

# The Linkage Between Innovation and Services

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**Abstract**— Innovation would be the rule of thumb that facilitates the achievement of gaining competitive advantages and accomplishing excellence among others. Innovation starts from the early stages of recruiting people who can innovate new process to result in novelty and creative outcomes that fulfill the customer's demands [3]. Innovation can result in increased market share, revenues, profits, reduced costs, and other significant implications that any firm would work to achieve. However, innovation is likely to have some atmospheres of uncertainty, risk taking, and entrepreneurial actions. And that would quietly require special conditions on both aspects of management and organizational culture [6]. Therefore, there is a need for exploring those conditions and managerial practices that can boost innovation in such firms that perceive innovation as a building block for their whole road map. And that would reveal more facts regarding innovative practices from both parties the firm (the product / service) and the consumer (the feedback). Moreover, an investigation is also required revealing the factors that might become barriers for innovation boosting, which result in poor performance and deficiencies.

**Index Terms**— Linkage, innovation, services, practices, strategic advantages, management, value.

## 1 INTRODUCTION

Nowadays, getting survived in the marketplace is not enough and forms a real risk to those who would perceive it that way. And that is because of the high increasingly competition over the different industries and among variable players. Thus, the trick and the main recipe of gaining advantages from competition instead of disadvantages and following others is to be different from other players in the market in line with customer's needs and trends.

Moreover, the call of being differentiated and distinguished from others is alarming all the time during your presence in the marketplace. Therefore, to produce and deliver different outcomes to customers require some sort of different internal processing of resources inside the firms, and that what we need to call as innovation [4].

Innovation would be the rule of thumb that facilitates the achievement of gaining competitive advantages and accomplishing excellence among others. Innovation starts from the early stages of recruiting people who can innovate new process to result in novelty and creative outcomes that fulfill the customer's demands [3].

Innovation can result in increased market share, revenues, profits, reduced costs, and other significant implications that any firm would work to achieve. However, innovation is likely to have some atmospheres of uncertainty, risk taking, and entrepreneurial actions. And that would quietly require special conditions on both aspects of management and organizational culture [6].

Therefore, there is a need for exploring those conditions and managerial practices that can boost innovation in such firms that perceive innovation as a building block for their whole road map. And that would reveal more facts regarding innovative practices from both parties the firm (the product / service) and the consumer (the feedback). Moreover, an investigation is also required revealing the factors that might become barriers for innovation boosting, which result in poor performance and deficiencies.

## 2 INNOVATION PRACTICES

In 2004, Frank Hull studied an issue related to innovation practices in service sector compared to those in manufacturing sector. In the study, concurrent engineering and contingency theory were examined through a composite model called "Troika". The model does involve the three issues of organization, processes, and tools in such a way that intended to increase the novelty and innovation of service development. Figure 1.0 represents the Troika model, by which the model elements are interacting and affecting each other [1].

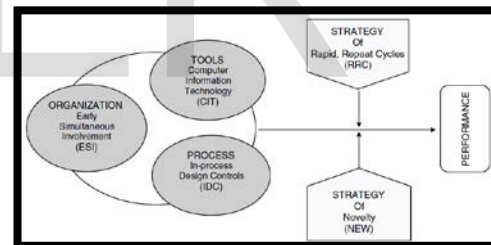


Figure 1.0: The Troika [1]

On the left side of the model, the operating part is considered in terms of people working in cross functional teams, processes required to achieve required goals, and tools that boost the cycle of achievement.

However, in order to examine the viability of the Troika, some hypotheses were set as follows:

"Hypothesis 1: Interaction effects among the troika

Hypothesis 1a: The greater the deployment of IDC, the greater the positive effect of ESI organization on performance outcomes.

Hypothesis 1b: The greater the deployment of CIT tools, the greater the positive effect of ESI organization on performance outcomes.

Hypothesis 1c: The greater the deployment of CIT tools, the greater the positive effect of IDC performance outcomes.

Hypothesis 2: Interactions of the magnitude of innovation targeted by the strategy

Hypothesis 2a: The more the strategy targets novelty, the greater the positive effect of ESI organization on performance outcomes.

Hypothesis 2b: The more the strategy targets novelty, the greater the positive effect of IDC process on performance outcomes.

Hypothesis 2c: The more the strategy targets novelty, the greater the positive effect of CIT tools on performance outcomes.

Hypothesis 3: The greater the strategy of novelty, the greater the interaction between (a) ESI and IDC, (b) ESI and CIT, and (c) IDC and CIT." [1].

In addition, in order to compile the study a sample of around 58 large firms was drawn, using a questionnaire that is intended for concurrent methods being used there in the firms.

Results showed that ESI was having a significant impact on performance and CIT was having a moderate effect on performance. In contrast, IDC was having insignificant effect on performance [frank].

Nevertheless, the interaction between both ESI and IDC was resulting in a significant effect on performance indicators (time/cost index and product innovation index). Despite to this, CIT has no interactions with other elements in the troika, and that does contract with the results in goods firms [1].

### 3 INNOVATION IN MANUFACTURING AND SERVICE SECTOR

In 2005, Joe Tidd, John Bessant, Keith Pavitt Innovation tried to attempt the management part of innovation "Managing Innovation", where they perceive innovation as opening up new markets or new needs. Not only that; it also means offering existing products or services using new ways [11].

Despite a global shift in textile and clothing manufacture towards developing countries the Spanish company, Inditex (through its retail outlets under various names including Zara) have pioneered a highly flexible, fast turnaround clothing operation with over 2000 outlets in 52 countries.

It was founded by Amancio Ortega Gaona who set up a small operation in the west of Spain in La Coruna - a region not previously noted for textile production - and the first store opened there in 1975. Central to the Inditex philosophy is close linkage between design, manufacture and retailing and their network of stores constantly feeds back information about trends, which are used to generate new designs [11].

They also experiment with new ideas directly on the public, trying samples of cloth or design and quickly getting back indications of what is going to catch on. Despite their global

orientation, most manufacturing is still made in Spain, and they have managed to reduce the turnaround time between a trigger signal for an innovation and responding to it to around 15 days [11].

the Karolinska Hospital in Stockholm has managed to make radical improvements in the speed, quality and effectiveness of its care services - such as cutting waiting lists by 75% and cancellations by 80% - through innovation.<sup>5</sup> In banking the UK First Direct organization became the most competitive bank, attracting around 10 000 new customers each month by offering a telephone banking service backed up by sophisticated IT.

A similar approach to the insurance business - Direct Line - radically changed the basis of that market and led to widespread imitation by all the major players in the sector. Internet-based retailers such as Amazon.com have changed the ways in which products as diverse as books, music and travel are sold, whilst firms like e-Bay have brought the auction house into many living rooms.

Nowadays, the lead-time between the launching of two certain products has been so short in such a rapid response markets. Where the competition in the market plays a very critical role in pushing some firms to respond to other players, otherwise, the firm will miss the trip!

However, customer's needs and preferences are being changing with no prior alarm and notice, where the first who respond to that call will gain the advantage. Likewise, new regulation trends and policies might play a similar role, for example, being committed to some measures for environmental issues can facilitate creating a new product that is fulfilling that goal, whilst others can still think about that regulation as a challenge.

The same story applies for services, and that mean breaking the traditional and usual picture of offering services. Because any player can easily come with new and innovative way of serving that lead to his / her competitive advantage and lead to your competitive disadvantage.

### 4 INNOVATION ELEMENTS IN PRACTICE

There are specific elements for innovation, which can be combined in the coming 4Ps:

1. Production Innovation: making new changes in products or services that the firm offers.
2. Process Innovation: making changes in the way / style that products or services are being made.
3. Position Innovation: making changes in the environment where the product or service will be launched and introduced.
4. Paradigm Innovation: making changes in the mental or conceptual model that specify what the firm is doing.

Some times you need to develop a product that has gone through several phases of introducing till it lasts, and that may be clear in car manufacturing, where they make some gradual

modification till the model is obsolete and the turn is due for introducing the new model that has radical innovation and changes [2]. In 2006, Jeroen Jong and Patric Vermeulen investigated the determinants of product innovation in small firms. They were interesting in exploring the differences across the service and goods sectors in terms of producing innovative outcomes [11].

A sample size of 1,250 small firms was drawn over 7 industries. In the study, the focus was considering the practices that a firm would perform in order to come up with innovative outcomes whether in service or manufacturing firms.

The following indicators were used in analyzing the innovative practices among small firms, which might vary from one firm to another [11].

- Recent product introduction (new to the firm)
- Recent product introduction (new to the industry)
- Innovative practices:
  - Managerial focus
  - Documented innovation plans
  - The use of external networks
  - Market research
  - Inter-firm cooperation
  - Involvement of first line staff
  - Training and development programs" (Jong and Vermeulen, 2006).

However, the investigation over those industries showed that recent product innovation is common over the industries in 21% of the sample. One important fact Jong and Vermeulen have come up with is that "Our most interesting finding is that the various models confirm our suspicion of the determinants of product innovation being different across industries." [11].

For instance, a managerial focus on innovation was significantly connected to new-to-the firm products in five out of seven sectors, but not in manufacturing and financial service firms. In such highly innovative firms, a managerial focus towards innovation might happen by default, and therefore not be a significant practice.

With the exception of training and education programs, all innovative practices had significant regression coefficients in only a subset of the industries we have investigated."

Nowadays, to get competitive advantages in any industry have become a prerequisite for sustainable growth and future profitability. And that would be achieved through innovation, organizational change, and entrepreneurial initiatives. Moreover, special traits of leadership have to be there to support the construction of such a climate or a culture of innovation and creative outcomes [8].

Their study is intended to test the connections and relationships of organizational innovation and other related factors such as leadership and culture. And that study was conducted for the dedication of Australian private sector firms.

A random sample was drawn to collect the required data to

test the hypotheses of the study through a customized questionnaire that serves the study purpose. A sample of 1,158 managers was determined to compile the entire study.

Where the questionnaire was designed to explore the perceptions and the practices of those managers and how it might form an impact on the organizational culture and innovation as well.

The hypotheses were as follows [8]:

"Hypothesis 2: Articulating a Vision will be the factor of transformational leadership most strongly (and positively) related to a competitive, performance oriented organizational culture.

Hypothesis 3: The transformational leadership factor of Setting High Performance Expectations will be positively related to a competitive, performance oriented organizational culture.

Hypothesis 4: A competitive, performance-oriented organizational culture will be positively related to climate for organizational innovation.

Hypothesis 5: A competitive, performance-oriented organizational culture mediates the relationship between transformational leadership and climate for organizational innovation." [8].

The above stated factors in the hypotheses are called transformational leadership factors which were examined with its correlations with other factors like competitiveness and performance orientation.

However, both factors of articulating a vision and providing individual support were having a positive correlation with organizational innovation. In addition, the factor of vision articulation was strongly connected with competitive and performance oriented organizational culture, and that would support the second hypothesis.

Moreover, setting high performance expectations was positively correlated with organizational culture as expected in hypothesis 3. And the end they came up with a positive correlation between competitive and performance oriented organizational culture with the climate of organizational innovation, as expected in hypothesis 4. And that was mediating the relationship between three transformational factors and organizational innovation as expected in hypothesis 5 [8].

The study was contributing and enhancing the enrichment of leadership and organizational behavior, and that was achieved through the illustration of the transformational leadership factors and its correlations.

The study suggests that for the purpose of enhancing organizational innovation, leader and managers should focus more on articulating the organizational vision, providing individual support, and focus on lesser high performance expectations [8].

## 5 INNOVATION AND SERVICES MIX

Recently, the direction toward service orientation is becoming a demanding factor for making sustainable financial positioning and market controlling [6, 7]. However, services in general have

higher profit margins and more stable input for business revenues. Another factor to support this orientation; is the customers' needs. Where it has been shown that customers are requiring more services. Another important aspect is that services are said to be "not easy" to imitate, which can save the innovation context for a certain company to gain competitive edges over other players based on that sort of un-copied innovation in services [6].

In 2004, a discussion was going on with Paul Horn, IBM vice president for research at that time. Paul was asked about a big problem that he is facing at that time and he replied: "I can't sustain a significant research activity at IBM if our research is not relevant to more than half of the company's revenues going forward". And that is because he admitted himself that most of IBM's revenues are from services rather than products [7].

However, that problem of how to sustain innovative services that can stabilize the revenues are faced most of the companies and even countries, where services represent more than 70% of the total gross domestic product and employment in the Organization for Economic Cooperation and Development Countries.

The following list can illustrate the recent goals and challenges that are faced by companies with regards to innovation [9].

Priority Top innovation "Goals for 2010":

Increase product revenue.

Decrease product cost.

Decrease product development cost.

Increase value of Intellectual Property (IP).

Top innovation "Challenges for 2010":

Product pricing/cost pressures

Short windows for new product introduction.

Increased competition.

Globalization of markets.

With regards to IP, the patents battles are being very common nowadays, and that is because of one the innovation goals to companies is to increase the value of IP, for example, the millions spent in between Apple and Samsung on patents competitions and battles [10]. Moreover, for product pricing and cost pressures; this also can be seen very clearly among the tech companies where both innovation and price are the main key factors to control the market wit, where Apple for example, is thinking of lowering the iPad mini prices to be more competitive with other players like Samsung and Nexus [11].

## 6 CONCLUSION

Obviously, innovation does impact on the firm and the market as well. But, innovation can be always linked with uncertainty and risks of offering and making something that might not get what is expected and with even strong market research and surveying.

And the secret is how to turn those uncertainties into knowledge base, by which all the resources well input and get an output to and from that base. Managing innovation is not an easy job; otherwise anyone can come with innovative ideas in a daily basis and cover up the market.

Ultimately, a firm has to look for its potentials of innovation, process it, exploit it, and learn from it and that would lead to an

improving knowledge base.

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