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EXPLORING OF THE ROLE OF TOP MANAGEMENT SUPPORT AND PRODUCT CHARATERISTIC TOWARDS NEW PRODUCT DEVELOPMENT SUCCEESS. EFFECT ON MALAYSIA MANUFACTURING FIRM

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ABSTRACT

Business is influenced by several factors, both internal and external factors. Though firm management might not be able to control the external factors, but it is important for management to identify and understand it. Various external factors can affect the ability of the business or investment to achieve all the strategic goals and objectives. researcher try to identify the role and significant impact of top management support towards product success as without the support and motivation theoretically the product developments will proceed at very low phase. Top management played as significant role in encouraging and stimulating the innovation in the companies and manufacturing firm. Besides, top management support also has been positively linked with the successful of new product development as they provide the necessary management support, financial support and create policy support and resources (Richtner and Ahlstrom, 2006). Top management are the group of people that establish the highest management executive authority in a company. To benefit from these product characteristic factors, Linn (2004), said that effective planning should be carried out as effectively to coordinate the resources available in the manufacturing firms such as equipment, utilities, design of product, skill and knowledge worker, quality raw materials, feedback from customer , culture of the product users so that the development of the product and efficiency of production so that it reach to market as schedule and scheduling operational equipment. The statement also argues that the influence of the organization both sides also serves to ensure the success of this cooperation in the context of industrial products. However, the extent of cooperation between the firms that manage the manufacturing of new products design with external support organizations to enhance market performance is important to study. Using SPSS as tool to analyze the relationship with. No of respondents 236 among E & E manufacturing firm in Malaysia found that both variables have significant relationship of adjusted R of 68.7 % and 72.4 % respectively. With cronbach alpha value of 0.861 and 0.668 accordingly. It can conclude that both variables have positive relationship and hypothesis supported

Keywords: Top Management Support, Product Characteristic, Product Development Success,

Introduction

In the modern business atmosphere, the world has become borderless and full with new successfully product. With the advances in engineering and internet technology, the company has distribute their development and production of their product towards offshore sites and with global outsourcing partners while still maintaining their quality, price and other product criteria through the tightly controlled process. As a consequences, the multinational company has execute their research and development in various aspect such as technology and manufacturing integration in order to maintain the product quality as same as parent company in offshore and effective outsourcing of raw material, product and technological partners. Hence, the idea of effective and integrative applying of supply chain theories has emerging in the multinational company and these has been put as an important criteria of consideration in developing or development of product. Ozer (2003) and Debruyne et al (2002) discussed thatthenew product development is indeed very important for companies. However, developing new products is a risky and uncertain process. In order to reduce the risks and uncertainties, companies need to evaluate their new product initiatives carefully and make accurate decisions. Although the outcome of a new product evaluation decision can be influenced by the environmental uncertainties that are beyond a company's control, companies can successfully improve the accuracy of their new product evaluation decisions.

Top Management Support and New product Development

Researcher try to identify the role and significant impact of top management support towards new development product success as without the support and motivation theoretically the product developments will proceed at very low phase. Top management played as significant role in encouraging and stimulating the innovation in the companies. Besides, top management support also has been positively linked with the successful of new product development as they provide the necessary management support ,financial support and create policy support and resources (Richtner and Ahlstrom, 2006). Top management are the group of people that establish the highest management executive authority in a company. Usually, these teams are includes a chief executive officer (CEO), chief operations officer (COO), chief financial officer (CFO), purchasing manager, production manager, warehouse and logistic manager, research and development manager (R&D) (Richtner and Ahlstrom, 2006). Without top management support would create gap that hinder success of product development.

Top management provides support for the changes, provides clear vision for new product development concept and at the same time allocate sufficient resources and allocation for the product development teams (Poolton et al. 1998; Clark and Fufimoto, 1990). In other findings, Brunner (2001) stated that, the top management support is the vital to the success of new product development. These are include of two main factors which are:

i) Sufficient resources which are form of people (teams), time and money for the innovation and successful new product development.
ii) The personal involvement in the new product development programs.

According to Orcun (2001), the manufacturing sector became more interested in the process of production in two decades because of more flexibility, in association for the production of a variety of products in small amounts, and lower investment. Customers now require various product features; therefore the demand for products is subject to the requirements of the user. Demand for the design of new products is difficult to predict the future. Accordingly, the character of the product in processing new products needs to get serious attention from the manufacturer.
To benefit from these product characteristic factors, Linn (2004), said that effective planning should be carried out as effectively to coordinate the resources available in the manufacturing firms such as equipment, utilities, design of product, skill and knowledge worker, quality raw materials, feedback from customer , culture of the product users so that the development of the product and efficiency of production so that it reach to market as schedule and scheduling operational equipment. This is obvious when car manufacturer such as Nissan, Honda develop and market their new car at a schedule budget and meeting the market price at different part of the market around the world. However, in practice, optimize production scheduling production Group is difficult because there are different kinds of processing equipment with features varying operations and uncertainty in demand for such products.

According to Kotler & Keller (2012), the product characteristics is the distinctive features of the new product development that distinguish them from its competitors and can be offered to the market to meet the needs and requirements of customers. Therefore, each product has its own characteristics that make it different from competitors. Many manufacturing firms are trying to develop new products with a unique design of their own to get a certain perception of the customers. This concept was later called strategy position. However, Acuff & Reiher (1997) states that the product features a unique, competitive and difficult to being copied by competitors will lead to a competitive advantage that can be offered to the characteristics of their new products development. This argument further strengening if new product development from car manufactuer produce new product with different competitive new characteristic that attract many customer as discuss by Acuff , Reiher (1997).

According to Linn (2004), with the rapid changes in technology, particularly in information technology and global competition, the success of product development in many manufacturing organization depends on its ability to create new products that are more innovative to stay in the current market. As such, Rigby (2009) stated that through serious analysis to the factor product characteristics, the company must always explore, create, innovate and create new values, which will ensure the characteristics of innovation in the design of new products. However, according to Mol & Birkinshaw (2009), introduction to such management practices is an important issue for the product characteristics as it is meant to increase their productivity, improve quality and remain competitive. The most common innovation is related to the product characteristics and activities of R&D for new product design success. Previous research has shown a relationship between product characteristics and interests in demand by consumers. This is based on the findings of previous studies made by Goodman (2007), which highlight that one of the advantages that can be offered to users is the characteristics of the product and as such, it is able to influence the selection of users especially design new products that have the specific characteristics of the product. According to Mayhen (1976), the product characteristics will affect the results of the users to get the product and it can be said that the success of new product design efficient is necessary

for terms of design, safety and ergonomic as well as be able to exhibit primarily new product design is one of the essential features required by current users.

Result

Result and analysis of the data are as follows.

Regression between Top Management Supports and New Product Development Success

Linear regression was used to investigate how top management supports could influence new product development success. The Table 1 below shows that the R square value was 0.687. This indicates that 68.7% of the variance in new product development success initiatives was explained by the access variable.

Regression between Top Management Support and New Product Development Success

Table 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.829[a]	.687	.686	.45313

a. Predictors: (Constant), TopManagement Support

b. Dependent Variable: N.P.D Success

Table 1 above shows the linear regression between new top management support and new product development success showed that the positive direct significant relationship for 68.7%. It also means that top management supports influence the new product development success in Malaysian manufacturing sectors for 68.7%.

Table 2 below show the linear equation between new product characteristic and new product development success. Based on the Table 2 the identified equation in to access the relationship are:

New product Development Success = 0.862*Top Management Supports + 0.562

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.562	.158		3.567	.000
	TopManagement Supports	.862	.038	.829	22.758	.000

a. Dependent Variable: N.P.D Success

Coefficients between Top Management Supports and New Product Development Success

Regression Between Product Characteristic and New Product Development Success

Linear regression was used to investigate how product development strategy could influence new product development success. The Table 3 shows that the R square value was 0.724. This indicates that 72.4% of the variance in new product development success initiatives was explained by the access variable.

Table 3

Regression between Product Characteristic and New Product Development Success

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.851[a]	.724	.723	.42565

a. Predictors: (Constant),Product Development Strategy

b. Dependent Variable: N.P.D Success

The linear regression between product development strategy and new product development success showed that the positive direct significant relationship for 72.4%. It also means that product development strategy influence the new product development success in Malaysian manufacturing sectors for 72.4%.

Table 4 below show the linear equation between product development strategy and new product development success. Based on the Table 5 the identified equation in to access the relationship are:

New Product Development Success = 0.861*Product Characteristic _ + 0.668

Table 4

Coefficients between Product Characteristic and New Product Development Success

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.668	.140		4.769	.000
	Product Dev	.861	.035	.851	24.869	.000

a. Dependent Variable: P.D Success

Conclusion

The conclusion outlines the analysis from the data. The set of items that match up to each theoretical concept was initially subjected to the result of Cronbach's Alpha. In addition, there are also an item of a total correlation and regression test. All the measurement appeared to be one dimensional, internally consistent, reliable and valid for analysis of the mode. Furthermore, the relationship between variables which are product characteristic and product strategy new product development also has been determined. Pearson Correlation analysis has shown that each variables has positive and significant relationship with the new product development success. Hence, this has providing the initial proved and supported to the previously developed research hypothesis. The statement also agrees that the influence top management support and product characteristic in new product development and the organization both sides also serves to ensure the success of this cooperation in the context of industrial new products. The outcome of this study contribute to the extent of strong relationship between the firms that make the manufacturing of new products development with external support organizations to enhance new product development. It will further enhance the policy maker to formulate standard operation for manufacturing in new product development.

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