

## **Implementation of a Framework of Open Innovation- A Case Study in the Telecom Sector of Pakistan**

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### **Abstract**

*Open innovation management practices are crucial for the firms to grow globally. It is even more important for the firms belonging to the technology services sector. This study aims to fill the gap of a comprehensive and in depth case study of internal and external factors in open innovation management of a firm from IT industry of a developing nation. The framework of innovation management was used in order to improve the innovative management of the firm through action research. The results validated the framework.*

### **Introduction**

Open innovation (OI) is based on the assumption “... organizations need to cast their nets far and wide to garner the knowledge they need to create new products and processes” while the innovation system is said to be “... open networks of innovating organizations, customers and users, commonly supported by information technologies” (Hrastinski et al., 2010).

Previous researchers have underlined the necessity of doing research in Pakistan in this area and proposed that forthcoming research must be directed towards identifying those areas that will improve the state of innovation in Pakistan (Tipu, 2007). Another research by Naqvi (2011) confirmed the lack of the support system for improving innovation management practices of the firms by the governmental institutions.

The objective of this study is to implement and validate an integrated model of innovation management framework in a firm belonging to the IT sector. The theoretical underpinnings of this research are influenced by the theory of open innovation (OI).

### **Literature Review**

Open Innovation has both been used as a system and as an output in the past research. By looking at a wider angle, innovation characterizes a significant change from existing policies, procedures and practices and signifies deviation from normal way of doing work. There are various types of innovation named as radical or incremental, enabling or

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disruptive, product or process (Korsching, Sapp, & El-Ghamirini, 2003). Open innovation is a model that maintains that firms can and should use external ideas as well as internal ideas, and internal and peripheral paths to market, as the firms look to advance their technology.

Open innovation enables organizations to gain benefit from concepts found from the external environment and it also allows them to attain resources including human resources and finances for starting new endeavors. The literature has found strong evidence that firms can achieve competitive advantage through innovations developed in house and outside the boundaries of the firm. Firms can collaborate with other firms in their areas and thus attain greater openness (Lazzarotti and Manzini, 2009). In this way, one can argue that gaining of information and its subsequent sharing is an important factor of open innovation practices of the companies.

The technologies involved in IT and telecom organizations prove to be a source of a unique, cheap substitute for providing a platform for producing innovative goods and services in emerging economies. Until now, the firms belonging to under developed countries, used to compete on price alone and hardly any technologies were being used as a source of competitive advantage. This strategy is no longer viable now. These companies must strive towards state-of-the-art practices and better innovation management in order to be viable in the international marketplace.

This research aims to explore some of the critical factors of open innovation management and challenges faced by the businesses involved in the knowledge intensive sector of IT sector of Pakistan with the help of inductive research philosophy. Thus the objective of this research is to highlight those areas which are essential in the open innovation policy making of this important sector.

### **Research Methodology**

The aim of this paper is the application of the framework of open innovation developed by Bhatti (2017). A case study was used for this purpose. Sample organization from the IT sector was chosen as a case and the focal person from the IT firm was emailed to get his consent for participating in the study. After the focal person gave his consent to participate in the research and he was contacted and the firm was selected as a case firm. The name of the firm was changed in order to maintain the confidentiality of the firm.

#### *Introduction to the Case*

ABC Telco's offers a variety of services including services of scheduling, assurance, analytics and optimization of systems and due to these it

assisted more than three hundred major IT and IT firms in order to enable them to route their networks more competently and cost-effectively. They also assisted their customers the support for better user engagement and enhanced service delivery. Typical services of ABC Telco included 360° Finances, Customer Analytics, and planning and optimization.

### Data Collection and Results

Data was collected from the sample firm over a period of six months. The firm operated in Pakistan as a subsidiary of a multinational firm. The information was taken primarily by the CEO of the strategic business unit of the company and some of the key informants were managers of different departments of the firm; all of those were located in Pakistan. The details of the key informants are listed in Table 1. Both primary and secondary data was used in the research. Secondary data involved a detailed review of the company's policies and other reports including progress reports.

Sr. No.	Name	Designation	Department
1.	AB	CEO	Nil
2.	CD	Director Finance	Accounts
3.	EF	HR Manager	HR
4.	GH	IT Manager	Technology
5.	IJ	Systems Manager	Engineering Systems Engineering

Table 1. Key personnel interviewed in the study

Primary data were collected by means of various interviews and small focus groups held at different intervals of time. The introductory session was held with the whole team in which the primary researcher introduced the purpose of the research and stated the objectives of the study. Also a couple of presentations were given to the participants in order for them to completely understand the basic area and concepts that were being studied. After these sessions, detailed interviews were held with the informants where each interview lasted from half an hour to around two hours long. In addition, the primary researcher also visited the company and attended the business meetings of the firm as an observer in order to better understand the existing practices of the firm. Various parts of the framework were then discussed with the key informants as a focus group session and data were collected by the researcher for the subsequent analysis.

*Means to generate ideas*

The first step in the process of innovation is how to generate ideas and then implement them in any organization. In the paradigm of open innovation, companies no longer required a specific department for this purpose. In fact, any employee can suggest a new idea and pitch it in front of his bosses. ABC Telco did not have a formal process of idea gathering. One of the reasons for this lack of a proper mechanism was that the company relied on the ideas of their parent organization. After detailed discussions with the department heads and their teams, it was agreed that a proper mechanism should be developed in order to tap the ideas of the employees. In fact a few department heads confirmed that they had a few ideas but somehow they were reluctant to discuss them with the top management as they were not encouraged to do so.

This matter was discussed with the CEO of the firm who agreed that if the ideas came from the internal employees instead of the parent organization, they would be more viable as the internal employees had a better sense of the local market. After some long sessions with the teams, a system was developed in order to encourage employees to come up with their innovative ideas and share these ideas with the top management. As a result, the employees received non-monetary rewards including recognition letter from the CEO and also appreciation from other team members in the monthly progress meeting. Various brainstorming sessions were held in the firm in which the employees from various departments sat together and pitched their ideas. Although the implementation of these ideas required approval at the strategic level but overall the CEO and the employees all agreed that the process will definitely improve their innovative output.

*Sources of knowledge*

A few decades back, firms rely on only internal knowledge generated by the R&D departments of the firm. But this scenario changed after the realization by the firms that these activities take too long and are very expensive for the individual business firms. The concept of open innovation was presented by researchers as a solution to this problem. Open innovation maintains that firms can source outside sources of information and use this knowledge for generating new products and services.

It was clear from the interviews and focus group sessions that ABC Telco used very few sources of information and knowledge. The firm had its own intranet and most of the employees didn't even use the internet to get any information. After the sessions, the employees

admitted that they had started using a variety of sources for knowledge and information and it had saved them a lot of time and efforts.

#### *User involvement*

Users can also play an important part in the firm's innovation practices. Although ABC Telco used customer feedback but it was just a formality. The voice of the customer was not being used by the company for strategy making and implementation activities. CEO agreed to look into the matter and it was decided that users should be involved more in future and their feedback will be integrated in the future course of action developed for the firm.

#### *Improved Cooperation*

Information and knowledge sharing has a huge role to play in the innovation management practices of the firm. The firms could collaborate with a variety of institutions from inside and outside the organization. In the focus group sessions, it was pointed out by the systems engineering team head that the firm can increase the innovative output by collaborating from a variety of sources like universities. The idea was appreciated by the CEO and different universities were contacted and finally an MoU was signed with one of the leading universities of the country.

#### **Conclusion**

Innovation management is a complex task and requires the combined efforts of the whole team and commitment from the top management. The factors identified in the framework were found to be essential and critical for improving the innovation management practices of the IT firm. Since the fruits of innovation management practices are long term, so it is a limitation of the study that the exact benefits of these practices could not be analyzed in the short time in which the study was conducted. Future research could build on this framework and take a longitudinal approach to study the effects of innovative management strategies adopted by the technology service firms. Researchers can also add other important aspects of innovation management in this framework and explore its impact in other sectors and hence increase the generalizability of the research.

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