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STUDY OF FLEXIBLE STRATEGY WITH INNOVATION AND NEW PRODUCT DEVELOPMENT IN MOBILE PHONES

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ABSTRACT

The study focus to identify the determining factors involved in flexible innovation and product development from both the organization and customer point of view with reference to mobile handset in India. Using exploratory approach the study has adopted the strategy based on survey and questionnaire analysis. The result reflects both subjective and objective factors. Subjective factors are related to the consumers' attitude, value perception, emotions and social group pressure. The positive subjective factors often lead to the success of new products. Where as, the objective product related factors are link with flexible innovation for unique design, versatile features and high degree of customization. Both the factors are interrelated and crucial from researcher point of view. The organization that meets these factors with both flexible innovation and technology that leads the market place positioning in the India mobile handset market.

Keywords: *Flexibility Innovation Technology New Product Development*

Introduction

In the ever-changing liberalized world, the strategy for Innovation and New Product Development is the true essence for achieving success and sustainable profitability for an organisation. The success of innovations or new products is highly dependant on the consumer adoption process and the suitable marketing strategy of the manufacturers. The ever-encouraging growth of Mobile phones, DVD players etc are the vivid examples of new products. The firms do not stop here; they are continuously adding additional and innovative features to the said products to build a loyal customer base that appreciates innovations. Emerging and evolving technologies are making experimentation faster and cheaper and compelling organizations to rethink every aspect of R&D—from the development process and the way groups are structured to how new information is created. Continuous new product development not only provides the amazing business success but also provides the competitive advantage. With this background the main aim of the paper is to identify the determining factors involved in innovation and Product development from both the organization and customer point of view giving special reference to India. Also identify the strategies that provide the competitive advantage and to access the trends in technology.

Funk (2004) has described the key technological trajectories and their potential effect on the expansion of mobile Internet applications. Riquelme (2001) has revealed that consumers have a relatively good predictive power of a product they have chosen and have important

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implications for companies that collect information about preferences from consumers. Sushil (1997) has revealed about paradigm shift from classical mechanics to quantum-relativistic over different stages and further Sushil (2000a) has developed a model of inquiry using situation-actor-process (SAP) and learning-action-performance (LAP) for analysing the managerial situation and problem. Rogers (1995) revealed that a “new” product is any product that a potential consumer judges to be new. In other words, newness is based on the consumer’s perception of the product, rather than on physical features or market realities. Volberda (1998) has commented that innovation cannot be achieved without some kind of change; however every change results in innovation and also revealed that flexibility is a necessary but not sufficient condition for innovation because it is driven by change and accommodated by flexibility. Schiffman and Kanuk (1997) has studied that genuinely new product has features that satisfy the user in a manner that differs significantly from that of an older product. Moore and Benbasat (1991) has described, a product that is perceived as having a strong relative advantage, as fulfilling present needs and values, as easy to try on a limited basis, and as simple to understand and to see (and/or examine) is more likely to be purchased than a product that is not so perceived.

Flexibility in Product Development – Why an Important Strategy

In fact, the history of new product development in the Indian market may be traced back to the period of liberalization, which marked the entry of several international players entered with several new products with different new technologies in defined sector. From then, the Indian consumers are regularly exposed to the new products and technology that marked the emergence of a considerable flexibility in consumer behaviour towards the new product. The use of mobile phones marked its emergence in India by the later part of 1990, and gained its momentum by 2000 with the entry of players like Nokia, Sony, Motorola and several other foreign players who stressed on new innovative product offerings and having flexibility in new product development on continuous basis. Moreover, at present the Indian mobile market is flooded with products with additional new features. This marked the rapid expansion of mobile phone penetration in the Indian market. This led to the dominance of Nokia telephones in India because of its flexible strategy on product development. Nokia sets the benchmark for innovation and others started following them.

A. Product Development in Context of Customer

There is ongoing research to know the changes in consumers’ tastes and preference. There is always a quest to provide something new that provides utmost customization. The organisations continuously try to upgrade the designs or flexible on create new designs with additional new features that meets or exceeds the consumers expectation. They look for new features and technology that will affect considerable switch in consumer behaviour towards that innovation. For example, the introduction of additional features like, camera, Video Recorder, Web, Blue tooth, touch screens etc, in the mobile phones have resulted in tremendous consumer switch towards the new mobile phones.

B. Product Development in Context of Organisation

A successful innovation results in tremendous growth in revenue and profitability. It provides the pioneer image, so that the company can charge premier prices. The innovation will generate higher market share. It increases efficiency at all the levels. Further successful and continuous innovation provides the much-desired competitive advantage, which results in superior market place positioning. Continuous innovation results in improved image, improved loyal customers base and superior market place positioning. It is the flexibility of technology, that attracts the customer and it is up-gradation and innovation in technology that meets the expected customer

value.

C. Strategic Significance of New Product Development

It is evident that the New Product should provide the best value for money to the consumers and more over it should flexible into the specific consumer characteristics. The firms like Nokia, Motorola and Samsung have achieved considerable success in the new product development and innovation. Innovation and NPD should be continuous in order to generate long-term sustainability to the firms business. To drive demand and increase profit potential, operators open their marketplaces to as many content providers and products as possible. With the open market business model the mobile phone manufacturers develops new and innovative products and establish the same with optimal promotional mix through out the life cycle of the product. Thus, to proof that successful Innovation with flexible strategy and New Product Development leads to considerable amount of success the researcher has studied the success of Nokia.

Methodology

The study is based on primary data collected with the help of the structured questionnaires. The data was collected from 130 students of premium Management College in Delhi and nearby. Random and purposive sampling methods were used to collect information from 65 males and females each mainly in the age bracket of 21-28. The variables having significant effect on selection of new mobile phone by the youth were analysed in the primary study. Some of the respondents were interviewed personally to obtain better insights on the subject. Both quantitative and qualitative analyses were done to derive worthwhile conclusions from the responses. In addition, company managers and field executives were also interviewed on open ended questionnaires. Besides, some secondary information is also consulted through databases like Emerald, Mintel and Business Source Premier. The data mentioned in the study was mainly collected through Indian Economic Survey.

Result and Discussion

The study shows that both males and females believed that innovation and development of new mobile phones is important for customers. They have shown their interest for first purchase with effect of innovation. It indicates that the consumers in the defined segment who bears positive attitude towards the need for the new product development are always in the quest for innovative products. This favourable consumer attitude always motivates the manufacturers to develop new products.

Adaptation and Consumer Perception towards NPD

The result of the respondents can be equated with the result where due to the effect of new product development in market, about 70 percent of males and 60 percent of the females are interested to have new handset. They favoured the concept of innovation and they are very flexible to switch over to the new product.

In response to the certain typical characteristics considered by the new adopters to select a new mobile phone, Table 1 further explain that males and females tend to purchase handsets that exceeds their value perception. The consumer always seems to equate the innovation in terms of technological innovations. The primary factor lies in the consumer mind. Whatever the product or the new feature features might be they should exceed or at least meet the value perception of the consumer. That is why almost all the market researchers, players are continuously engaged in studying the consumer perception. In fact, the questions related to 'whether the new product is better than the new one' often reflect the consumers' perception towards the new product.

Table 1 : Consumer perception towards NPD (in percent)

SN	Indicators	Male	Female
1	Users of New mobile product	90	85
2	Interested to change	70	60
3	If change then preference to		
3.1	Technological intensive	35	25
3.2	Better than old one perception	25	35
3.3	Exceed your value perception	40	40

Attributes Preferred under NPD

The result of *Table 2* shows the certain typical characteristics considered by the new adopters according to their gender to select a new mobile phone. As per the result, 40 percent males have given 1st preference to the technology and then to design whereas 45 percent females have given importance to the appearance of the mobile and then to the technology. These factors could motivate the manufacturers to mould their new product features according to the consumer preferences.

Table 2: Attributes preferred for New Product Development

Characteristics feature	Males	Females
Unique Design (U.D.)	35	45
Colour Animated Screens (C.A.S.)	40	40
Storage Capacity (S.C.)	30	30
Radio	15	15
High End Cameras (H.E.C.)	45	35
Cosmetic Colours (C.C.)	10	10
Additional Feature other than the old handset (A.F.)	20	30
Video /Audio Recorder (V/A.R.)	30	30

Strategy Followed By Nokia for NPD and to Gain Market Share

The key Success Factors of firms like Nokia can be grouped in three areas they are: Financial Performance, Efficiency and Window of Flexibility. Innovation brings Process Efficiency, which results in substantial increase in speed, productivity and flexibility. NPD provides better product effectiveness, which results the increase in profitability, market share, and product review and product quality. The success of Nokia is the vivid example of the successful and continuous innovation. The ongoing strategies of Nokia for new product development is as follows-

Flexible Strategy I - Initiator

Nokia get first crack at the market by obtaining the patent, which creates legal hurdles for others, and at the same time, they are also flexible to match or surpass the imitators' product features because of which they dominate/saturate the market with more brands. Generally this follows an offensive and flexible strategy and promotes the product as per the industry standard. Thus, Nokia gets the first movers advantage that enable the firm to: start to introduce barriers, keep ahead of imitators and try to create a standard. Nokia mostly uses the prime movers strategy. In addition, uses other flexibility during the life cycle of the product like lowering the price at the maturity period to match the imitators.

Flexible Strategy II - Adapter

The other best strategy implemented by Nokia is imitator. It is to let a pioneer open the market and also flexible to learn from the pioneer's mistakes, then offer improved product version for

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differentiation with a lower price. This was adversely affect the first mover and likely to destroy first mover advantages. The strategy is to diminish the “new product” label, turn the product into a commodity. The steps taken by Nokia is try not to take the risk of establishing the market, issue is being flexible and to keep up with the pioneer, and faster and earlier NPD would lead to a greater shareholder wealth effect.

Flexible Strategy III – First Innovator

Nokia gain competitive advantage by shortening the planning loop in the product development cycle and make smaller increments of improvement, but introduce its flexible strategy more often as “Newness and freshness” become important product attributes for customers. The New product features increase technological sophistication of Nokia’s products because of which competitive products begin to look old and out of date. Nokia, in competition with Samsung and Motorola in the mobile phone market has shown more flexibility to introduce new models in short period of time and made the competitors retreat.

Flexible Strategy IV – Process Reengineering

Nokia always follows the accepted and discussed strategy to sustain the innovation, which maintains a steady rate of product improvement. On the other hand process re-engineering results in sacrifices performance, offers different package of attributes, not yet valued by mainstream customers (i.e. no market) and typically don’t offer attractive financial returns compared to sustaining innovations. Thus, the leading player like Nokia let the new technology cannibalize the life cycle of the old technology through technical staff and not marketing and finance. Nokia locate the market not through market research, but by trying to launch a product in the marketplace.

Flexible Strategy and Technology

During the time of interaction with customers with respect to flexible innovation, it was observed that individuals gather and synthesize information about the innovation; this information processing results in the formation of perceptions about the innovation. Based on these perceptions, a decision is made to adopt or reject the innovation. If this decision favours adoption then the use of innovation results the initial use of flexible innovation. The following strategy is developed based on customer perception about the flexible innovation and technology.

Technology	high	Focus on durability and Brand Image	Star performers with high customer satisfaction
	Low	Prefer to adopt the low cost technology/ models in lower income groups	Attractive in short run but not good with customer reliability
		low	high

Flexible Innovation

Figure 1: Strategy in mobile handset in India

Nokias’ successful innovations and its flexible strategy has set the benchmark and opened up the opportunities in the market. The rapid proliferation of new products has not only increased the revenue but also increased the usage by attracting more and more customers to buy the mobile phones. The trend of new product development has turned the fashion into necessity and the vice versa. The combination of need and fashion has created the sharp increase in

the demand for the mobile phones.

Market Share Achieved by Nokia with Flexible Strategy and NPD

The successful flexible strategy provides Nokia the prime movers advantage where the company can improve revenue by charging the premium, because the new product adopters are not price conscious as it is observed in the findings and further could be seen in below figure. The market share of Nokia has increased from 28.8 percent in 2004 to 30 percent in 2005. Thus, premium price has resulted in high increase in profit margin. Thus, it provides efficiency in overall performance and profitability.

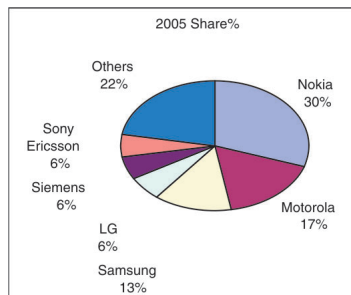


Figure 2: Market Share of mobile handset in India

The successful flexible strategy and new products provide substantial benefits to the manufacturer. It results in a sharp increase in revenue, which results in the considerable growth in market share. A growth in market share improves the positioning and increases a loyal customer base. Nokia is continuously achieving high growth in revenue as well as in market share, by virtue of which it is the undisputed market leader.

Conclusions and Recommendations

Whether a company produces cars, medical instruments, consumer products, or high technology equipment, its management must possess the know-how to design flexible, action-oriented solutions to improve product development. While innovation is at the heart of every development effort, the high cost of experimentation has prevented many companies from innovating successfully. Today, emerging and evolving technologies are making experimentation faster and cheaper and compelling organizations to rethink every aspect of R&D—from the development process and the way groups are structured to how new information is created. Designed by HBS faculty with extensive industry experience, Leading Product Development prepares senior managers to take innovation to a whole new level by discovering concepts and implementing solutions in entirely new ways. Senior managers from companies like Nokia, Motorola and Samsung already are leveraging their experience in Leading Product Development to revamp product development processes and position their companies for maximum competitive advantage.

Hence the success of innovation, flexible strategy and NPD is largely dependant on the consumer adaptation process in relation to consumers' perception and the various other factors that influences the consumer behaviour or decision making process. The other factors includes: unique design, versatile features, higher degree of customisation, technology intensive and brand power.

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