

THE BASIC NOTIONS OF INNOVATION: WHAT WE KNOW SO FAR

OLUTAYO OTUBANJO

Senior Lecturer (Marketing), Lagos Business School, Pan-African University, Lagos, Nigeria

ABSTRACT

This paper gives an update on the basic notions of the concept of innovation with reference to how the meaning and types of the concept are documented in literature. This objective is achieved through a review and analysis of academic literature concerning the concept of innovation. Importantly, three important types of innovation – namely product, organizational, and technological were found to preponderate academic literature.

KEYWORDS: Concept of Innovation, Organizational and Technological

INTRODUCTION

Academic work contributing to the concept of innovation is increasing by the day. A number of recent studies (Clausen, 2012; Parida et al, 2012; Piva et al, 2012; Orr and Roth, 2012; Nagji and Tuff, 2012; Govindarajan, 2012; Esty and Charnovitz, 2012) which appear in some decent journals support this view. However, in recent times, only a few of these have given an update of what is known so far with reference to the meaning (see Battistella et al, 2012; Robert and Eric, 2012; Stephenson, 2010; Harmancioglu, 2009) and types of innovation (see Carlo, 2012; Baba, 2012; Friedrich, 2010; Wilson and Doz, 2011; Damanpour, 2009). As such there is an urgent need to raise the volume of academic literature on this subject to create a deeper understanding of the concept. Against this backdrop, this paper aims to strengthen existing literature by providing an update of what is known about the meaning of innovation and the types of innovation that predominate academic literature. The paper opens with a review of works on the meaning of innovation, followed by an analysis of the dominant types of innovation. The paper ends with an analysis of the issues discussed.

THE MEANING OF INNOVATION

Stephenson (2010) argues and I quote “bring up the topic of innovation and often the conversation will soon revolve around a cool, new gadget or an exciting start-up company with a revolutionary idea. If the talk is about the challenge of innovation, it usually focuses on developing something new, original and radically different”. Following up on Stephenson (2010), it appears that innovation is the change that leads to the development of new performance (Hesselbein et al, 2002) and the creation and implementation of new ideas in order to add value (Rogers, 1998). Zhang et al (2004) defined innovation as the development and implementation of new ideas by people who engage in transactions with others within an institutional context. More precisely, it is the generation of new ideas (Ling, 2002). Innovation is the introduction of new and improved products, services and processes developed for the commercialization of products and services (Gibbons, et al., 1994; see also Australia Bureau of Statistics questionnaire, Section B). For Barsky and Sims (2012), the notion of innovation conveys incremental information about economic activity far into the future. It is to a certain extent the result of an interactive process of knowledge generation, diffusion and application (Tödting et al, 2008). Innovation is a multifaceted process.

It is dominated by the generation of novel ideas for products and services, as well as related fixes to business processes, technological capabilities, and production and distribution methods (Bartel, and Garud, 2009). Schumpeter (1942) approached the concept of innovation as a process of creative destruction in which 'new combinations of existing resources' evolve.

Based on the foregoing, it is possible to argue that innovation demands change and the willingness on the part of business organizations to learn new changes as a result of ongoing events in the environment. However as Bekkers et al (2011) points out, change is not always necessarily innovative, while a learning process that kicks in the innovative process does not always lead to new ideas, practices and so on. Consequently, For Bekkers et al (2011), the important issue of note that must be pointed out about innovation centres on the questions of how radical innovation is; what is the 'newness' of the change that has occurred and what is the nature of the learning process that has led to the willingness to change? Several authors including Bekkers et al (2011), provide a useful basis for examining the extent to which innovations take place in business organizations. First is what Bekkers et al (2011) call incremental innovation, which involves minor changes in existing services and processes. Second is radical innovation, which fundamentally changes existing ways of delivering products and services. Third is systematic or transformative innovation, which emerges from the introduction of new technologies such as the Internet (Bekkers et al, 2011).

THREE DOMINANT TYPES OF INNOVATION

Product Innovation: the concept of product innovation has been of paramount interest to firms (Kotabe and Swan, 1995; Schmidt and Calantone, 1998) and is generating more interest among business organizations than ever before. Several important factors are responsible for the recent drive towards product innovation. First is the deregulation of various productive industries coupled with the relaxation of various market control instruments. Second is increased competition arising from the deregulation of markets and third is the desire to satisfy the ever changing needs of customers (Slattery and Nellis, 2005). Fourth, many business organizations in the late 1980's and the 1990s faced an untold amount of pressure, which had a profound effect on organizational performance and market share. Put another way, marketplace dynamics moved at top speed making it difficult if not impossible for business organizations to identify and track changing customer needs (Shepperd and Pervaiz, 2000). In addition, as market competition on the international scale became fierce; many business organizations resorted to the use of product innovation (Zhang and Doll, 2001; Kessler and Chakranarti, 1996; Cooper and Kleinschmidt, 1994).

Today many business organizations have become system-builders adapting to new structures of production and operations. In many cases business organizations have created change given their desire to become historical figures in their industries. Many innovative products came into being given organizational ability to adapt to turbulent business environment through activities of trial and error and risk-taking (Fuglsang and Sundbo, 2005). Consequently, the ever changing business environment has forced business organizations to rethink their product innovation processes. Unlike several decades ago when innovation was deemed to emanate from senior management, modern business organizations now adopt the use of cross-functional teams that deliver development projects more efficiently (Drew and Coulson-Thomas, 1996; Hershock et al., 1994). There is now an emergence of project-based organizations where teams are created to deliver development projects and then disbanded to create new teams for new projects (Hobday, 2000). There is evidence in theoretical literature to suggest that this new approach which is being deployed by many business organizations is successful (see McDonough, 2000; Donnellon, 1993; Sethi, 2000; Hitt et al., 1996).

Innovation is critical to the success of any product (Zirger, 1997; Sethi et al., 2001). It is a critical mechanism through which firms secure a place in the competitive world of the future (Van de Ven, 1986) and an essential process for firm success (Brown and Eisenhardt, 1995). Product innovation is increasingly recognised as a vital component of organizational competitive strength, the survival strategy of most industries (Edquist, 2000; Laborde and Sanvido, 1994) and the sustainability of any organization depends largely on it (Henard and Szymanski, 2001). The introduction of new and innovative businesses and products present organizations with an unimaginable and unquantifiable opportunity to grow, expand into other areas of business, raise market or customer share and dominate the market. The development of new innovative products is central to the growth and prosperity of modern organizations (Sheperd and Pervaiz, 2000). Product innovation relates to the novelty and meaningfulness of new products (Slattery and Nellis, 2005). It is regarded as the perceived newness, novelty, originality, or uniqueness (Henard and Szymanski, 2001) of products.

Business organizations have pursued several types of product innovations but most notable are the routine and radical innovation systems, Nord and Tucker (1987). Under the routine innovation system, business organizations introduce products that are new but similar to products previously developed by the organization. Radical innovation, commonly regarded as breakthrough (Deschamps, 2005) business organizations add new products that are completely different from existing product lines. Breakthroughs rarely occur but when they do they emanate unexpectedly through an unplanned bottom-up production process. For instance, 3M's 'Post-It' pads as well as Searle's 'Aspartame' (Anonymous, 2006) emanated accidentally through such a process. Furthermore, radical innovation refers to changes in technology that facilitate significant improvements in the delivery of products (Foster, 1986; McKee, 1992). Baker and Sinkula (2002) argued that the movement towards radical innovation has in many business organizations rendered state of the art technology obsolete.

Time or timing is important to product innovation processes. As such organizations are now driven to implement production and operations changes that speed products through development and improvement processes (Griffin, 1997). Today's organizations speedily investigate existing opportunities competing for limited resources (no matter how large they are) and ensure they can be efficiently prioritised – leading to improved sales volume and improved profit making for organizations. Recent research by Pavar et al. (1994), indicating a strong correlation between product innovation and organizational health, supports this view. Product innovation has increasingly become one of the most important functions of successful business organizations (Trygg, 1993). Furthermore, many organizations have recognized not only the need to develop innovative products but also sustainable innovative products as well. Anthony et al. (1992) argued sustainability holds the key to achieving product innovation success. Consequently, many business organizations are approaching product innovation as a source of achieving competitive advantage (Bowen et al., 1996).

Technological innovation: refers to the invention of new technology and the introduction of products, processes or services based on new technologies (Betz, 1998). Pavit (1994) identified four characteristics of technological innovation. First is continuous and intensive collaboration and interaction among functionally and specialized groups. Second is that intensive collaboration and interaction often remains profoundly uncertain. Third, they are cumulative involving the development and testing of prototypes and pilot plants and fourth, they are highly differentiated based on specific technological skills required in the innovation process. These characteristics help us to understand the meaning of technological innovation. Technology has made immeasurable contributions to changes witnessed in society (Twiss, 1993) and has played a crucial role in organizational development. All business organizations, without exception, owe their origin

and continued existence to the successful application of technology in the development of new products and improved manufacturing processes.

The role of technology in the marketplace has been profound, so much so that business organizations that fail to maintain technological innovative momentum will be overtaken by more youthful and vigorous ones. As Twiss (1993) argued, a comparison of today's market leaders with those operating over two decades ago reveals how many of the once great names have declined in importance or made extinct from the business environment due to their inability to anticipate the effects of new technology.

The use of technological innovation could be traced to the period of industrial revolution of the 1800s (Wells et al. 1995). Industrial talents like Morgan, Rockefeller and Carnegie built enormous factories using latest technological innovation of their time. New products were created and state of the art transportation networks were established to deliver these products. This was followed in the 1900s by industrial geniuses like Ford and Watson who opened the door to mass production with new innovative technologies. Rather than reduce its pace, the Second World War of 1939 to 1945 had a significant and even more positive effect on technological innovation – this time in the military. Newer technological innovations emerged in the form of war equipment.

The Germans for instance developed automobiles that required no carburettor. Many factories in the United States became the hub of innovative war technologies as Tanks, Jeeps, artillery and ammunition and fighter bombers were produced (Wells et al., 1995). After the war ended, western economies witnessed a new phase of technological innovation - the emergence of a new range of technologies founded primarily on microelectronics and information technology.

In many organizations and most especially the banking industry, technological innovation has been central to the achievement of organizational goals. The banking industry all over the world has embraced all forms of technology namely information technology, computers, automated teller machines to mention a few. Scarbrough and Lannon (1989) averred that major British banks were enthusiastic about the adoption of sophisticated technologies and that they were among the first financial institutions to automate the 'the heavy work load of back office operations' fuelled by the increasing volume of bank operations in the 1950s and 1960s. Since then the use of information technology has grown rapidly. It has played an important role in the delivery of fast and efficient financial services to customers and has been the source of competitive advantage (Barney, 1991; Clemons, 1986; Clemons and Kimbrough, 1986; Clemons and Row, 1987; 1991; Feeny, 1988; Feeny and Ives, 1990).

More precisely, the use of innovative information technology has resulted in the proliferation of electronic cash dispenser networks. Today, customers no longer carry cash around as they now withdraw cash using the Automatic Teller Machines (ATM) which have been strategically distributed at various locations round the country. Unlike the back office automation systems of the 1960s and 1970s, the Automatic Teller Machines (ATM) technology promised competitive and immeasurable benefits (Scarbrough and Lannon, 1989) to customers and banks alike. While, banks no longer spend time preparing cash balances across the counter, customers carryout bank transactions withdrawing cash through the ATM at any place and at any time (even over the weekend). In addition the use of innovative information technology has provided the benefit of constant access to certain core services reducing the need to interact with bank staff for many people (Devlin, 1995)

Another major technological innovation in the banking industry is home and telephone banking, pioneered in the UK by the Nottingham Building Society (Devlin, 1995). Innovative technology has triggered the development of home and telephone banking systems. Customers can now carry out banking transactions, privately in the comfort of their homes and offices. Further technological innovations have stemmed and reduced the cost of entry into certain retail financial services markets by reducing the dependence on the existence of a branch network to distribute product offerings (Devlin, 1995). Through innovative technology, the banking industry in Britain moved rapidly towards increasing the ability of its customers towards transacting business online (Mullighan and Gordon, 2002).

Many banks' customers now interact with their banks online transacting business through the internet. In the comfort of their homes, offices or even under mobile circumstances, customers can now transfer funds from one account to another through the internet. Such transfers can be done internationally, between one bank in one country and another bank in another country.

In a nutshell, technological innovation through computerization and information technology allowed banks to centralize accounting systems and develop comprehensive database of customers, providing services online or over the telephone. The adoption of information technology through the internet and telephone brought fast and speedy and more efficient customer services. Customers no longer have to wait for hours on end to get their money. The adoption these new technologies sent signals of better and more efficient customer service identities and resulted in favourable corporate image for banks among stakeholders.

Organizational innovation: refers to the adoption of innovation in business organizations. It involves the generation and implementation of new ideas or behaviour. Organizational innovation may be founded on the adoption of a new product or service, a new production process technology, a new structure or administrative system, or a new plan of programmes (Damanpour, 1991). Following Draft (1982); Damanpour and Evan (1984); Zaltman, et al. (1973), Damanpour defined the notion of organizational innovation stating thus:

“The adoption of an internally generated or purchased device, system, policy, programme, process, product or service that is new to the adopting organization”.

Broadly speaking, the main intention of organizations in the pursuit of innovation is to contribute to the efficiency of their core business activities and operations. It is a means of re-aligning organizations to respond effectively to rapid changes witnessed in the business environment. The implementation of organizational innovation often requires the development of a new culture. The discipline of organizational innovation has been pursued by organizations in several ways. Organizational innovation evolves over time in three major ways (Fuglsang and Sundbo, 2005). First is via a value based entrepreneurial system, second via a technology based functional system and third, through a strategic reflexive system.

The value based system is the start of an exciting journey which will re-energize the organization. It occurs where organizations assume an entrepreneurial role with a spirit of independency and creativity. Writing in support of Fuglsang and Sundbo (2005), an anonymous author identified 7 factors impinging on value based innovation system. These include fear of failure, lack of step-change in growth and value, poor commitment from middle managers, poor shared commitment across boundaries, ‘the running of good ideas out of momentum’, pressure to manage measures more than value and unnecessary focus on processes and outcomes. Similarly three strategic ideas (immersion, innovation and impact)

otherwise called 3i's were put forward by the same author as a possible way out of this quagmire. First is to understand what consumers want and not sell what the organization can produce. This is conceived as immersion. Second is innovation. This is to gain insight into the business demand and re-defining resources. Third is to make innovation an organizational culture by engaging the entire organization in innovation. This equally conceived as impact.

Business organizations build systems, create new structures, lead and create change and within a short period of the change become reference points and heroic and historic figures in the industry. The change or invention led by entrepreneurial organizations does not happen accidentally. It occurs through a series of activities of trial and error and risk-taking behaviour and organizations that change the business environment with new innovations display leadership behaviours at each stage along the way. Entrepreneurial ability is, however, weaved together by organizational entrepreneurial charisma and personality relating to organizational behaviour and communication (Albert and Whetten, 1995). Essentially, this results in what could be termed organizational innovative identity. It is observed that business organizations that are involved in value based innovation systems automatically project industry leader identities and in return create similar image among stakeholders in markets.

Organizations that pursue technology based systems are mostly driven by institutional routines that lead to the production of specific goods and standardized technology-based services at specific prices and volume. Under this system, organizations are hierarchically structured through various socialization mechanisms, ranging from the patriarchal leadership of an individual person to more indirect forms of socialization, for example, in the professional organizations. Organizations that pursue the technology based system of innovation take a very careful route in the course of adapting to changes in the environment. The technological innovative policies pursued by such organizations (particularly pharmaceutical industry operators) rely heavily on empirical evidence and identifiable trajectories of change. Highly rigorous systematic routines existing within technical and natural science research are strictly and religiously followed in the course of the technological innovative process. Thus, a lot of time is consumed in arriving at the product through this innovation process. Consequently, this process sends identity signals that indicate that organizations are pursuing 'laid down' rigorous systematic scientific rules.

The strategic reflexive organizational system is driven by the entire organization. Business organizations operate in turbulent business environments where things occur for the good or bad at most times. As such business forecasts, may at times, fail to come true. Organizational activities in most markets are highly dependent on strategic moves made by other market operators. Organizations operating in the biotechnology industry (Van der Valk et al, 2003) for instance are forced to develop networks and strategic alliances, share information and take joint strategic decisions that affect all if they want to survive in business, but are left unsure about where to go and how to move. Strategic decisions are taken among such organizations because of the recognition that modern technological developments evolve rapidly, creating uncertainty concerning which technological fields companies need to focus on. Therefore organizations tend to specialize in their core competencies and look for appropriate partners when it comes to activities that they have less competence.

Thus, when deciding to establish partnerships, firms take into account their own needs as well as the core competencies of potential partners (Van der Valk et al, 2003). The value or rule of organizational behaviour in this context is called strategic reflexivity. Importantly, when organizations pool their resources together, share information and take strategic decisions that affect all market operators together, two conflicting signals are given. First, a harmonious identity is developed by market operators and sent to stakeholders. Second, a homogeneous identity is also drawn based on the

similarities in the decision making activities of operators. Either way, organizations operating the strategic reflexive organizational system of innovation develop industry wide generic image on the one hand and a harmonious image on the other.

CONCLUSIONS

This paper sought to give an update on the basic notions of the concept of innovation with reference to how the meaning and types of the concept are documented in literature. The paper drew attention to the increased importance of innovation and examined how its meaning has been constructed from multiples perspectives in academic literature. Importantly, it underscored the ongoing conception of innovation, in literature, as a phenomenon reflective of the process of developing something radically different and the extent to which such new products or services are radically different (Bekkers et al, 2011).

Beyond its meaning, this paper examined the three popular types of innovation – namely product, technological, and organizational. At the product level, innovation is generally conceived to occur at two important levels namely – routine and radical (Nord and Tucker, 1987). Routine innovation occurs when new products that are similar to products previously developed by the organization are introduced in the marketplace. Radical innovation otherwise called breakthrough in organizations (Deschamps, 2005) occurs when business organizations add new products that are completely different from existing product lines.

On a final note, this conceptual paper demonstrates the desire for innovation is increasing and increasing phenomenally. The paper equally demonstrates innovation increases wealth. It shows that business organizations that aim to stay ahead of competition cannot do without innovation and that is a major priority for business organizations. Innovation has become an important tool that influences the direction of strategic planning. Business organizations that wish to sustain innovation do so by maintaining an open door policy to business ideas regardless of the source of the idea within the organization. To such organizations, ideas regardless of who suggests it lead to innovation resulting in business, market or technological revolutions. However, in order for innovation to be conceived as being valuable, newly introduced ideas, products, services, or processes must be strong enough to progress successfully from the product development process phase to the competitive marketplace. Business organizations that fail to innovate or sustain innovation in today's marketplace will in no time face decline and extinction. In order to avoid this, business organizations are consistently deploying a variety of measures to strengthen their ability to innovate. Some of these include the development of forward and original thinking cultures not just among managers but throughout the organization. In addition, many businesses are investing in scientific research given its recognition by organizations as a major source of innovation. Business organizations in today's marketplace are feeling the need for innovation given intensity of globalization, technology, knowledge, and increased climate change. Business organizations that engage in sustainable innovation will consistently add value in the marketplace, better the quality of human life and make the world a better place to live.

REFERENCES

1. Albert, S. and Whetten, D.A. (1985). "Organizational Identity", In Cummings, L.L. and Staw, B.M. (Eds), *Research In Organizational Behaviour*, Volume 7, pp263-95, Jai Press, Greenwich, CT.
2. Anonymous (2006). Value Based Innovation, <http://www.agendaforchange.co.uk/index.php>

3. Anthony, Shapiro and McGrath (1992). *Product Development: Success Through Product & Cycle-Time Excellence (PACE)*, Butterworth-Heinemann, Oxford.
4. Baba, Yusif, (2012), Adopting a specific innovation type versus composition of different innovation types, *International Journal of Bank Marketing*, Vol. 30 No. 3, pp.218-240.
5. Baker, W.E. and Sinkula, J.M. (2002). Market Orientation, Learning Orientation and Product Innovation: Delving into the Organization's Black Box, *Journal of Market - Focused Management*, Mar; 5, 1; pg. 5
6. Barney, J.B. (1991). Firm Resources and Sustained Competitive Advantage, *Journal of Management*, Vol. 17, pp.99-120.
7. Barsky, Robert B. and Sims, Eric R. (2012). Information, Animal, Spirits, and the meaning of innovations in consumer confidence, *American Economic Review*. Jun2012, Vol. 102 Issue 4, p1343-1377
8. Bartel, C.A. and Garud, R. (2009). Role of Narratives in Sustaining Organizational Innovation, *Organization Science* 20(1), pp. 107–117,
9. Battistella, Cinzia; Biotto, Gianluca; De Toni, Alberto F. (2012), From design driven innovation to meaning strategy, *Management Decision*, Vol. 50 No. 4, pp.718-743.
10. Bekkers, V. Jurian Edelenbos and Bram Steijn (2011). *Innovation in the public sector: linking capacity and leadership*. Palgrave Macmillan, London, New York.
11. Betz, F. (1998). *Managing Technological Innovation: Competitive Advantage From Change*, Wiley and Sons, New York.
12. Bowen, H.K., Clark, K.B., Halloway, S.C. and Wheelwright, S.C (1996). *The*
13. *Perpetual Enterprise Machine: Seven Keys to Corporate Renewal through Successful Products and Process Development*, Oxford University Press, Oxford.
14. Brown, S. and K. Eisenhardt. (1995). Product development: Past research, present Findings, and Future directions, *Academy of Management Review*, Vol. 20, Iss. 2, Pp 343-378.
15. Carlo, Jessica Luo; Lyytinen, Kalle; Rose, Gregory M. (2012) *MIS Quarterly*, Vol. 36 Issue 3, p865-A10.
16. Clausen, Tommy; Pohjola, Mikko; Sapprasert, Koson; Verspagen, Bart (2012), Innovation strategies as a sources of persistent innovation, *Industrial & Corporate Change*. Vol. 21 No. 3, pp.553-585.
17. Clemons, E.K. and Kimbrough, S.O. (1986). Information Systems, Telecommunications and their Effects on Industrial Organization, *Proceedings of the 7th International Conference on Information Systems*, December, pp.99-108
18. Clemons, E.K. and Row, M. (1987). Structural Differences among Firms: A Potential Source of Competitive Advantage in the Application of Information Technology, *Proceedings of the 8th International Conference on Information Systems*, pp 1-9.
19. Clemons, E.K. and Row, M. (1991). Sustaining IT Advantage: The Role of Structural Differences, *MIS Quarterly*, September, Vol 15 No. 3, pp.275-292.

20. Clemons, E.K. (1986). Information systems for sustainable competitive advantage, *Information and Management*, Vol. 11 No. 3, pp. 131-136.
21. Cooper, R.G. and Kleinschmidt, E.J. (1987). New Products: What Separates Winners From Losers, *Journal of Product Innovation Management*, Vol. 4 No. 3, pp. 169-84.
22. Damanpour, Fariborz; Walker, Richard M.; Avellaneda, Claudia N. (2009), Combinative effects of innovation types and organizational performance: a longitudinal study of service organizations, *Journal of Management Studies*, Vol. 46 No 4, pp.650-675.
23. Damanpour, F. and Evan, W. M.(1984). Organizational innovation and performance: The problem of organizational lag. *Administrative Science Quarterly*, 29: 392-409.
24. Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy Of Management Journal*, 34: 555-590.
25. Devlin, J.F. (1995). Technology and Innovation in Retail Banking Distribution, *International Journal of Bank Marketing*, Vol. 13 No. 4, pp.19-25.
26. Donnellon, A. (1993). Cross-functional Teams in Product Development-Accommodating the Structure to the Process, *Journal of Product Innovation Management*, Vol. 10, pp. 377-92. Draft (1982)
27. Drew, S. and Coulson-Thomas, C. (1996). Transformation Through Teamwork: The Path to the new organization?, *Management Decision*, Vol. 34 No. 1, pp. 7-17.
28. Edquist, C. (2000). Systems of Innovation Approaches - Their Emergence and Characteristics, in Edquist, E. and McKelvey, M. (Eds), *Systems of Innovation: Growth, Competitiveness and Employment*, Cheltenham, UK; An Elgar Reference Collection, Northampton, MA, Vol. 1, pp. 3-37.
29. Esty, Daniel C. and Charnovitz, Steve (2012), Green rule to drive, *Harvard Business Review*. Vol. 90 Issue 3, p120-123.
30. Feeny, D. and Ives, B. (1990). In Search of Sustainability: Reading Long-Term Advantage from Investments in Information Technology, *Journal of Management Information Systems*, Vol 7 Iss. 1, Summer, Pp 27-46
31. Feeny, D. (1988). Creating and Sustaining Competitive Advantage with IT, In *Information Management: The Strategic Dimension*, M. Earl, (Ed.). Oxford University Press, Oxford UK.
32. Foster, R. (1986). *Innovation: The Attacker's Advantage*, Summit Books, New York.
33. Fuglsang, L. and Sundbo, J. (2005). The Organizational Innovation System: Three Modes, *Journal of Change Management*, London, Vol. 5, Iss. 3; p. 329 (16 pages)
34. Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., Trow, M., 1994. *The New Production of Knowledge: The Dynamics of Science and Research in Contemporary Societies*. Sage, London.
35. Govindarajan, Vijay (2012), A reverse-innovation playbook, *Harvard Business Review*, Vol. 90 Issue 4, p120-124.

36. Griffin, A. (1997). PDMA Research on New Product Development Practices: Updating Trends and Benchmarking Best Practices, *Journal of Product Innovation Management*, Vol. 14, pp. 429-58.
37. Harmancioglu, Nukhet; Droge, Cornelia; Calantone, Roger J. (2012), Theoretical Lenses and Domain Definitions in Innovation, *European Journal of Marketing*. Vol. 43 No. 1/2, p229-263.
38. Henard, D.H. and Szymanski, D.M. (2001). Why Some New Products are More Successful Than Others, *Journal of Marketing Research*, Vol. 38 No. 3, pp. 362-75.
39. Hershock, J., Cowman, C.D. and Peters, D. (1994). From experience: action teams that work, *Journal of Product Innovation Management* Vol. 11, pp. 95-104.
40. Hesselbein, F. Goldsmith, M and Somerville, I. (2002). *Leading for Innovation and Organizing for Results*, San Francisco: Jossey-Bass.
41. Hitt, M.A., Nixon, R.D., Hoskisson, R.E. and Kochhar, R. (1996). The birth, life and Death of a Cross Functional New Product Design Team, *Marketing Science Institute Working Paper Report*, pp. 96-111
42. Hobday, M. (2000). The Project Based Organization: An Ideal Form For Managing Complex Products and Systems?", *Research Policy*, Vol. 29, pp. 871-93.
43. Deschamps, J. P. (2005) "Different leadership skills for different innovation strategies", *Strategy and Leadership*; 2005; Vol. 33, Iss. 5; pp. 31-39.
44. Friedrich, Tamara L.; Mumford, Michael D.; Vessey, Brandon; Beeler, Cheryl K.; Eubanks, Dawn L. (2010), Leading for innovation: reevaluating leader influences on innovation with regard to innovation type and complexity, *International Studies of Management & Organization*. Summer2010, Vol. 40 No. 2, pp.6-29.
45. Kessler, E. and Chakranarti, A. (1996). Innovation Speed: A Conceptual Model of Contest, Antecedents, and Outcomes, *The Academy of Management Review*, Vol. 21 No. 4, pp. 1143-91.
46. Kotabe, M. and Swan, K.S. (1995). The role of strategic alliances in high-technology new product development. *Strategic Management Journal* **16**(8): 621–636.
47. Laborde, M. and Sanvido, V. (1994). Introducing New Process Technologies into Construction Companies, *Journal of Construction Engineering and Management-ASCE*, Vol. 120 No. 3, pp. 488-508.
48. Ling, T. (2002). Innovation: Lessons from the Private Sector A 'think piece' in Support of the Invest to Save Study www.nao.org.uk/publications/nao_03/innovation.pdf
49. McDonough, E.F. III (2000). Investigation of Factors Contributing to the Success of Cross-Functional Teams, *Journal of Product Innovation Management*, Vol. 17, pp. 221-35.
50. McKee, D. (1992). An organizational learning approach to product innovation. *Journal of Product Innovation Management*, Vol. 9 No, 3, pp. 232-245.
51. Mullighan, P. and Gordon, S. (2002). The Impact of Information Technology of Customer and Supplier Relationships in the Financial Services, *International Journal of service Industry Management* Vol. 13 No. 1, pp 29-46

52. Nagji, Bansi and Tuff, Geoff (2012), Managing your innovation portfolio, Harvard Business Review, Vol. 90 Issue 5, pp66-74.
53. Nord, W. and Tucker, S. (1987), Implementing routine and radical innovations, Lexington Books, Lexington, MA.
54. Orr, Gordon and Roth, Erik (2012), A CEO's guide to innovation in China, McKinsey Quarterly, Issue 1, pp.74-83.
55. Parida, Vinit; Westerberg, Mats; Frishammar, Johan (2012), Inbound open innovation activities in high tech SMEs: the impact of innovation performance, Journal of Small Business Management. Vol. 50 No. 2, pp.283-309.
56. Pavar, K.S, Menon, V. and Reidel, J.C.K.H. (1994). Time to Market, Integrated Manufacturing Systems, Vol. 5 No. 1, pp. 14-22
57. Pavitt, K. (1994). What We Know About the Strategic Management of Technology. In Implementing New Technologies: Innovation and the Management of Technology, edited by Ed Rhodes and David Wield. Blackwell, UK
58. Piva, Evila; Rentocchini, Francesco; Rossi-Lamastra, Cristina (2012), Is open source software about innovation? Collaborations with the open source community and innovation performance of software entrepreneurial ventures, Journal of Small Business Management. Apr2012, Vol. 50 No. 2, pp.340-364.
59. Robert, B. and Sims, E.R. (2012). Information, Animal Spirits, and the Meaning of Innovation, *American Economic Review*. Vol. 102 No. 4, pp.1343-1377.
60. Rogers, M. (1998). The Definition and Measurement of Innovation, Working Paper, 10/98, Melbourne Institute of Applied Economics and Social Research, University of Melbourne
61. Scarbrough, H. and R.Lannon, 1989, 'The Management of Innovation in the FinancialServices Sector: a Case Study', *Journal of Marketing Management*, Vol.5, No.1, pp.51-62.
62. Schmidt, J.B. and Calantone, R.J. Are really new product development projects harder to shut down? *Journal of Product Innovation Management*, Vol. 15 No. 2, pp.111-23.
63. Schumpeter, J. A. (1942). *Capitalism, Socialism and Democracy*, Harper and Row, New York.
64. Sethi, R., Smith, D.C. and Park, C.W. (2001). Cross-Functional Product Development Teams, Creativity, and the Innovativeness of New Consumer Products, *Journal of Marketing Research*, Vol. 38 No. 1, pp. 73-85.
65. Sethi, R. (2000). New Product Quality and Product Development Teams, *Journal of Marketing*, Vol. 64, pp. 1-14.
66. Shepherd, C. and Pervaiz, K. Ahmed (2000). NPD frameworks: a holistic Examination, *European Journal of Innovation Management*, Bradford, Vol. 3, Iss. 3; pg 160
67. Slattery, D. J. and J. G. Nellis (2005). Product development in UK retail banking developing a market-oriented approach in a rapidly changing regulatory environment." *International Journal of Bank Marketing*, **23**(1): 90-106.
68. Stephenson, Carol (2011), The true meaning of innovation, *Ivey Business Journal.*, Vol. 75 No, 2, pp12-12

69. Tödttling, Franz and Lehner, Patrick and Kaufmann, Alexander (2008) Do different types of innovation rely on specific kinds of knowledge interactions? SRE - Discussion Papers, Institut für Regional- und Umweltwirtschaft, WU Vienna University of Economics and Business, Vienna.
70. Trygg, L. (1993). Concurrent Engineering Practices in Selected Swedish Companies: A Movement or an Activity of the Few, *Journal of Product Innovation Management*, No. 10, pp. 403-15.
71. Twiss, B. C. (1993). *Managing Technological Innovation*, Pitman Publishing, London
72. Van de Ven, A.M. (1986). Central Problems in the Management of Innovation, *Management Science*, Vol. 32 No. 5, pp. 590-607.
73. Van der Valk, T., Meeus, M., Moors, E., Faber, J., Hu, H. (2004), Partnering among biotechnology companies: the role of inducements and opportunities in explaining partnering behaviour, Conference paper, DRUID Summer conference
74. Well, W., Burnett, J. and Moriarty, (1995). *Advertising: Principles and Practice*, Prentice Hall, Englewood Cliffs, New Jersey.
75. Wilson, Keeley; Doz, Yves L. (2011), Agile innovation: a footprint balancing distance and immersion, *California Management Review*, Vol. 53 No. 2, p.p6-26.
76. Zaltman, G., Duncan, R. and Holbek, J. (1973). *Innovations and Organizations*, John Wiley and Sons, New York, NY.
77. Zhang, Q. and Doll, W. (2001). The Fuzzy Front End and Success of New Product Development: A Causal Model, *European Journal of Innovation Management*, Vol.4 No. 2, pp. 95-112.
78. Zirger, B.J. (1997). The Influence of Development Experience and Product Innovativeness on Product Outcome, *Technology Analysis and Strategic Management*, Vol. 9 No. 3, pp. 287-97.

BIODATA

Olutayo Otubanjo is a Senior Lecturer in Marketing at Lagos Business School. He is a Visiting Research Fellow at Warwick Business School, University of Warwick (UK) and also a Visiting Scholar at Spears School of Business, Oklahoma State University, USA. He holds a PhD in Marketing with emphasis on industry construction of the meaning of corporate identity. Otubanjo attended University of Hull (UK) and Brunel University, London. He is published in *Academy of Marketing Science Review*; *Tourist Studies*; *Management Decisions*; *Marketing Review*; *Journal of Product & Brand Management*, *Corporate Reputation Review*, *Corporate Communications: An International Journal* etc. He has contributed to edited books on corporate reputation and corporate branding. His research interests sit at the interface between social constructionism, historical institutionalism, discourse analysis, on the one hand, and the elements of corporate marketing including corporate branding, corporate identity, corporate reputation, corporate image, corporate communications cum corporate PR, on the other. He was at a time Director for Brand Strategy & Account Planning, CentrespreadFCB, Nigeria's third largest advertising agency.