

A Study on Impact of Product Development in Organic Industry

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Article Info

Volume 83

Page Number: 2002 - 2007

Publication Issue:

May - June 2020

Abstract:

New product development is the main factor for an organisation to achieve success and be a competitor for other organisations. Organizations these days are under pressure to develop new products and services and the processes necessary to produce and deliver them. Two of the major causes for this increased emphasis on developing new products are increased competition and advances in technology. The objectives of the research is to know about product development, to know why and how the products are made, to analyze the stages involved in product development and to know the benefits of developing new products. Descriptive research is used in this study to accurately portray the characteristics of an individual. Convenient sampling method is used in the study to collect the samples. Questionnaire is used to collect the primary data and secondary data is collected from various reports and journals. 3030 samples are collected. Independent variables are age, monthly income and educational qualifications. Dependent variables are preference towards investment avenues and factors to be considered before investing. Statistical tools used are Chi Square. So, developing a new product shouldn't feel like you're fighting in the dark. New product development drives growth. The authors in this study focus on finding whether people are aware of the process of development of new products through a well structured questionnaire framed by the researcher put forth among the general public. The paper is structured into three parts. First part provides an insight on the topic. Second part traces the stages involved in product development and the third part provides detailed information about.

Keywords: *Development, Goods, Organisation, Products, Services*

Article History

Article Received: 11 August 2019

Revised: 18 November 2019

Accepted: 23 January 2020

Publication: 10 May 2020

Introduction

Product development is also known as making of new products which are made through a series of steps that includes the preparation of the concept, drafting and development of the product and finally marketing of newly created or newly rebranded goods or services. Companies first find the target

market segment and then customers. Afterwards, these companies develop products, which may be product modification or it may be a complete manufacture of new products. Product offerings are increasing per annum as consumers are trying to find more and more variety of products. Companies which are unable to develop new products fall back on competition. Companies not only face danger

from competitors but also from consumer needs, development of new technology, and product life cycle. New product development is not so easy as it looks it consists of so many challenges. Nowadays, companies are following stage methods for product development. The first stage is concept generation that's explored for new merchandise. Companies pay a selected target client desires and demands to determine on the new product. The second stage is screening of ideas. Not all new ideas which are planned can be converted into products. Companies list concepts into three classes promising concepts, marginal concepts and rejects. The third stage begins once concepts enter the event method. Here a product plan is reborn into many product ideas. Out of many product ideas, the one that appearance matches is then placed against competitors to finalize promoting and positioning strategy. The fourth stage involves developing marketing strategies for new products. The promoting strategy involves analysis of market size, product demand, growth potential, profit estimate. The fifth stage involves the event of the business model around the new product. Business models begin with estimation of sales, frequency of purchase, and nature of business. Next estimation of cost and expense involved in production and distribution of new products. The sixth stage involves the particular production of recent products. Here more than one possible product is created, from preliminary version to finalized products are produced. The seventh stage involves market testing of recent products. The new product is prepared with name, packaging, price to capture space in consumer's mind.

The eighth stage involves launching a product across the target market backed by a correct promotion and strategy set up. This stage is called the commercialization phase.

An ability to develop new products will make the organisation step into a new life that can bring success or failure. The primary advantage of product development is that it can help a brand and business stay relevant with its consumers' needs. By continuously striving hard to solve new problems

that are faced by consumers, an organization is continually creating the chance to create revenues. The aim of the research is to give information about the stages involved in product development.

Objectives

1. To know what is product development
2. To analyze why the new products are being developed
3. To know the benefits of developing new products

Review of literature

The traditional method of innovating management for new product development includes information, resource management and knowledge for the development of market demand Clark 1992. Product development is the process of developing the product for commercial purposes according to the market information Fujimato 1991. Other authors defined the development of a new product as effective organisational and management processes by consuming minimum time and minimum cost to sell these products on a market (Wheelwright and Clark 1992). New product development is a formal process with well-defined decision-making criteria (Cooper 2008). A set of activities that begins with the market research and ends with the production and sales of the product on the market (Ulrich and Eppinger 2010). Today companies are under pressure to produce new products to improve their organisation. In business, new product development means bringing a new product to market (Claessens 2015). A central aspect of new product development is product design, along with various business considerations (Yassine et al. 2003). New product development is described broadly as the transformation of a market opportunity into a product available for sale (Cooper and Kleinschmidt 1986). The product can be tangible or intangible, but sometimes services and other processes are distinguished from "products" (Smith and Reinertsen

1998). New product development requires an understanding of customer needs and wants, the competitive environment, and the nature of the market(Ulrich 2003). Cost, time and quality are the main variables that drive customer needs(Zhu 2009). Innovative companies create new products to the market to satisfy their customers and to increase their own market share(whittney. 2003). There are many uncertainties and challenges which companies must face throughout the process(Eppinger et al. 1994). The use of best practices and the elimination of barriers to communication are the main concerns for the management of the new product development(Mei 2013). The product development process consists of numerous activities that firms employees in the complex process of delivering new products to the market(Wheelwright and Clark 1992). A process management approach is used to provide a structure(Nasr et al. 2016). New product development is the process of bringing an original product idea to market goods(Yücesan 2006).. New Product development is a journey. It's the road which leads to the actual product and then the actual product to the marketLOCH, C., KAVADIAS, S. (2008). In highly complex engineered products (e.g. aircraft, automotive, machinery), the new product development process can be likewise complex regarding management of personnel, milestones and deliverablesNitin Joglekar. 2019.

Research methodology

This research follows a descriptive type of research and the sampling method used in this survey is a convenient sampling method. This study used both primary and secondary data. The secondary data used from government documents, unpublished thesis, websites, journals etc. The primary data was collected from the respondents using a convenient sampling method with structured questionnaire. Independent variables such as Age, gender, educational qualification, income level, marital status were also collected.

The current paper is based on stratified random method of sampling and the sample size is limited to 3030 and the survey is taken on Chennai only and most importantly the survey was made in an authenticated way for appropriate results and also tries to reveal the actual truths regarding these issues. This paper also includes various secondary sources to get through the current issue, but the results will be focused mainly on the primary data.

Data analysis and discussion:

Frequency Table

Table 1

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid female	1156	38.2	38.2	38.2
male	1710	56.4	56.4	94.6
prefer not to say	164	5.4	5.4	100.0
Total	3030	100.0	100.0	

Table 1 discussion- With respect to current survey results, the frequency table is created out of the survey responses collected from several people. The present frequency table is based on Gender of the respondents. The majority of the respondents were male 56.4%, followed by 38.2% are female respondents . Thus, on the whole a total of 3030 responses were collected.

Crosstab

Ho: There is no significant association between gender and development of new products should be made considering the customers needs.

Ha: There is a significant association between gender and development of new products should be made considering the customers needs.

Table 2

Crosstab analysis between gender and the respondents opinion on development of new products should be made considering the customers needs

Count

		Every new products should be made considering the customers needs			Total
		yes	no	maybe	
Gender	female	419	605	132	1156
	male	529	884	297	1710
	prefer not to say	20	98	46	164
Total		968	1587	475	3030

Table 3
Chi-square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	61.623 ^a	4	.000
Likelihood Ratio	65.740	4	.000
Linear-by-Linear Association	51.324	1	.000
N of Valid Cases	3030		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 25.71.

Table 4
Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval	Pearson's R	.130	.018	7.224	.000 ^c
Ordinal by Ordinal	Spearman's Correlation	.121	.018	6.707	.000 ^c
N of Valid Cases		3030			

- Not assuming the null hypothesis.
- Using the asymptotic standard error assuming the null hypothesis.
- Based on normal approximation.

Inference : From the above tables and responses received the following is inferred:

Crosstab - According to the responses received it is evident that totally 1587 out of 3030 have disagreed that every new products should be made considering the customers needs. In which 605 are female respondents, 884 are male respondents and 98 prefer not to say.

Chi square Value - The Value is 0.00 which is below 0.05 it is more significant. Hence alternative Hypothesis is proved. There is a significant association between gender and development of new products should be made considering the customers needs.

Crosstab

Ho: There is no significant association between gender and the development of competitive new products is a prerequisite for many companies' success.

Ha: There is a significant association between gender and the development of competitive new products is a prerequisite for many companies' success.

Table 5
Crosstab analysis between gender and the respondents opinion on development of competitive new products is a prerequisite for many companies success

Count

		The development of competitive new products is a prerequisite for many companies success			Total
		yes	no	maybe	
Gender	female	607	347	202	1156
	male	554	623	533	1710
	prefer not to say	39	72	53	164
Total		1200	1042	788	3030

Table 6
Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	146.617 ^a	4	.000
Likelihood Ratio	148.235	4	.000
Linear-by-Linear Association	127.163	1	.000
N of Valid Cases	3030		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 42.65.

Table 7
Symmetric Measures

	Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Interval by Interval Pearson's R	.205	.017	11.519	.000 ^c
Ordinal by Ordinal Spearman's Correlation	.213	.017	12.001	.000 ^c
N of Valid Cases	3030			

- a. Not assuming the null hypothesis.
- b. Using the asymptotic standard error assuming the null hypothesis.
- c. Based on normal approximation.

Inference : From the above tables and responses received the following is inferred:

Crosstab - According to the responses received it is evident that totally 1200 out of 3030 have agreed that development of competitive new products is a prerequisite for many companies success. In which 607 are female respondents, 554 are male respondents and 39 prefer not to say.

Chi square Value - The Value is 0.00 which is below 0.05 it is more significant. Hence alternative Hypothesis is proved. There is a significant association between gender and the development of

competitive new products is a prerequisite for many companies success.

Discussion

The analysis were considered under different basis depending on the background of the respondents under which the analysis under the gender reveals the following; the total number of samples were found to be 3030. Totally 1587 out of 3030 have disagreed that every new products should be made considering the customers needs. The Value is below 0.05 it is more significant. Hence alternative Hypothesis is proved that there is a significant association between gender and every new products should be made considering the customers needs. Totally 1200 out of 3030 have agreed that development of competitive new products is a prerequisite for many companies success. Since the value is below 0.05 it is more significant. Hence alternative Hypothesis has been proved that there is a significant association between gender and development of competitive new products is a prerequisite for many companies success.

Conclusion

Developing a new product shouldn't feel like you're fighting in the dark. There's an easier way. You have a clear idea that gives your business a clear path to follow. Infact developing a tangible product or service is not a small portion of the process, it consists of a complete journey from creating the idea to bringing the product to market. Once setting out the steps involved and sticking to them, the product development will become more focused and it will become a flexible approach that can be adapted for all different types of products and services. New product development drives growth of an organization.

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