

Product Innovation and Its Impact on the Indian Automobile Industry

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Abstract

Does not matter how crowded and competitive today's market really is, and also how aggressive one must be to succeed in it. Yet, being aggressive is not really the single, main secret for success in this case is **product innovation**. If your product or solution is innovative, you've got a much higher chance to survive and thrive. The automobile industry in every country has prioritised innovation and the development of new models. In response to the constant evolution of consumer preferences, competitive pressures, and changes in safety and emission regulations, the industry is investing a lot per year to launch new models and improve existing ones. It is a way of life defined by fashion, speed, mobility, comfort, and, most importantly, individuality. The automobile industry, like other business sectors, grew dramatically after World War II. The rate at which companies innovate and develop new vehicles has clearly become increasingly important in the automotive industry. Asian automakers outperform their competitors in spectacular fashion.

Introduction

Economic growth is becoming increasingly linked to the creation and application of new knowledge. Firms face rapid technological changes and a constant need to innovate faster and in more novel ways than their competitors. We come across various ads of innovative product in our day-to-day life. Innovation means creating something new or making significant changes in the existing product or services, the reason behind changes is that you want to make the product better & you don't want to lag behind your competitors. Innovation comes when a need is realized or improvement in existing product is needed. We can't deny the fact that innovation has changed the way, we do everything. The way we communicate, the way we shop, and now, the way we drive have been turned upside down by innovation. Staying aware about innovation is the key in the automobile industry. In many countries, the car industry is a key driver of GDP as well as a major employer. Car manufacturers are constantly trying to stay up to date with new innovations & continuously focussing on how they can make the driving safer, easier & fun enriched. These requirements necessitate the importance of communication, networking, and collaboration among knowledge producers and users.

In most markets, competition is fierce and dynamic. As a result, it is critical for a company to continue developing new products – as well as modifying existing ones – in order to meet changing customer needs and competitors' actions. The absence of an active new product development process indicates that the company has decided to milk its current products and go out of business, either consciously or unconsciously. New product development is not something that can be put off. It must be done simply to survive.

As a customer we always expect the best. So in Automobile customer expectations of

vehicle quality, reliability, safety, and utility are at an all-time high. To meet these expectation what companies does is , they uses 3 approaches of innovation.

- 1) They focus on bringing latest technology
- 2) Continuously focusing on enhancing their manufacturing and supply time
- 3) changing business model according to the situation, for example if they forecast that sales can be declined in coming months so accordingly they change their business model

We all know how huge this automobile industry , it is full of competitors some are new in the market like Kia, MG hector and some with very long histories like tata, Maruti are there. We have witnessed how much innovation the industry has experienced from the day it has invented . example from manual to automatic. By introducing innovative product, companies are trying to stay relevant in a highly competitive and cost sensitive industry. To achieve this, companies are changing their innovation strategies. Artificial and Machine Learning helps in customizing the driving experiences. This is done by implementing algorithms which understand the driver's preferences and aligns application preferences accordingly

Latest Product Innovation in Automobile Industry

- **Connected:-** Cars are often already connected to the internet. Soon however, these internet-enabled cars will have the ability to communicate with one another. They are capable of communicating and sharing details related to on-road conditions, traffic jams, weather
- **Autonomous:-** it is a self-driving cars which will reduce human error . Tesla is coming in India in march with the technology of autonomous cars in India. It is a self-driving car will pick you up and take you where you need to go – it will be more safer and comfortable.
- **Blockchain:-** will solve the problem of fake auto parts which are circulating in the market, it will detect the suppliers who sell such fake parts and eliminate them from the system. This will enhance transparency as well as bring efficiency in the pricing strategies.
- **Telematics:-** is the joining of two sciences—telecommunications, a branch of technology including phone lines and cables, and informatics such as computer systems. What it will do is, we generally don't check and many times forget about maintenance and servicing on due time. This technology will tell us about vehicle use, fuel efficiency, maintenance requirements and automotive servicing.
- **Biometric:-**It collect real-time data of the driver from the seat, steering wheel, clutch, and accelerator. The data is analysed to identify the anxiety levels of the driver. Accordingly, the vehicle issues warnings instructing them to be more careful or take a break whenever needed

It takes a lot of effort to create great products. Few businesses are highly successful more than half of the time, which presents a significant challenge for a product development team. Trade-offs, dynamics, details, time pressure, and creation are some of the characteristics that

make product development difficult. Others include societal and individual needs satisfaction, team diversity, and team spirit (Petrella, 1996)

Automotive brands such as Toyota, Honda, and BMW, for example, have successfully launched new products with appealing product designs and high-quality interior features. Their ability to create such offers has set them apart from competitors and allowed them to become one of the leading automotive brands. To become highly competitive, automakers should focus on introducing appealing product designs with innovative interior features based on cutting-edge technology. Firms can gain a long-term competitive advantage and increase their market share by engaging in such activities.

Product Innovation definition

Product Innovation represents a new way of solving a problem a high number of consumers have. There may be no products at all on the market that address the issue, or there may be other products already on the market that address it in a different way. Product innovation is important because it can help you create new spaces in a seemingly crowded market. By identifying the gaps and imposing yourself into a new space, you can find an audience and satisfy consumer needs in a way that is new and refreshing. It's also important to note that product innovation doesn't always involve the creation of a completely new product that addresses a completely new issue. For sure, when the first iPhone was launched, it established a previously non-existing market and satisfying needs that consumers didn't even know they had.

Product innovation can be classified into three categories. The first dimension is how a company defines its target market. In a nutshell, who is the company's customer, and what do they value? This definition has far-reaching implications beyond advertising. It also influences the types of products that a company believes will appeal to and satisfy the market, how they will be delivered, and at what standards and costs. The second dimension is design, which is the process of translating what are perceived to be the consumer's values into a product. What does a company believe the consumer needs and wants, and what shape should a product or service take to meet those needs? Product design incorporates both form and function—color and style, as well as functionality, usability, and accessibility. The third dimension, delivery, is where the product finally comes into contact with the consumer. This dimension, also known as the consumer experience, includes the channels through which the customer can be reached, such as insurance brokers and agents, shopping malls, the Internet, and, of course, the automobile showroom.

Objectives of the study

- To study impact of product innovation on Indian Automobile Industry
- To enhance the understanding about latest Product Innovation

Research Methodology

The methodology applied is descriptive in nature. Data is collected using secondary resources. Various reports & studies have been referred in the present research. The sources from where the data has been collected for the present study is listed below –

- Research paper on related topic
- Web resources related to the topic
- All the other published material has been referred during the research

Literature Review

(NANDAL & AGARWAL, 2020) In today's digital world, the buzzwords are "Innovation" and "Automation." Every company strives for "Innovation" and "Automation." In the automobile industry, innovation gives a company a competitive advantage over its competitors. Because India has a relatively higher percentage of young people, millennials gravitate toward innovative products. The recent success of Seltos (KIA Motors) and MG Hector demonstrates this. A firm's survival depends on its ability to innovate, as a firm that is not engaged in changing customer demands will eventually be wiped out of the market. (For example, Hindustan Motors)

(Talke, Salomo, Wieringa, & Lutz, 2009)The findings of this study show that product innovativeness is a significant driver of new product performance. When compared to their less innovative competitors, OEMs that launch more innovative new cars are able to generate higher sales with these models. The findings, in particular, lend support to the initial hypothesis that design newness is a relevant dimension of product innovativeness. The discovery that design novelty has a significant impact on car sales. The discovery also suggests that, even in technologically advanced industries such as the automobile industry, the distinct appearance of a new product is an extremely important adoption criterion.

(LIN & LU, 2006)This research suggests that product quality, defined as the ability to provide products that meet consumer and environmental demands, influences product innovation performance. Regardless of the automaker's nationality, the identical slope of both regression lines shows that quality has a consistent effect on innovation. This study also looks at how automobile nationality affects product innovation. Asian automakers file more patents and engage in more innovative activities than Western automakers.

(Aarushi, Nandal, & Agrawal, 2020) According to the research, the major factors of product innovation are Intelligence Dissemination, Intelligence Generation, Technology Selection, Quality, Flexibility, Dependability/Delivery, Product Marketing Support, and Product-Process Innovation Linking. The findings of the organisational structure research would assist managers in designing a proper structure for implementing product innovation.

(Henard & Dacin, 2010)It was concluded that a positive RPI (reputation for product innovation) improves the firm's overall image. Consumers' overall perceptions of the firm improve as they become psychologically engaged by the activities of the innovating firm. Furthermore, the empirical findings show that consumer-perceived RPI, through its influence

on consumer involvement levels, increases consumer loyalty toward the firm and its products.

(Ray & Ray, 2011) The case study, which focuses on Tata Motors of India's product innovation with the Nano—the world's cheapest car—aims to understand how the innovator's choices regarding the use of technology, product design, and organisational practises for new product development enabled it to meet the challenge of innovation for India's masses. The findings show that working with suppliers on component design and incorporating them early in the design phase significantly reduced costs and helped eliminate unnecessary frills while incorporating features valued by mass markets.

According to the findings of a study conducted by (Hanaysha, Hilman, & Abdul-Ghani, 2014), product innovation has a significant relationship with brand image and brand trust. According to the study, a brand that is perceived to be trustworthy in delivering what is promised to its customers will have a positive brand image.

(DANNEELS, 2002) This study looked at how new product development can be used to drive organisational renewal. I contended that product innovation activities not only draw on, but also serve to develop firm competencies, thereby contributing to firm renewal over time. This is especially important in today's dynamic environment, where firms must renew their competencies in order to survive and prosper.

(Iwu, 2010) Product development and innovation can significantly boost performance in any organisation. However, it is important to note that product development, product innovation, and high levels of performance are not easy to achieve. Product development and innovation must be viewed as critical to the survival and competitiveness of progressive organisations.

(Hanaysha & Hilman, Product innovation as a key success factor to build sustainable brand equity, 2015) According to the findings of this study, product innovation has a significant positive impact on overall brand equity. This means that introducing new products with innovative features can help organisations improve their brand equity and ensure long-term growth. Similarly, this study's findings indicated that product innovation has a significant positive impact on brand leadership. This means that being able to create innovative products will make gaining a leadership position in a specific target market easier.

(Nandal, Kataria, Nandal, & Jora, 2021) Concluded in their research that adoption of product innovation is very important. In their study financial performance has been related to the components of product innovation and it has been found that product innovation has a positive impact on the financial performance. So the automobile sector cannot neglect the product innovation as it is very essential for the overall success of the Organization. Product innovation is one of the key element to improve the financial performance.

Conclusion

In today's scenario, Product innovation plays a crucial role for a company's survival. Automakers who consistently focuses on Product Innovation tends to have a higher market share. The recent success of Tata Motors & MG Hector is a testimony of this. Where-as firms which do not focuses on innovation, tends to have low market share. The dwindling sales volume of Jeep is a live example. Automakers needs to focus on changing customer's demands so that

they stay relevant in market. Automakers need to be innovative as customer's demand is changing rapidly & they need to be adaptive as well so that they provide best in class products & services. Also, it has a direct impact on company's financial performance & it's brand image.

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Links

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