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Knowledge is Power

MANAGING INNOVATION NETWORKS: CHALLENGES FOR THE SURVIVAL AND GROWTH OF NIGERIAN ORGANIZATIONS

BY

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Abstract

This paper has attempted to offer explanations that facilitate the understanding of the concept of innovation as a corporate strategy. It identified the general life cycle that characterize innovations in organizations. The study has brought out a clearer understanding of different ways innovations could be promoted and enhanced in a hyper-competitive environment like Nigeria. The paper calls on managers to pull the bull by the horns as they tackle the challenges posed by organizational innovations. Finally the paper compels organizations to promote a business system that delivers customer value and advocates that a successful innovation strategy requires continuous top management support and long term commitment.

Introduction

Everyone loves successful breakthrough innovations, when someone boldly changes the rules of the game and launches a new product, service or business model which creates its own profitable and defensible market. Sometimes the resulting new category is even larger than the previous market and the innovator achieves long-term dominance. To secure long-term survival, organizations should not only address the requirements of existing customers, but must simultaneously innovate to ensure the identification of new customers and the means of delivering a value proposition: an ability that has been termed organizational ambidexterity (Grant and Baden-Fuller: 2004; Tushman and O'Reilly, 1996). The essence of the innovative firm is the ability of an organization to adapt to market change and is influenced by the organizational integration of a skilled base and the speed at which new competencies and skills can be developed to match the demands of the technologies (Verdu – Jover et al 2005). This is because companies do not create uncontested market and make competition irrelevant. Consenting to this statement, Kim and Mauborgne (2005) account that markets are subject to continuous creative destruction. Competition rarely stays 'irrelevant' for long. On the international scene, it has been predicted that the global economy will experience a slow down never seen since World War II, with the World Bank estimating a decline of up to 2 percent. Even developing countries that did everything right and had far better macroeconomic and regulatory policy than the United States did – are going to feel the impact (Stiglitz, 2009:48). Largely as a result of a precipitous fall in exports, China is likely to continue to grow but at a much slower pace than the 11-12 percent annual growth of recent years. Unless something is done by businesses in these economies, the crises will throw as many as 200 million additional people into unemployment and poverty (Business Day, 2009:48).

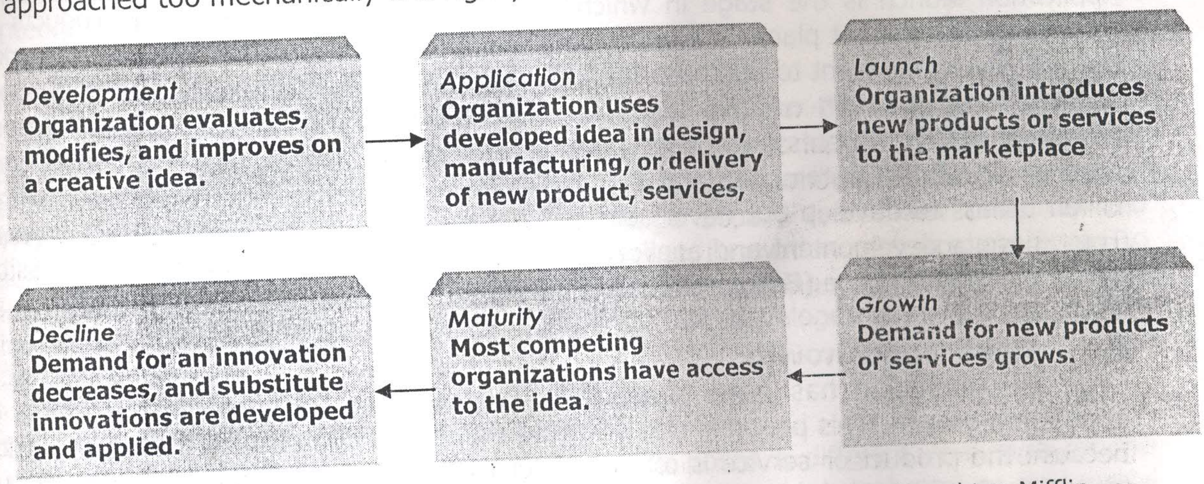
Innovation defined:

Organizational innovation has been defined variously by competent authorities. Whitefield (1975:7) defines innovation as the development of a creative idea into a finished article or process or system. This definition suggests that innovation is a complex problem solving sequence which in some produces something novel, with creativity as an essential ingredient. Thompson (2004:7) maintains that innovation takes place when an organization makes a technical change, that is, produces a product or service that is new to it or uses a method or input that is new and original. If a direct competitor has already introduced the product or method then it is imitation, not innovation. However, introducing a practice from a different country or industry rather than from direct competitor would constitute innovation. Markides (1997:9-24) remarks that innovation is the managed effort of an organization to develop new products or services or new uses for existing products or services. He argues that innovation is clearly important because without new products or services an organization will fall behind its competitors. It must be pointed out that creating an idea or inventing something along is not innovation but a part of the total processes of innovation. Creativity, however, is the ability of an individual to generate new ideas or to conceive of new perspectives on existing ideas (Griffin et al, 1993:213-22). In other words, innovation relates to the creation of competitive advantage in the sense that the aim of innovation is to add value for the customer or consumer by reducing costs or differentiating the product or total service in some sustainable way. Innovation is a testimony to the capability of individual managers working in concert with like-minded fellows to win victories for themselves and their business organizations against any competition, however belligerent. The analogy between war and business has often been made increasingly true as world markets have grown much more combative (Heller, 2004:3).

This paper will attempt to show the innovation process; the various forms of organizational innovation and in this wise reveal that an organization pursues the various forms simultaneously to achieve growth and remain relevant. The paper will also examine which factors can accelerate the propensity of an organization to innovate. This is an issue especially in this period of global economic crunch. To this and, the challenges to organizational innovation process will be explored.

The Innovation Process

Organizations actively seek to manage the innovation process. These steps illustrate the general life cycle that characterizes most innovations (figure I). It should be borne in mind that just as with creativity; the innovation process will suffer subtly if it is approached too mechanically and rigidly.



Source: Griffin R. W. (2002:401) *Management* 7th edition, Boston: Houghton Mifflin.

The organizational innovation process consists of developing, applying, launching, growing and managing the maturity and decline of creative ideas (Alan, 1986: 54-59).

a. Innovation Development

Innovation development comprises the evaluation, modification and improvement of creative ideas. Innovation development can catapult a product or service with only modest potential into a product or service with significantly great potential. An instant local example is the development and re-launch of the Legend Extra stout by Nigerian Breweries Plc last year into the market that has been long dominated by Guinness Extra stout. This is particularly true in the south Eastern Nigeria.

b. Innovation Application

This is the stage in which an organization takes a developed idea and uses it in the design, manufacturing or delivery of new products, services or processes. At this stage, the innovation emerges from the laboratory and is transformed into tangible goods, or services. One local example of innovation application is the noodles market where the product indomie manufactured by Dufil Prima foods since 1996 has remained a brand to displace. A successful combination of scientifically proven marketing strategies, drive and dedication of a highly motivated team has resulted in a significant increase in sales. Another factor working for the company is that it introduced a range of variants and carved a niche area for itself in the market, instead of coming to fight the saturated Spaghetti market. Instead, it employed convincing salient marketing strategies that indomie is fast to cook (Business Day, 2009:22).

c. Application Launch

Application launch is the stage in which an organization introduces new products or services to the market place. The important question is not "Does the innovation work?" but will customers want to purchase the innovative product or service?". This is because history is replete with creative ideas that did not generate enough interest among customers to be successful. Some notable innovation failures include Sony's seat warmer, the Edsel automobile and Polaroid's SX-70 instant camera (which cost three billion dollars to develop but never sold more than hundred thousand units in a year). Thus, despite development and application, new products and services can still possibly fail at the launch phase (Business Week, 1993:76-82; Sheremata, 2000:389-405).

d. Application Growth

Once an innovation has been successfully launched, it then enters the stage of application growth. This period is one of high economic performance for an organization because the product or service is often greater than the supply. Organizations that fail to anticipate this stage may unintentionally limit their growth as Gillette did by not anticipating demand for its March 111 razor blades. At the same time overestimating demand for a new product can be just as detrimental to performance. Unsold products can sit in warehouse for years (Griffin, 2002:403).

e. Innovation Maturity

After a period of growing demand, an innovative product or service often enters a period of maturity. Innovation maturity is the stage in which most organizations in an industry have access to an innovation and are applying it in approximately the same way. The technological application of an innovation during this stage of the innovation process can be very sophisticated. Because most firms have access to the innovation, either as a result of developing the innovation on their own or copying the innovation of others, however it does not confer competitive advantage on any one of them. The time that elapses between innovation development and innovation maturity varies remarkably depending on the particular product or service. In Nigeria this phenomenon of innovation maturity has been witnessed in a number of sectors. Some of them are in the beverage industry, water packaging, food packaging, and soft drinks. The latest is in the water packaging and noodles markets that are currently experiencing "hypercompetition from later entrants. Some players are easily displaced while others like indomie remain strong, maintaining same market dominance. It has been revealed by experts that they achieve this dominance through a combination of convincing salient innovative strategies aimed at the consumers (Business Day, 2009:22). Whenever an innovation involves the use of complex skills such as complicated manufacturing process or highly sophisticated teamwork, moving from the growth phase to the maturity phase will take longer. In addition, if the skills needed to implement this innovations are rare and difficult to imitate, then strategic imitation may be delayed and the organization may enjoy a period of sustained competitive advantage. In manufacturing parlance, this interval is called the "grace period".

f. Innovation Decline

Every successful innovation bears its own seeds of decline. Because an organization does not gain a competitive advantage from an innovation at maturity, it must encourage its creative scientists, engineers and managers to look for new innovations. This continued search for competitive advantage usually leads new products and services to move from the creative process through innovation maturity and finally to innovation decline. Innovation decline is the stage during which demand for an innovation decreases and substitute innovations are developed and applied (Griffin, 2002:903).

Typologies of Innovation Techniques

Each creative idea that an organization develops poses a different challenge for the innovation process. Innovations can be radical or incremental, technical or managerial and product or process.

a. Radical versus Incremental Innovation

Radical innovations are new products, service or technologies developed by an organization that completely replace the existing products, services or technologies in an industry (Sheremata, 2000:405). Incremental innovations, on the other hand are new products, services or technologies that modify existing ones. Firms that implement radical innovations fundamentally shift the nature of competition and the interaction of firms within their environments. Firms that implement incremental innovations alter, but do not fundamentally change, competitive interaction in an industry.

The table 1.0 below shows the new product by industry. It clearly points out the significance of innovation by each industry.

Industry	% products launched within the past 5 years
Clothing	67
Furniture	57

Leather	54
Textiles	50
Plastics	50
Building and Construction	45
Engineering	41
Printing and Publishing	38
Chemicals	29
Paper	24
Stone, Gloss and Clay	24
Fabricated metal	21
Iron and steel	21
Food drink and tobacco	11

Source: Heller, R. (2004) *The complete Guide to Modern Management,* 2nd Edition, Mumbai: Jaico Publishing House p.9.

b. Technical versus Managerial Innovations

Technical innovations are changes in the physical appearance or performance of a product or service, or the physical processes through which a product or service is manufactured. It should be pointed out that many of the most important innovations over the last fifty years have been technical. For instance the serial replacement of the vacuum tube with the transistor, the transistor with the integrated circuit and the integrated circuit with the micro chip has greatly enhanced the power, ease of use and speed of operation of a wide variety of electronic products. Not all innovations developed by organizations are technical. However managerial innovations are changes in the management process by which products and services are conceived, built and delivered to customers. Managerial innovations do not necessarily affect the physical appearance or performance of products or services directly. For instance, reengineering which is the radical redesign of all aspects of the business to achieve major gains in cost, service or time (Stewart, 1993:41- 48).

c. Product versus Process Innovations

Perhaps, the two most important types of technical innovations are product innovations and process innovations. Product innovations are changes in the physical characteristics or performance of existing products or service or the creation of brand-new products or services. Process innovations are changes in the way products or service are manufactured or offered. Whereas managerial innovations generally affect the broader context of development, process innovations directly affect manufacturing. For instance the development, implementation and adoption of robotics to certain productive systems is a process innovation. The figure 2.0 below shows the effects of product and process innovations on economic returns and it reveals that its prevalence or manifestations depend on the stage of the innovation product that a new product or service occupies.

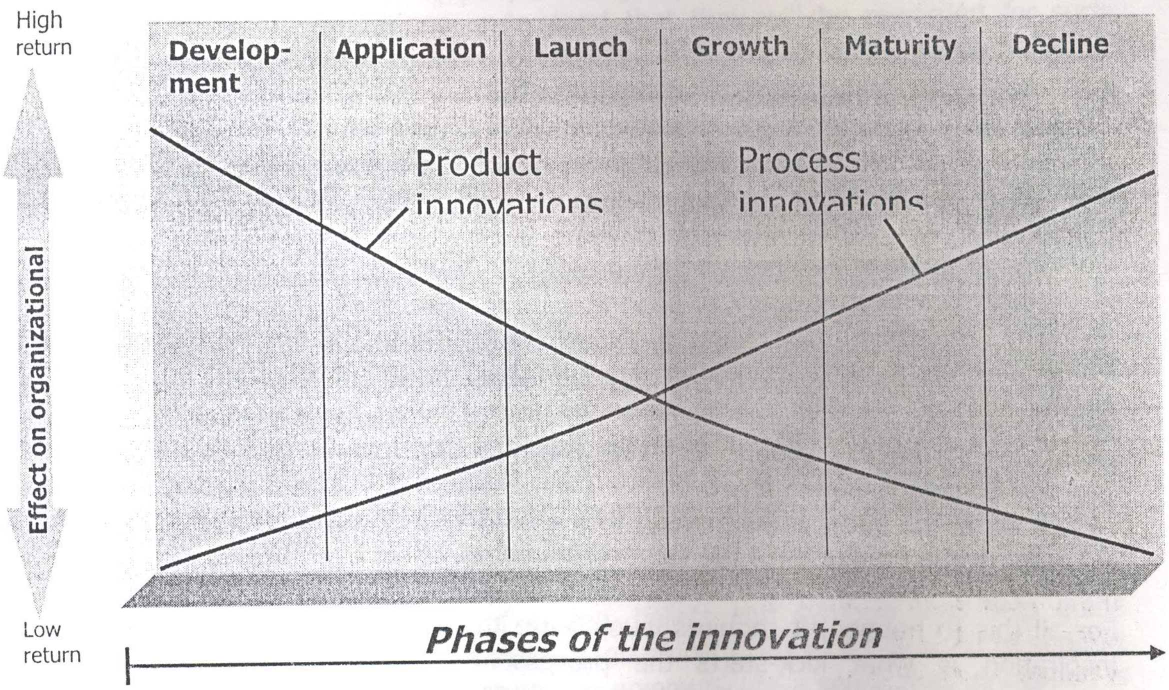


Fig. 2.0: Effects of Product and Process Innovation on Economic Return
Source: Griffin, R.W. (2002:405) *Management* 7th edition, Boston: Houghton Mifflin

At first, during the development, application and launch, the physical attributes and capabilities of an innovation mostly affect organizational performance. Thus, product innovations are particularly important during these beginning phases. Later, as an innovation enters the phases of growth, maturity and decline, an organization's ability to develop process innovations such as fine-tuning manufacturing, increasing product quality and improving product distribution becomes important to maintaining economic return. In international manufacturing practices, it is known that the Japanese organization often excelled at process innovation. The market for 35 mm cameras used to be dominated by Germans and other European manufacturers until in the early 1960s, when Japanese organizations such as Canon and Nikon began making cameras. Some of these early Japanese products were mainly imitations of the original 35 mm cameras. However, these companies continued to invest in their process technology and today are able to improve and increase quality, while lowering manufacturing costs. Consequently, these Japanese organizations are today market leaders for 35 mm camera technology, while the German companies, because they were not able to maintain the same pace of process innovation, are just struggling to maintain market share and profitability.

Iv. Promoting innovation in organizations

Because they make such good stories, most business people are familiar with many examples of successful breakthrough innovations: Cable News Network, CNN, INDOMIE, GLO, MTN and Microsoft Computers Inc. For sustainable success four things need to happen:

- The organization comes up with a radically different offer which turns out to meet customers' latent needs.
- The organization executes a successful introduction (the 4Ps – product, price place and promotion) despite the lack of clear prior information on the optimum positioning.
- It invests heavily enough to create the new category or subcategory and to build the dominant market share.
- It turns the initial breakthrough into a long-term success by out-execution of the rest of the market once the competitors enter.

For all this to happen, it requires much more than the initial inspiration, although this inspiration is what kick-starts the process. Also required are customer insight, operational excellence, resource and luck. This type of radical innovation is sometimes called a "flanking strategy" which positions the company in an uncontested, virgin territory. The financial rewards are spectacular when the strategy succeeds. History then shows the innovators to have been right; the offering really did tap a large latent need. The company successfully developed the right offering and marketing mix to develop and dominate the market and chase out later entrants who piled in once it became clear that there was a big new market. This is exactly what Dufil Prima foods, the indomie giant has done in Nigeria. The products now come in five distinct flavours: Indomie chicken, indomie onion chicken Indomie chicken pepper soup and the recently introduced pepper chicken and suya flavours. Indomie noodles are versatile, quick and easy to cook. It is therefore no surprise that the product has become very famous among Nigerians, especially women and children. A wide variety of ideas for promoting innovations have been developed over the years. Three specific ways for promoting innovation are through the reward system, the organizational culture and a process called entrepreneurship (Leonard and Rayport, 1997: 102-115).

a. The Reward System

A firm's reward system is the means by which it encourages and discourages certain behaviours by employees. Major components of the reward system include prompt salaries bonuses and perquisites. Using the reward system to promote innovation is a fairly mechanical, nevertheless effective management technique. The idea is to provide financial and non-financial reward to people and groups that develop innovative ideas. Once members of the organizations understand that they will be rewarded for such activities, they are more likely to work creatively. With this in mind, some banks in Nigeria like First Bank Nigeria Plc and Intercontinental Bank Plc adore their bank halls with the photograph of the best staff either monthly or quarterly. It is important for organizations to reward creative behaviour but it is vital to avoid punishing creativity when it does not result in highly successful innovations. It is the nature of the creative and innovative processes that many new product ideas will simply not work in the market place. Each process is fraught with too many uncertainties to generate positive results every time (Griffin, 2002:408). Managers need to be very careful in responding to innovative failure. If innovative failure is due to incompetence, systematic errors or managerial laxity, then a firm should respond appropriately, for example by withholding raises or reducing promotion opportunities. However, people who act in good faith to promote innovation that simply does not work, should not be punished for failure. This is because a punitive reward system will deter people from taking risks and therefore reduce the propensity of organization's ability to obtain competitive advantages.

b. Organizational Culture

An organization's culture is the set of values, beliefs and symbols that help guide behaviour. A strong, appropriately focused organizational culture can be used to support innovative activity. A well managed culture can communicate a sense that innovation is valued and will be rewarded and that occasional failure in the pursuit of new ideas is not only acceptable but even expected. In addition to positive reward system and entrepreneurial activities, firms such as NB Plc, Guinness Nigeria Plc and even Mobile Telecommunication Networks (MTN) are known to have strong, innovation oriented cultures that value individual creativity, risk-taking and inventiveness.

c. Entrepreneurship in Larger Organizations

In Nigeria, many large businesses have realized that the entrepreneurial spirit that propelled their growth becomes stagnant after they transform themselves from a small but growing concern into a larger one. To help revitalize this spirit, some organizations today encourage what they call intrapreneurship. Intrapreneurs are similar to entrepreneurs except that they develop a new business in the context of a large organization. For (Ibe and Ugboaja, 2008:20) intrapreneurship is the term given to the establishment and fostering of entrepreneurial activity within large organizations which results in incremented improvement to existing products and services and occasionally to brand new products and services. There are three entrepreneurial roles in large organizations (Pinchot 111, 1985). To utilize intrapreneurship successfully for encouraging creativity and innovation, the organization must find one or more individuals to perform these roles. The inventor is the individual who conceives of and develops the new idea, product or service by means of the creative process. Because the inventor may lack the expertise or motivation to oversee the transformation of the product or service from an idea into a marketable entity, however, a second role comes into play. A product champion is usually a middle manager who learns about the project idea and becomes committed to it. He or she helps douse organizational resistance and convinces others to buy into it and take the innovation seriously. The product champion may have limited understanding of the technical details, nevertheless is skilled at knowing how the organization works, whose support is needed to further push the idea, who knows where to go in order to secure resources for successful development. A sponsor is a top-level manager who approves of and supports the innovation project. This person may fight for the budget needed to develop the idea, overcome arguments against the project and use organizational politics to ensure that the innovation survives. With a sponsor in place, the inventor's idea has a much better chance of being successfully developed.

The challenges to innovation in organizations

To remain competitive in today's global melt down and hyper-competitive economy, organizations must be innovative. And yet many organizations that should be innovative are not successful at bringing out new products or services or do so only after innovations created by others are very mature. The challenges are not far-fetched.

a. Fear of Failure

Fear of failure lies deeply in most organizations. Failure is directly associated with change. Most companies despite the blurbs in many of their annual reports are conservative, risk averse and do not welcome change. Everyone knows the "Killer phrases" as used by Ramsay (2004:10) when a new idea or a new way of doing things is proposed:

- A good idea, but...
- Against company policy
- All right in theory
- Cost too much
- Don't start anything yet
- It's not budgeted
- It's not part of your job
- Let's make a survey first
- The boss won't go for it.
- We have been doing it this way for a long time and it works
- Let us form a committee etc.

A popular saying about innovation is that nine out of every ten new products fail. Of course this is completely untrue. Many different studies have shown that the true number is closer to three in ten (Ramsay, 2004: 11). Nevertheless all market researchers recognize that perception is more important than reality. The popular belief *in the high rate of new product failure* reflects the concern with failure that continues to affect management support and company organization of new product development.

b. Lack of Resources

Innovation is expensive in terms of naira, time, and energy. If a firm does not have sufficient money to fund a programme of innovation or does not currently employ the kind of employees it needs to be innovative, it may lag behind in innovation. Even highly innovative organizations cannot become involved in every new product or service its employees think of. For example numerous other commitments in the electronic instruments and computer industry forestalled Hewlett-Packard from investing in Steve Jobs and Steve Wozniak's original idea for a personal computer. With infinite resources of money, time and technical and managerial expertise, Hewlett-Packard, would have entered this market early: (Tellis and Golder, 1996). Because the firm did not have this flexibility however, it had to make some difficult choices about which innovations to invest in.

c. Failure to Recognize Opportunities

Because firms cannot pursue all innovations, they need to develop the capability to evaluate innovations carefully and to select the ones that hold the greatest potential. To obtain a competitive advantage, an organization usually must make investment decisions before the innovation process reaches the mature stage. If organizations are not skilled at recognizing and evaluating opportunities, they may be overly cautious and fail to invest in innovations that turn out later to be successful for other firms.

d. Subtle Resistance to Change

Innovation means giving up old products and old ways of doing things in favour of new products and new ways of doing things. These changes can be personally difficult for managers and other members of an organization. In reaction, they present subtle resistance to slow down the innovation process which might in the end scuttle the innovation initiatives. There are evidences of middle level managers blocking innovative ideas that are tantamount to diluting their departments or portfolio. They subtly kick against them.

e. The Challenge of Motivating Employees

Recent evidence linking customer satisfaction with market capitalization should encourage managers to attack the source of customer dissatisfaction as well as customer satisfaction with both the brand and the category more vigorously than in the past. The starting point is usually the "service-profit chain" which shows the mutually reinforcing relationship among employee morale, customer satisfaction and profitability. The need to focus on those relationships is even greater when organizations choose to prioritize new products innovation.

First, employees of a simply better company cannot brag that it offers something unique. At least in the short term engaging and motivating them may be harder than it is for employees of a brand differentiator the competitor. Although they may feel proud to work for an organization that is best, the organization needs to show employees it is the best and that they have a role in making it best, especially if it has just embarked on an innovation process and anxiety is high due to uncertainty about the future. The employees should be energized, treated with respect and told in unmistakable terms that their goodwill and productivity are critical for innovation to succeed.

Conclusion

All successful organizations do and should try to drive the market. In innovation there is nothing like compromise. Every organization should endeavour to protect the business system that delivers customer value by achieving a complete understanding an customer value propositions. They can do this by developing innovative ways of cocreating value with their target customers in order to gain and maintain unique competitive advantage. Above all successful innovation requires continuous top level encouragement and long term commitment.

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