipate them, the strategist can elicit extraordinary leverage in shaping the future. Drucker (1980) in Managing Turbulent Times, writes that one of the most important skills during times of turbulence is anticipation. Barker (1992) in Future Edge says that good anticipation is the result of good strategic exploration which is composed of influence, understanding, divergent thinking, convergent thinking, mapping, and imaging. This paper explores the effects of the information age (Figure 1), upon the global business enterprise, which is shifting from an old paradigm to a new one, in the way Kuhn (1970) described paradigm shifts in science in The Structure of Scientific Revolutions. We will also suggest that since all major business dimensions have shifted paradigms, a new era in business requires a new set of rules.

This paper offers an integrative strategic model for a new informated business architecture that operates in the new Electronic Global Village (Targowski 1991, 1996). In this village, planet Earth, computers, communications and cognition (3C) will globally connect islands of business, customers, and citizens between diminishing national boundaries. These new tools develop computer and human networking within a new informed, more abstract, or icon driven environment (Tapscott and Caston 1993).

1. Shift of Power

The most easily recognized paradigm shift is that of power: political, economic and social.

a. Political Perspective

At the end of World War II, the United States was preeminent in all areas of commerce and industry with 52% of the world’s GNP. This singular leadership by Pax Americana was seriously eroded during the decade of the 1980’s and has evaporated altogether with the collapse of the Soviet Union and the reemergence of Japan and Germany as economic superpowers. Perhaps the most dramatic shifts of the second half of the twentieth century occurred in the areas of political, economic and social power. The polar competition between capitalism and communism ended with a singular unboastful victor while the former communists are transforming themselves into fledgling democracies (Huntington, 1996; Talbott, 1996).

b. Economic Perspective

The year 1991 marked the end of the old military industrial arms race and the beginning of economic warfare conducted by stateless corporations (Korten, 1995). Since 1991, large corporations have moved away from local or national boundaries toward cosmopolitan and global ones without borders. For example IBM had 62% of its sales in...
countries other than the U.S. Similarly, Colgate had 64% of its sales outside of the U.S. while Coca-Cola did 54% of its business abroad (1991, Annual Reports). In these instances, companies thought to be American are in fact global competitors, serving global markets, with global products. But to whom are they responsible? They wield the power and financial resources that rival that of many nations. This shift from local to global has eroded the power of a single nation. For centuries many corporations served their own nation, while today many nations serve as markets for the multinational corporations (Cox, 1987).

This change of a global environment has led to changes in regulation—the creation of G-7, changes in production and marketing—from mass consumption to highly differentiated global markets; changes in employment—from full employment to structured unemployment; changes in organization design—from hierarchical core units to joint ventures, peripheral units and expanded partnerships or Keiretsu; and changes in the state, from a military-welfare society, to an industrially competitive self-supporting society (Elliott 1996).

c. Social Perspective

For most of mankind’s history the individual worked either on the farm or as a craftsman and was solely responsible to himself or the guild, with a resulting per capita income of approximately $300 per year. The industrial revolution was started in England at the end of the eighteenth century by entrepreneurs and their families, an event that radically transformed productivity and personal income. Men such as John Rockefeller, Henry Ford, Andrew Carnegie created, financed and managed their own business. These early entrepreneurs were the first capitalists and their offspring today control at least 25% of the stock in over one third of the present day Fortune 500. During the first half of the twentieth century, the role of the capitalist was assumed by individual stockholders, while entrepreneurs provided the knowledge and the vision, but not necessarily the capital to start a business. By 1950 “managerial capitalism had gained ascendancy over family and financial capitalism.” Today the managerial class is the “largest single group in the labor force” (Financial World, 1992).

This shift in economic power has had a great impact upon the blue collar workforce. Prior to the 1980’s the manufacturing cost of direct labor was approximately 25% of sales and almost a third of the workforce was employed in manufacturing. Today, the U.S. average cost for direct labor in manufacturing is approximately 3% of sales while fewer than 16% of the workforce is employed in manufacturing. The collective voice of labor has also been muted. Union membership among manufacturing workers had a post war high of 25% in the 1950s, while today barely 10% of all U.S. manufacturing workers are unionized (Krugman, Forbes, Lawrence, 1996). The evolution of social power is shown as a model on Figure 1.

2. Shift in Strategic Resources

The raw materials paradigm will actually shift along two dimensions: from more resources to fewer resources, and from quantity and quality to the timeliness of resources. Plastics and synthetic materials actually replace heavier, more labor intensive and scarcer materials such as the vacuum tube was replaced by the smaller, more knowledge intensive, but less labor intensive transistor, which in turn was replaced by silicon chips and now by molecular size chips etched by single electrons. Even automobiles have fewer parts, fewer cylinders, with less direct labor, and a tremendous increase in quality. Fewer parts, less labor and diminished resources actually resulted in a better automobile. New electric motors have fewer parts, require less direct labor to produce, less electricity to run, and are virtually maintenance free. Total product redesign adds product value by employing fewer resources.

The other paradigm shift (Figure 2) involves product development. Companies no longer have the luxury of waiting decades to see new products or technologies brought to market. Computer producers would love to have the luxury of more time between development cycles, but neither the competition nor the customer will allow it. Service companies

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**Figure 1: From the Hierarchy to Networking**

The Birth of Business Modern Era

1800’s – 1970’s
expanding organization tower
“SEARS”

1970’s –
shrinking organization tower
“The Gap”

1990’s
expanding networking society
“Multi-level Marketing”

The End of Social Modern Era

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