

**PARADIGM SHIFTS -
IMPLICATIONS FOR INDIVIDUALS
AND ORGANISATIONS**

By

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ABSTRACT

A paradigm is a set of beliefs that are used to set boundaries and focus problem solving. A paradigm shift occurs whenever a new analytic framework changes the understanding of the way a system operates. In this article the paradigm shifts in the family system, political systems, man management, health care, information technology, human resource management, marketing, retailing and management education are discussed. Their implications to individuals and organisations are also elaborated.

PARADIGM SHIFTS - IMPLICATIONS FOR INDIVIDUALS AND ORGANISATIONS

We are in the midst of unparalleled change. New developments in science and technology have made many established theories out of date. New theories of the type put forward by great scientists like Newton and Galileo are reported more frequently. What was considered to be true and unalterable for centuries get changed several times in ones own lifetime. The shifts are so rapid that, Chan Heng Chee says there is today no ringing model anywhere in the world that has worked completely well.

Science historian Thomas Kuhn observed that a paradigm shift occurs whenever a new analytic framework changes the understanding of the way a system operates. A paradigm is a set of beliefs that are used to set boundaries and focus problem solving. Kuhn's paradigm-shift hypothesis has become influential beyond the worlds of pure science and academe. Business leaders today are routinely admonished to shift their paradigm or be left behind. The paradigm shifting is seen as the key to innovation or the pathway to progress. In this article we shall examine some of the key shifts that are occurring in the social and business environment and their implications to individuals and organisations.

Shifts in the Family;

In the Indian scenario we see a shift from Joint family system to nuclear families necessitated due to migration of people to the cities for employment. A number of people still long for the old joint family system though it is not feasible in the present context. As a consequence of this change, a large number of old people are left in the lurch. Hence we see the arrival of old age homes. A whole lot of people have started preparing for their old age during their prime earning days itself. The social norm that the sons should look after their aged parents is becoming a thing of the past. Of course, we still have people caught in the transition phase who live with the guilt feeling that they are not in a position to look after their parents.

In the western society, we see the breaking of the institution called marriage itself. Alvin Tofler observes that the nuclear family can no longer serve as the ideal model for society. He talks of the emergence and existence of a bewildering array of family forms such as homosexual marriages, communes, groups of elderly people banding together to share expenses (and sometimes sex), tribal groupings among certain ethnic minorities and so on. There are also contract marriages for short periods and in many cases people^{are} simply living together.

However the transition from nuclear family form to newer forms will be traumatic. In order to make this easier, we need changes in many aspects ranging from morality to employment practices.

Life Time Employment To Just In Time Employment:

With the environmental turbulence, economic upheavals and fierce competition, the life of organisations are getting shorter and shorter. Consequently the concept of life-time employment is giving way to just-in-time employment. According to Caudron, temporary hires, independent contractors, leased employees and part-timers comprise an estimated 20% of the work force in the US. If the current growth rate continues, up to 1/3 of all individuals will be employed on an as-needed basis within 10 years, creating many problems for human resources (HR) departments. HR professionals will have to learn how to staff and manage the contingency work force to the benefit of the company and all its various employees. HR personnel also will have to learn to evaluate a company's staffing needs and determine, in advance, which employees should form the core work force and what positions can be more fluid. The paradigm shift between life-time employment and just-in-time employment is difficult to understand, but HR professionals who acknowledge the transition will be better able to manage it .

Shifts in Politics:

Political ideologies keep shifting at a faster rate. From being a socialistic, democratic country we are moving towards free-market economy. This kind of shift is occurring all over the world. Naisbitt calls it a shift from central government to individual empowerment:

From public housing to homeownership

From national health service to private options

From government regulation to market mechanism

From welfare to workfare

From collectivism to individualism

From government monopoly to competitive enterprise

From state industries to privatized companies

From state industries to employee ownership

From government Social Security Plans to private

insurance and investment

From tax burdens to tax reductions

What is interesting to note is that even those with communist ideologies are embracing market mechanism to bring prosperity to the masses. Maibach also predicts that power will shift from Washington to state and local governments - as well as to individuals, their families, and their businesses.

As is evident in the fall of the Russian empire, world over countries are giving-up their socialistic and Marxist ideologies in favour of market economy and private enterprises. This is resulting in privatisation of public sector, less regulation of most industries and development of pro-competitive policies to encourage innovation and efficiency of different sectors of the economy. This has led to the birth of global markets .

Countries that talked about 'self-reliance' are all giving up their ideals in favour of market driven economy. The days when foreign investments were loathed are gone. Countries are vying with each other to woo multinationals to invest in their countries by offering tax benefits and other incentives. There are no entry barriers or exit barriers for global companies. There are no restrictions on how much money that can be re-patriated. No foreign exchange regulations to harass the multinational companies.

In this changed scenario, countries can no longer take shelter under bi-lateral trade agreements and political alliances to keep up their export earnings. This has been proved right in the case of Indian exports to Russia. All those who operated under the protection of Rupee-Ruble exchange system, are finding it difficult to compete in the hot-currency market. They have to become globally competitive if they have to win back the Russian market.

National to Global Shift:

With the arrival of satellite television and increased air travel, the world is becoming a global village. Hence the national boundaries are cracking up. No nation can artificially erect barriers and deprive its citizens of the better products or services from around the world. Hence trade has become global. What we witness today is the globalisation of markets.

With the flow of products/services, people, money and information across countries without much of governmental interference, more and more companies are going global. With global sourcing and global markets, companies are able to gain competitive advantage over other companies. Most of the sports shoes sold in Europe, bearing American brand names are actually manufactured in Taiwan. The one hundred percent American car, made by General Motors and bearing the label 'Made in America', has most of its parts sourced from various parts of the globe. For example, Sundaram Fasteners supply radiator caps to General Motors.

Whole world is becoming a single global market. If any country tries to control the flow of goods from one country to another, they will find entry through the grey market. Consider for example the amount of smuggled watches and other electronic gadgets sold in India. Hence in one sense when we say we have decontrolled many rules and regulations, it simple means that we have reached a stage where we cannot control anymore and hence the decontrol. At the cash counter, the consumers have no concern for patriotism nor job losses.

Companies can no longer expect to get protection from the government. Whether we like it or not, companies will have to incorporate global perspective in their strategic and operational planning processes to include global competition and sourcing. According to Theodore Levitt, the new commercial reality is the emergence of global markets for standardized consumer products on a previously unimagined scale of magnitude. Corporations geared to this new reality benefit from enormous economies of scale in production, marketing, and

management. By translating these benefits into reduced world prices, they can decimate competitors that still live in the disabling grip of old assumptions about how the world works.

Of the top 25 companies in the Fortune 500 list from 1955, five are out of business, 6 are not in the top 25 anymore, and 2 are not in the top 100. These companies had total command of their market positions, yet somehow they managed to fail. The lesson is that companies must learn to accept change and adapt or they are going to be destroyed by paradigm shifts.

Shift from low-tech to high-tech:

Developments and advances in technology have changed the way the business used to be conducted. The most significant developments are due to improvements in electronics leading to computerization of every aspect of business. Rail reservations, banking, scheduling, inventory, pay-roll, accounting and production have all come under computerization. Another interesting development is the availability of databases. We have data bases covering a large number of areas, including product-markets, import-exports, companies, arts, science and medicine. Any information can be obtained by the press of a button. Computers have made the task of search and scan much lighter and speedier.

Advances in telecommunications and information technologies have reduced the time and place barriers of doing business. Companies have dedicated satellites across the globe to pass information from one division to another. A company like American Express, which has the largest number of credit cards in circulation, is able to make claims that they could service customers in any part of the globe within eight hours; thanks to the satellite communication.

Improvements in optical fiber technology, videophone and teleconferencing facilities are likely to make air-travel across the globe redundant. It is possible for customers and suppliers to transact business at anytime from any part of the globe. No wonder the world over the airline industry is facing a recession. Of course, it is only the business travel that is coming down while the tourists traffic is on the rise.

Research on superconductivity, bio-technology and ceramic materials are likely to bring about major improvements in the quality of life. Already, electronics advances are resulting in market egalitarianism. Luxury and comfort are now within the reach of even the common man; thanks to advances in technology. The field of Fuzzy Logic has already contributed to the development of a number of smart products: "intelligent washing machines, microwaves, cameras, camcorders, automobiles. Toss a load of clothes into a fuzzy washer and press start, and the machine begins to churn, automatically choosing the best cycle. Place chili, potatoes, or lasagna in a fuzzy microwave and push a single button, and it cooks for the right time at the proper temperature....". There are smart toilets available in Japan that spray warm water like a bidet,

blow warm air to dry and dispense scent. According to Davis and Davidson new models analyse urine and measure body temperature, weight, blood pressure and pulse.

Basically, consumers select from a confusing array of new and increasingly complex products, and they complain because of inadequate product service and a high rate of product obsolescence. A decade ago, possessing a black and white Television was considered a status symbol. Today the colour television is becoming a necessary item. Cooking used to be a simple affair for our grandmothers. The modern kitchen is full of gadgets, like, gas stove, pressure cooker, electric mixer, electric grinder, microwave oven, water filter and so on. Imagine the effect on lifestyles of the modern housewives if these items were banned due to change in government policies!

According to Dziatkiewicz, Cinema of the Future provides a new way to distribute and show motion pictures. Digital file servers replace film and digital transmission substitutes for 18-wheel distribution. Cable and telephone companies are testing similar delivery vehicles as part of video-on-demand and interactive service trials. Quality comes from high definition television (HDTV) signals. Telecine equipment converts film to tape in an HDTV format. The theaters of the future will be multi-use venues, showing closed-circuit pay-per-view events such as sports, concerts or plays, business conferences for new product introductions or major announcements, and interactive live-action adventure ideas.

Health Care:

Consumers' awareness about allopathic drugs and their side effects is on the rise. The days when doctors were revered are a thing of the past. Increasingly doctors are drawn to courts for lack of professionalism and poor service. Consequently the shift to ayurvedic and homeopathic treatments is also seen all over the country. Globally there is a shift towards, natural medicines. Also the food habits are getting altered for better health. Preprocessed and packaged food items are seen as junk foods and people are shifting to fresh items. Additionally there is a shift to vegetarianism all over the world.

Troy talks of the paradigm shift in US from managing care for individuals to managing the health of entire communities. Rice elaborates this as shift from: episodic interventions with patients to continuous support of entire communities, from restoring health, patient-by-patient, to protecting and promoting the health status of the community as a whole, and from planning service delivery to population-based community health planning. Comprehensive community health planning is essentially a 2-step process: assessment and action - in that order. Assessment identifies community problems and resources; action follows planning, which determines which of those problems should be addressed with which resources.

Personnel to Human Resource Management:

From the time men were clubbed with materials, machines and money the management theorists have come a long way in recognizing the potential of people. This is evident from the shift from personnel to human resources management. Even the highly automated factory will require human intervention of the highest order.

Control - Empowerment - Liberation:

In terms of getting the best out of people, behavioural scientists put forward a number of theories of motivation. McGregor's theory Y, Herzberg's two factor theory are the most notable among them. Then the emphasis shifted from motivating people to empowering people. Tongren says that organizations today are undergoing a substantial paradigm shift and replacing control techniques such as authorization, approval, and review with empowerment, trust, and accountability. The latest concept is liberation of employees by giving them enough autonomy and a share in the business.

Manager to Leader:

Executives, managers, supervisors and employees now face simultaneous challenges: borderless competition, new alliances, outsourcing, diversity, total quality demands and technology evolution. Many organizations that have stayed ahead of their competitors by making only linear, incremental changes suddenly discover that they have slipped behind or are

headed in the wrong direction. Therefore we need more of leaders with vision and foresight to manage today's organisations. Hyden says that there are too many managers and not enough leaders. The paradigm shift taking place today is from management to leadership. The core competencies of a leader are creating more leaders, empowerment, communication, vision, patience, and strategic thinking.

Computerisation to Reengineering:

There is a major shift taking place in the use of computers in organisations. Traditionally computers were used to automate processes that were carried out manually. This gave the companies certain advantages in terms of speed, accuracy and efficiency. Currently people are talking about strategic use of information technology. The questions typically asked are, "Can I use IT to change the way I do business? or Can I gain competitive advantage?" The buzzword in the IT industry and management circles today is reengineering.

There has been an explosion of interest and practice in industry on information technology (IT)-based Business Process Reengineering (BPR). According to Kim, the 'paradigm' in IT has shifted since the 1980s, including software and hardware. This paradigm shift in IT is drastically changing the way of operating businesses. A successful BPR implementation would be very difficult without exploiting the new IT infrastructure. Function-oriented structured analysis methods are not prepared to exploit the new IT environment, and they are not suitable for implementing information systems for BPR. A new analysis methodology for BPR should specify

explicitly data and cross-functional processes, independent of any particular implementation details.

Mass Marketing to STP to Relationship Marketing:

The field of marketing is witnessing the emergence of new concepts at a rapid rate. From mass marketing of standard products, we had an era of marketing to selected segments. During this era the emphasis was on identifying the target market of consumers having uniform demand requirements and positioning the product or service to meet those specific needs. This is popularly known as STP model, viz. Segmentation, Target Market and Positioning Model. However with improved technology we are in a position to now build relationship with individual customers and meet their specific needs through products custom-built to individual requirements.

Consider the case of ready-made garments. With the use of electric cutting machines, the factories produce identical dress material at a reduced cost. These require minor alterations at the retail outlets. However the introduction of computer based laser guns are changing the clothing industry. The laser machine does not cut 500 trousers at a time. It cuts one at a time. But it cuts faster than the mass-production methods. What we are witnessing is custom tailoring on a high technology basis. This kind of mass customisation is made possible through flexible automation facilities. To-day we can have custom built cars, refrigerators and so on.

Similarly, the role of advertising as a prime mode of communicating with customers is changing. With the use of databases, it is possible to customize communication to individual customers. Fueling the move toward database marketing is a paradigm shift away from the idea that consumers can be marketed to as one huge mass and toward the idea that consumers are demanding, and must receive, customization. With database marketing, the company can address customers differently and personally, deliver relevant messages, recognize loyal customers, and manage to measurable goals.

Gronroos further elaborates the shift from traditional marketing mix approach to relationship marketing. He cites the evolving trends in business and modern research into, for example, industrial marketing, services marketing and customer relationship economics as demanding a relationship-oriented approach to marketing.

Shifts in the Retail Business:

Retail business is virtually getting transformed with new technologies. Currently home-shopping through cables is leading to the emergence of non-store retailing. Beninati predicts a massive paradigm shift in the way retail business will be conducted. Consequently, the retail supply chain will metamorphose to a new level so that it will no longer be a chain of segmented functions but a complex of interlocking processes with the consumer as the focal point. Since the traditional categorization of retailing does not fit this new paradigm, there will be two categories of retailing in the future marketplace, in-store and non-store retailing, with

non-store retailing dominating the marketplace. The driving force behind these retailing changes will be technological innovations.

With the use of network facilities, such as internet, it is possible to create virtual retailing which will be everywhere and nowhere. Mysore silks and mangoes from India can be marketed in Massachusetts without opening retail outlets there. Through internet it is possible to send multi-media promotion material and get orders which can be delivered to customers through international couriers.

Shifts in Management Education:

Management education itself is undergoing a major paradigm shift. Students will need to be challenged to think non-traditionally, thereby broadening their paradigms to openly embrace the concepts and practices of cultural diversity, new formations of organizational structure, and the accompanying attitudes needed to successfully implement these new paradigm shifts in knowledge. Hence the traditional chimney's built around the functional areas of production, marketing, finance and personnel needs to be broken. Business problems^{are} so complex that it is not going to be possible to fit them into the functions of management. Many universities are revamping their curriculum and the teaching methodology. Group teaching of cases is the new approach tried out in many schools to enable the students appreciate the interdisciplinary nature of business problems. Greater emphasis is laid on leadership development in many universities.

Implications for the Individual and organisations:

An example of a major paradigm shift involves the clipper ships; when steam engines were invented, the owners of the sailing ships thought they could beat back the new challenge by adding more masts and more sail, but they did not understand that they were in an entirely new game.

Individuals and organisation should understand and adopt to the new paradigms in order to survive. However, it is not easy to get over established belief systems - Many individuals get caught in a conflicting situation. This is amply illustrated by the psychological experiment by Burner and Postman . The researchers asked experimental subjects to identify on short and controlled exposure a series of playing cards. Many of the cards were normal, but some were made anomalous, e.g., a red six of spades and a black four of hearts. Each experimental run was constituted by the display of a single card to a single subject in a series of gradually increased exposures. After each exposure the subject was asked what he had seen.

Though the normal cards were identified correctly, the anomalous cards were also identified as normal without any hesitation or puzzlement. The black four of hearts might, for example, be identified as the four of either spade or hearts. Without any awareness of trouble, it was immediately fitted to one of the conceptual categories prepared by prior experience. However the increase of exposure led to hesitation and confusion until finally, and sometimes quite suddenly, most subjects producing correct identification of even the anomalous cards. A few subjects, however were never able to make the requisite adjustment of the categories.

The lessons here are that adjusting to paradigm shifts is not an easy one as it require alteration of established perception and beliefs about the world. It should also be noted that the perceptual shift occurs quite suddenly. All it means is that an individual may see the new paradigm or will remain in the old paradigm and there cannot be an in between category. Also it should be noted that some individuals may not get to see the shift even after repeated exposures; i.e., individuals vary in their capability to perceive paradigm shifts.

Similarly organisations also should develop sensing capabilities to understand and adopt to paradigm shifts. The catholic church, the longest surviving organisation, is a living example of its ability to shift gears as and when needed. For example, the church believed that the world was flat as the Bible described the world as being supported by four pillars. However the four pillars concept was subsequently changed as four directions - north, east, west and south. Church is one of the early adopters of electronic media to propagate its ideas. Apart from radio, Satellite channels and cable networks are used by the church to reach its target audience. The typical programmes include preaching, music, faith films and programmes on social issues.

Hence it makes sense to accpt and adopt to paradigm shifts if individuals and organisations are to prosper. Those who fail to change will be left behind.

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