

**“ CONCEPTUAL CEREBRATION ON A NEW PRODUCT DEVELOPMENT, INNOVATION DYNAMICS AND DIGITAL TRANSFORMATION”**

*Dr. Amit Arun Medhekar,  
Associate Professor, Arihant Institute of Business Management, Pune*

*Dr. Pratap Vasantryao Pawar, Assistant Professor,  
Siddhant Institute of Business Management, Sudumbare, Pune.*

**ABSTRACT**

*There is a latent prerequisite of skilled human capital with high-brain, high-tech and high-expertise towards modernized techno-driven conglomerates. It is observed that a dynamic change is happening around. New product development has become a need of hour. New product development may be done to build up an item to compete with a particular product or may be done to improve an already established product. New product development is crucial to any business that must adjust with market trends and changes. Varying situations create new demands and needs safeguarding a distinctive competitive advantage to sustain and boost sales through replacement products, to shape up the company's future and fulfil the everchanging customer preferences. Innovation has become the norm for survival. Digitization has brought up unparalleled changes and growth in business sphere. Those have given strong ability, greater insight, broader opportunity through top-notch technology in complex business processes.*

*Keywords:* New product development, Innovation dynamics and digital transformation, top-notch technology, business processes.

**1. INTRODUCTION**

You can't just ask customers what they want and then try to give that to them. By the time you get it built, they'll want something new.

**-Steve Jobs**

Management domain and recent anew practices are undergoing through quick, enormous and unique changes. To sustain and bloom in such a mercurial arena of commerce and business- no single success formula is sufficient. We need to know that under the aegis of effective top Management direction, strategic business units must work and evolve with rigour into the daily tactics in competition encouraging integrated managerial functions. The superior and challenging benchmarks are set by entrepreneurs, marketers and their support team. There is necessity of top-class brand to introduce new products, make modification and improvements when required. No much work has happened on the above said topic.

New product development is a undertaking initiated by the company to introduce newer products in the market. Often there will exist and increase a need in the business for new product development. Your current products may be technologically obsolete, you have diverse segments to target or you want to cannibalize a present product. In such cases, New product development is the answer for the company

The researcher has focused on a few article published on innovation product development. The research probes in needs and problems in current innovation product development, analyze them, and explore them, utilize the discovered knowledge gained on the promising innovation product developments.

According to Reguia (2014) innovation is defined to be a success factor for economic companies as an element to understand what customers want and to reach customer satisfaction. Innovation has also been defined as a driving force behind many successful companies today (Dereli, 2015). Moreover, product innovations reflect firm's image and the overall success of the firm is dependent on the product's success by realizing consumers needs and wants, and in that way, developing new products (Reguia, 2014). Product innovation is described as a product that is new or improved (Angelmar, 1990). Besides new concrete products, product innovation can also include new techniques and means in the production methods (Reguia, 2014).

**1.1 PURPOSE OF THE STUDY**

The main purpose of the conceptual paper is learning the role of New Product Development, Innovations, digital transformation.

## 1.2 OBJECTIVES OF THE STUDY

1. To understand the need of new product development to serve consumer better
2. To study the innovation Dynamics important for attaining business growth
3. To know the changing scenario leading towards digital transformation

## 1.3 DISCUSSION: ABOUT NEW PRODUCT DEVELOPMENT, INNOVATIONS, DIGITAL TRANSFORMATION

### 1.3.1. NEW PRODUCT DEVELOPMENT: NEW MARKET AND NEW OPPORTUNITIES:

In light of the customer preferences and their feedback- new innovative products can be developed. Customers are influenced by established brands and the trust element generated by companies for over decades. A new product is any product which is perceived by the customer as being new. According to McDaniel "A new product is a product new to the world, the market, the producer, the seller, or some combination of these." McCarthy says "A new product is the one that is new in any way for the company concern."

To develop new products in business process generally following sequence is followed: First Competition is analysed in the light of intricate business environment. Market is chosen and Then target Customer groups are used as the basis of Segmentation. Next, Target Market Customer Needs are Identified. Market Positioning is determined and then Develop and Launch New Products.

### 1.3.2. THE FOLLOWING 8 STEPS AND SEQUENCE ARE USED WHILE CREATING AND LAUNCHING NEW PRODUCTS:

1. Idea is generated through Internal Sources and External Sources. Internal Sources are used to generate idea through R&D teams, intrapreneurial programs. External Sources are used to generate idea through state holders such as Suppliers Distributors, Competitors, Customers.
2. Further Ideas are screened to identify which are real need based useful ideas, will have win-win situation and most feasible in nature. We must probe how strongly customers need it. Further it is explored that If product concept is clearly expressed or not. It is seen if Sustainable competitive advantage achieved through win-win situation or not. It is found that if sufficient resources available or not. It is analysed which product development has Sufficient profit potential.
3. Develop & Test Concept is used to understand detailed version of idea in meaningful consumer terms. It is tested with groups of target consumers and analysed for knowing consumer reactions through asking the questions about the concept. e.g. How much pragmatic and utility oriented the product is and will you purchase that a product.
4. Market Strategies are devised and implemented through firstly, describing target market and then offering better customer value. The strategies are focused on Price, distribution, marketing budget as well as Sale, profit goals, marketing mix etc.
5. Business Analysis is carried out through Reviewing and studying sales, costs as well as profit projections. For that we should use sales history of similar products, conduct market surveys. Next it is estimated economical risk, costs and expenses of marketing, Research & Development, operations, accounting, finances and so on.
6. While Developing Product initially Prototype is developed by R&D team. Next it is studied for the Test for safety, effectiveness, value. A help and feedback is taken through Involve consumer preference.
7. In test Marketing following tests are indispensably used through Real Market Test, Controlled Test and Simulated Test. Real Market Test is used to test product and marketing program in toto. Controlled Test is carried out through combining consumer's buying preferences through analysing demographics variables and collating information. Simulated Test is done in Lab or in virtual online shopping milieu.
8. Commercialization is used through right introduction or pitching time of product into target-market. It synergizes the effect on other product range, macroenvironmental conditions, competitors' release. The

geographic dynamics are studied through different locational attributes such as: regional market, national market, global market.

## **New Product Development are thus Customer-Centric, Team Based, Systematic in nature.**

Myriad of products being brought into the market regularly. The companies follow innovative product development, are Google, Apple, HP, Dell and many more such FMCD, FMCG and online companies. However, new product development is not a simple affair. There are numerous aspects which the company has to take into reflection before even thinking of New product development. These aspects and the challenges of new product development are discussed below.

New products introduced to the market creates ample opportunities and explore unexplored markets for companies. Adding up new product lines to existing one permits the company to re-enter into well-established markets. New products offer greater perceived value. New products enable the current product line to endure in the long run and increase the product's life cycle. With repositioning strategy- present products are launched to new markets or market segments. Through cost reduction program, new products provide same functions at economical cost.

*Greatest risk is not development of new product, but development of customers and markets -Steve Bank*

## **1.4 THE REASONS FOR NEW PRODUCT FAILURE ARE AS FOLLOWS:**

Poor product design, Wrong launching timing, product Priced exorbitantly, Ineffective and untimely promotion, unsuccessful brand positioning, Management's procrastination in decision making, High development costs, intense and cut throat Competition, Overestimation of market size.

New product development is the one of the prime factors for growth and competitive advantage. Latvia has a low innovation performance in comparison with other EU countries because of the lack of innovative companies, lack of investments in research and development, insufficient cooperation among science, higher education and industry sectors.

## **1.5 INNOVATION: THE CRUX OF BUSINESS GROWTH**

*We Experiment Endlessly, With New Products, New Methods, New Companies And New Marketing. A Successful Business has Emphasis on Experiment And Development, Ideas Are The Life-blood Of Business.*

### **-Richard Branson**

It has majorly known that evolutionary theory applies to innovation systems, and thus to NPD which produces product innovations. A common definition of an innovation is something novel that is (economically) useful and actually implemented in processes or artifacts (Campbell 1960, Simonton 1999). Innovations are therefore like adaptations in an evolutionary system, in which artifacts that are more complex are produced over time via 'cumulative finding' (Dawkins 1986, Fleming 1996).

It is concluded that theoretical non-clearance on the definition of Innovation Product

*Dewar & Dutton (1986), define innovation "as an idea, practice, or material artifact perceived to be new by the relevant unit of adoption."*

IPD was clarified by arguing IPD to be perceived as a creation of new or improved products that can also include new production method techniques, and uncertainty in the decision making due to the lack of information concerning the development of the product (Angelmar, 1990; Reguia, 2014).

Innovation can be defined as "the process of translating an idea or invention into a good or service that creates value or for which customers will pay". The innovative idea must be replicable, scalable at an economical cost and must satisfy a specific need. Innovation involves thoughtful application of information, comprehension and initiative in accruing greater or different values from resources. Multiple scalability matters a lot. It is the crux of business growth. Through Automation, TQM, Six Sigma, Lean Management and Poka-yoke processes innovations can be perfected. It includes all processes by which new ideas are generated and transformed into useful products. In corporate, innovation often results when ideas are applied by the company in order to further satisfy the needs and expectations of the customers.

Innovative ideas and feasible product concepts are winnowed from raw ones. There is the possibility of huge profitability with launching user-friendly, value-based and most sought new product in recent future. Hence companies have to rediscover the possibilities, revive the processes and reinvent the wheel altogether. It is

possible through understanding and meeting demands of the stakeholders closely. Having focus group study and individual opinion survey it is possible to gauge relevant and recent expectation by them.

Information about the initial phase of the product innovation may provide a tool for management to understand the causes and effects in this process. Thus, this research may allow management to take control of a negative spiral and constitute new patterns of ideation, behaviour, and dialogue that enforce their innovative capability.

## 1.5.1 ENTREPRENEURS AND INNOVATION

*Business is the force of change. Business is essential to solving the climate crisis, because this is what business is best at: innovating, changing, addressing risks, searching for opportunities. There is no more vital task*

**-Richard Branson**

Entrepreneurs have to take decisions on new product development through making original product modifying or alerting existing product. Many times competitive arena is volatile and complex. At this juncture, it becomes tough for the firm, originally innovative, to keep up with market swings. Innovation transmogrifies industries and help firms to adjust to fluctuating marketplace undercurrents. Critically studying and accustoming to innovation is indispensable against increased narrowness and global competition, and the resulting demand for greater cost-value and globally fascinating products.

## 1.6 THE PHYGITAL WORLD: A NEW DIGITAL LANDSCAPE

This is the epoch of digital transformation. Businesses are being revamped and rejuvenated through it. If we talk about digital marketing specifically it is useful for the business houses to take more informed decisions. Varied reports can be generated as per the requirement by the managers and top management. They can get fair idea about market dynamics. The trends can be analysed. Digital marketing can be seamlessly integrated into all conventional methods of advertising and networking. The digital landscape has transmuted the way individuals articulate, collate information and receive their advertising.

When the physical world taps into the digital world, “The Phygital World” is created that can really hit your audience in a deeply attractive way. When people interact with a brand in a personal way by rapport building and partnering, they are far more likely to become brand ambassadors and referral marketers. Phygital Marketing blends what we do, see and interact with in our daily life. Digital paraphernalia can flawlessly unify with real-life experiences. This will really be total radical change that everyone is thinking about. Specifically, at Olympics or common wealth game events, at ballads or dances, we are keen-sighted about the online and mobile experience leading into the actual physical as well, blending the two.

The above argument is well identified if we conduct a search in ISI database using both terms “Digital Transformation” and “Digitalization”. Digital Transformation may be considered as a management fashion or as the refurbishing of part IT-enabled change initiatives with novel outfits.

Next, proponents may debate that Digital Transformation includes novel elements that deserve due heed and deed about future research. Explicitly, the results support that managers should resilient enough apply to the digital reality, by using innovative technologies in their business models, which raises the importance of processes and operations management topic.

## CONCLUSION

NPD encompasses a large number of topics and challenges in a firm, such as strategy formulation, deployment, resource allocation, and coordinated collaboration among people of different professions and nationalities, and systematic planning, monitoring, and control. In that light, NPD has long been an important topic for several business research disciplines, certainly economics, marketing, organizational theory, operations management, and strategy.

The history of innovation is explored through a diverse variety of industries -- from steam engine to automobiles to personal computers. Now with recent challenge of competition- innovation is happening through automation, artificial Intelligence and chatbots. Tycoons must accept the unavoidability of modifications by cherishing

innovation even above previous success; one of management's most essential roles is to find an composure between supporting new and established innovations.

The conventional economic perspective of supply-demand will not be enough to succeed in a digital world. Comprehending the worth of a great digital business vision requires the diligent building of the right functional, conceptual, technical and human competencies. Start the changeover from digital business goal till execution by line up digital projects to business value.

Thus it can be concluded that business and information technology big-wheels must exert together to define business value for digital transformation projects, recognize capability gaps, and line up the projects and resources which will help them achieve their digital transformation vision for thriving business.

## REFERENCES

- Angelmar, R. (1990). Product innovation: A tool for competitive advantage. European Journal of Operational Research. Elsevier
- Campbell D. T. (1960). "Blind Variation and Selective Retention in Creative Thought as in Other Knowledge Processes," Psychological Review, 67, 380–400.
- Derehi, D. (2015). Innovation Management in Global Competition and Competitive Advantage. Procedia - Social and Behavioral Sciences. Vol. 195. p. 1365-1370.
- Dawkins R. (1996). Climbing Mount Improbable. W.W. Norton, New York, NY.Fleming L. (2001). "Recombinant uncertainty in technological search," Management Science, 47 (1), 117–132.
- Joaj Reis, Marlene Amorim, Nuno Melao and Patricia Matos, "Digital Transformation: A Literature Review and Guidelines for Future Research" P-419.
- Irena Silinevica, Maris Igavens, Liene Amantova-Salmane, "Research of the New Product Development Process" Journal of Social Sciences No.1 (8) p-122.
- Sven Andersson, "Product Innovation Processes, Conceptual and Methodological Considerations" Licentiate thesis.
- Simonton D. K. (1999). Origins of Genius. Oxford: Oxford University Press
- Reguia, C. (2014). Product innovation and the competitive advantage. European Scientific Journal. Vol.1. p. 1857- 7881.