The significance of information technology assignment

Business, Management

THE SIGNIFICANCE OF INFORMATION TECHNOLOGY IN THE BUSINESS OF NIGERIA CHEMICAL CORPORATION BY OCHALA YUSUF OJIH MAT. NO: PGSS/ UJ/00442/07 BEING AN ASSIGNMENT ON MBA 505 (ICT MANAGEMENET) SUBMITTED TO MR. OKI, E. U. (MBA) DEPARTMENT OF MANAGEMENT SCIENCES UNIVERSITY OF JOS FEBRUARY 2009 INTRODUCTION Since the start of the 21st century, there has been an emphasis economic reform in Africa, which makes regional economies more attractive to foreign investors:

Over the past six years in Nigeria, for instance, the government has pursued a policy of trade liberalization, which makes the operating environment for businesses less rigid and friendlier to foreign investors; as a result, many opportunities for global business operators have been created in Nigeria The current wave of globalization has been driven by policies that have opened economies domestically and internationally. Taking advantage of new opportunities in these markets, corporations have built foreign factories and established production and marketing agreements with foreign partners.

Success as a global business operator no longer depend on size but on factors such as being able to discern and take advantage of available opportunities building up a thorough understanding the business and socio-cultural environment and familiarity with local business rules regulations and conventions. This assignment looks at them impact of business alliance, agile or hyper competition, Business process re-engineering, globalization, strategic competitive advantage and support managerial decision making on the business of Nigeria chemical corporation. BUSINESS ALLIANCE

Business alliance refers to cooperative agreements between potential or actual competitors. Business alliance runs the range from formal joint ventures, in which two or more firms have equity stakes, to short term contractual agreements in which two or more firms agree to cooperate on a particular task (such as developing a new product), collaboration between competitors is fashionable; recent decades have witness an explosion in the number of business alliances. Once a partner has been selected and an appropriate alliance structure has been agreed on, the task facing the firm is to maximize its benefits from the alliance.

As in all international business deals, an important factor is sensitivity to cultural differences. Many differences in management style are attributable to cultural differences, and managers need to make allowances for these in dealing with their partners. Managing an alliance successfully requires building interpersonal relationships between the firm's managers (building trust), or what is sometimes referred to as relational capital. The belief is that the resulting friendship helps build trust and facilitate harmonious relations between the two firms. Personal relationships also foster an informal management network between the firms.

Managing an alliance successfully also requires learning from partners. Academic have argued that the major determinant of how much acquiring knowledge a gains from all alliance is its ability to learn from its alliance partner. To maximize the learning benefits of an alliance, a firm must try to learn from its partners and then apply the knowledge within its own organization. It has been suggested that all operating employees should be well brief on the partner strength and weaknesses and should understand how acquiring particular skills will bolster their firms competitive position.

However, to achieve this, the managers involved in the alliance should educate their colleagues about the skill of the alliance partner. AGILE COMPETITION Agile competition is the ability of a company or firm to profitably operation in a competitive environment or continual and unpredictable changes in customer opportunities. Business process reengineering and its reliance on core competencies and process ownership has brought forth fundamental changes in strategic planning in this era of Agile the same or different goals via the same means (processes and resources) as competitors.

The focus has shifted towards pursuing the same goals through different means or pursuing different goals by different means. The reversal in strategic thinking, focusing on the process (doing, action0 rather than on the product (outcome, purpose) is increasingly forced by global agile competition or hyper competition. An agile company can operate in markets with broader product ranges and, shorter model lifetimes and can orders in arbitrary sizes. Agile companies depend heavily on information technology to give them the information processing capability to treat masses of customers as individuals.

This allows agile companies to offer individual product while maintaining high volume of production. Information technology is inevitable for companies wanting to be agile competitors. These companies needs and responding to them quickly means typically using telecommunications, software packages, computer systems and data bases to demonically speed up market resources, products development, production and distribution, order processing and customers services. BUSINESS PROCESS REENGINEERING (BPR) The handling of a customer, order from start to finish is an example of a business process.

Another example is the production of a complete batch of manufactured goods. In order words a ” business process” is typically general and high level. A business process may be defined as ” a set of related tasks which when executed produce a recognizable business outcome”. According to Michael Harmer a Reengineering guru, a Business process Reengineering is” the fundamental rethinking and radical re-designation of business process to achieve dramatic improvements in critical contemporary measures of performance such as cost quality, service and speed”.

A business process reengineering focuses on how and why of a business process sot that major changes can be made on how work is accomplished. One aim of BPR is to greatly improve all the processes within an area of a business or even within a business as a whole. One way of improving a process may be to automate it, which is where data processing can come into the BPR picture. However, the BPR exercise is normally more fundamental in that it examines how the business processes themselves can be improve, including replacement of current business processes by radically different alternatives.

Businesses may be completely eliminated too. Not only that, BPR questions the fundamental business objectives behind the business process so that at the end of a BPR exercise, the business process in question or place may all be completely different processes are changed or replaced, the data processing system that support them must also be changed and replaced. GLOBALIZATION According to Ajayi (2004), globalization refers to the liberalization and intensification of international linkages in trade, finance, markets, production, research, transportation, energy, medicine, education, politics and culture.

It is a process of interaction and integration among the people, companies and governments of different nations, a process driven by international trade and investment and aided by information technology. This process has effects on the environment', on culture, on political systems, on economic development and prosperity, and on human physical well being in societies around the world. Technology is one of the fastest drivers of globalization. Advances in information technology in particular, have dramatically transferred economic life.

Information technologies have given all sorts of individuals economic actors- consumers, investors businesses- valuable and tools for identifying and pursuing economic opportunities, including faster and more informed analyses of economic trends around the world, easy transfers of assets, and collaboration with far- flung partners. Businesses are being intiated, started and concluded on the Internet. There is now an abundance of information on websites; money can be transferred and received without entering the banking hall; all as a result of global trends that are gradually entrenching itself on the Nigerian scene.

Digital technology has also been a key driver of the new competitive pressure. It is creating substitute products with new economies that are forcing down industries that we will traditionally have considered impossible. A payment services link is emerging between the financial services and telecommunications industries. The two industries are bringing different assets in market power and competencies to compete or cooperate the emerging connect. We are now seeing competitive pressure driven by the forces of deregulation and re- regulation.

Globalization is breaking down " institutionalized monopolies" as witnessed in the telecom; gone are the days when telephone calls can only be made on blindness at home, Offices or phone booth; we are now in an era where calls can be made anywhere, anytime. Many companies are entering global market or enterprises. Businesses are expanding into global markets for their products and services. Using global production facilities to manufacture or assemble products, raising money in lobal capital markets forming alliances with global partners, and battling with global competitors for customers all over the world, so it is now easy for companies to operate globally, sometimes by forming global business alliance with other organizations, including customers, suppliers, former competitors and government agencies. Managing and accomplishing these strategic changes would be impossible without the global computing and telecommunications network, which are the central nervous system of today's global companies.

There are two dimensions of globalization that are worth considering-: Globalization of production and globalization of markets. Globalization of production Globalization of production occurs when organization disperse their value creation activities to those locations around the world where they can best be performed in terms of quality and cost while at the same time ensuring a tight and effective co-ordination of those globally dispersed activities in order to achieve optimum productivity and competitive advantage.

According to Hills (2003), globalization of production is the tendency among firms to source goods and services from different locations around the world to take advantage of national differences in the cost and quality of factors of production such as labour, energy, land and capital. This tendency is driven by a desire to achieve competitive advantage in the international market.

By dispersing value creation activities to different but most efficient locations, companies can lower their overall cost structure and improve the quality and functionality of their product offering thereby allowing them to compete more effectively against their rivals. Globalization of Market Globalization of market is the term that is used to describe the emergence of a homogenous world market and the breaking down and disappearance of cultural differences and specifications between nations.

This homogenization of the market is generally associated with them rise of a mass culture in the world, a phenomenon referred to as cultural globalization (Terpstra and David, 1995). According to Levith (1983), globalization of markets is the convergence of tastes and preferences of consumers in different nations on a global norm to create global market. It is, according to Hill (2003), the merging of historically distinct and separate national markets into one huge market place.

The globalization of markets has been made possible by technological innovations which has produced low cost of transportation making it more economical to ship products around the world and at a speed much faster than before. At the same time, low cost of global communication network such as the world wide web (www) are helping to create an electronic global market. The effective creation of a world market means that every economic actor i. companies, workers, consumers, now enter directly knowingly or unknowingly into relations with other actors potentially anywhere in the world thus creating networks of economic exchange. Electronic or information technology is the major factor behind these developments. STRATEGIC COMPETITIVE ADVANTAGE Gaining a competitive advantage is a key to our world today. Rapid contemporary change in economic politics and structure including the globalization of industries and markets is driving countries, organizations and individuals towards a search for competitive advantage.

Change is constant in modern societies and organizations that learn to search creatively for the future can trans form themselves to strategic advantage when then confront changing competitive environment (Eke, 2006). Building a competitive advantage in the global market requires having a competitive strategy, which is intended to achieve some form of a competitive edge for the firm. This means taking some forms of defensive or offensive actions to create a dependable position in an industry or world market to cope successfully with competitive forces and thereby yielding a superior return on investment for the firm.

Competitive strategies are only to be adopted by firms that face competition and since virtually all businesses and particularly Nigerian businesses like (Nigerian Chemical Corporation) are facing threats (competition) from global producers, they need to employ strategies and policies that will help them compete favorably with others in such a global market. Jones and George (2003), report that a quality product is one of the four elements that are employed in achieving strategic competitive advantage.

The other three are: efficiency, innovation and responsiveness to customers. This is shown in the diagram below: Fig 1. 1 Building Blocks of Competitive Advantage Source: Jones and Gorge (2003) The use of information technology for globalization, business process re-engineering, and agile competition frequently results in the development of information systems that help give a company a competitive advantage in the marketplace.

These strategic information systems use information technology to develop products, services, processes and capabilities that give a business a strategic advantage over competitive force it faces in its industry; these forces include not only a firm’s competitors; but also its customers and suppliers, potential new entrants into its industry and companies offering substitutes for its products and services.

Information technology can use the following strategies to implement competitive strategies to confront competitive forces: (a)Cost strategies: Becoming a low cost producer of goods and services a low cost product lowering your customer’s or supplier’s costs or increasing the costs your competitors must pay to remain in the industry. (b)Differentiation strategies: Developing ways to differentiate your company’s products or services from your competitors so your customers perceive your products or services as having unique features or benefits.

This may allow a firm focus its products or services to give it an advantage to particular segments or niches of a market. (c)Innovation strategies: Finding new ways of doing business. This may involve introducing unique products or services, or making radical changes in your business process that cause fundamental changes in the way business is conducted in your industry. (d) Growth strategies: Significantly expanding your capacity to produce goods and services, expansion into global markets, diversifying into new products and services. e)Alliance strategies: Establishing new linkages and alliances with your customers, suppliers, competitors, consultants and other companies. These linkages may include mergers acquisitions and joint ventures forming of ” virtual companies’ or others marketing, manufacturing and distribution agreements between a business and its trading partners.

SUPPORT MANAGERIAL DECISION MAKING

Decision making refers to a range of activities including defining and structuring a problem, identifying stakeholder value and objectives, general alternatives, identifying key uncertainties and possible consequences, evaluating the alternatives and finally choosing a course of action and implementing it. Information technology assist decision makers by providing better data, quicker access, better models, or more optimal solutions. To date information systems have been used to help us do tasks quicker and more cost effectively and have been most helpful to managers for, performing information gathering and decision making roles.

Given the complexity and competitiveness of the strengthening global marketplace, the trends towards group decision making and distributed decision making, and the need to make decisions under pressure when facing information o overload certain trends in the technologies appear likely. There will be increased need for technologies that support communication document sharing, knowledge sharing and decision making groups- particularly those separated by time and distance.

More and more systems will be connected to the outside world systems will be connected to the outside world via the internet to facilitate communications, relationship building and sharing of information and experiences with customers, clients and industry partners. A decision support system (DSS) and Executive Information system (EIS) are some of the veritable information technology tools used by manager and top executive for decision-making. DECISION SUPPORT SYSTEM (DSS) A DSS helps managers (users) make decision in unstructured and semi- structured environments where there is a high degree of uncertainty.

A DSS is a tool or model used to solve adhoc processing requirements rather than to support on going process. As a result, it is usually built by the user rather than by a professional programmer. It is most frequently used in interactive sessions to manipulate business related data. It allows the user to explore various alternatives, to answer what-if questions, to deal with constantly changing business problems, and to make decisions in situations that arise unexpectedly. A DSS is best suited to problems where there is uncertainty and ill-defined reporting requirements.

A DSS is a model of business problem that allows users (managers) to make more informed decisions. These decisions required that judgment, experience, and intuition be used. A computer based DSS makes use of decision models, the decision maker's knowledge data access and retrieval methods to help efficient data access and retrieval methods to help user formulate problems and channel their thinking so that the best possible decision can be made. The key element of any DSS is the decision maker the system is designed to support.

The system designer must fully understand the decision process from both a quantitative and behavioural perspective and must establish a combination of models, databases, and software systems that can effectively supplement (rather than replace) the manager's judgment in making the decision. The key element of the software system is the user interface, which provides the user with a set of commands (verbs such as FIND, DISPLAY and GRAPH) that may be used to assess and manipulate all the other elements of the system.

The user interface must be human- oriented rather than system oriented in order to accommodate managers who lack the knowledge or inclination to deal with standard computer languages. Ashhton identified several common capabilities of DSS software: (a)What- is capabilities: DSS can be used to answer questions like these: what is Nigerian chemical corporations' best selling product? Who are the top sales people at Nigerian Chemical Corporation's best selling product? Who are the top sales people at Nigerian Chemical Corporation?

How does this year's sales goal? (b)What- If capabilities: DSS can be used to answer questions like these: what effect would a 10% increase in Nigeria chemical corporation's sale have on gross profit? What effect will a new incentive sales program for all sales people have on net income? (c)Goal seeking: DSS can be used to determine what would have to be done to achieve a specified goal. For example, " what sales and expense levels would Nigeria Chemical Corporation have to have to reach a certain net income goal? d) Simulation: These packages use different probabilities and expectations to simulate a particular situation. (e) It is used by Airlines, engine and car manufacturers, consultants, and financial analysts to support planning operations, marketing, budgeting and how to shift resources around the organization e. g expert choice, spreadsheet etc EXECUTIVE INFORMATION SYSTEM (EIS) An executive information system (EIS) is an easy- to- use DSS made especially for top managers. It specifically supports strategic decision-making.

An EIS is also called an executive support system (ESS). It draws on data not only from systems internal to the organization but also from those outside, such as news services or market research databases. An ESS creates a more generalized computing and communications environment rather than serving any fixed application or specific capability such systems are often tailored to specific executive needs and can be very costly to build, but the ESS is designed to ultimately be used by executives without assistance from intermediaries.

An ESS delivers up-to date information about external business conditions, as well as internal data, in aggregate form that is easily accessible through a graphical user interface. ESS commonly uses state- of -the art data storage, communications and graphical display techniques to speed and simply online access to an " instrument panel" of high-level information about the status of the organization. Executives can then ' drill" down' from the aggregate level to get more detailed information in areas of particular interest.

Those systems help standardize the information base for executives and ensure they all have access to complete and up- to-date numbers for decision-making. CONCLUSION Today's managers need all the help they can get. Their firms are being buffeted on all side by strong, frequent shifting winds of change. Organizations strategic objectives (chosen markets, product strategy, expected outcomes) and their business (such as research and development, production, cash flow management and order fulfillment) are undergoing significant and volatile changes placing great pressure on firms and their managers.

The shifting winds of change in today's business environment have information systems and information technology vital components that help keep an enterprise on target to meet its business goals. Information technology has become an indispensable ingredient in several strategic thrusts, which Nigeria Chemical Corporation must adopt to meet the challenge of change or be on the competitive edge. These include agile competition, business process reengineering, and globalization, support managerial decision-making and using information technology for competitive advantage.

These are major reasons why Nigeria Chemical Corporation needs information technology. REFERENCES Anglo, N. A (2008) " Building Global strategy for increased market opportunities' University of Jos conference proceedings April, pg 83. O'Brien J. A, (2003) Introduction to information systems essential for e- business enterprise, McGraw- Hill, Irwin 11th edition. Haag, S (2000) Management Information System for the age, McGraw- Hill, Irwin, 2nd Edition. Williams B.

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