ABSTRACT

Development of a product is an important way of businesses to stay ahead of the competition and continue to appeal to the changing needs of various customers. And, new product development can open up new channels of marketing, which helps to increase the shares of market. Modifying already existing products or developing products so they appear new, and offering those products to new markets is the definition of product development strategy. There are varieties of strategies and processes for the effective development of the product.

Keywords: product development, strategies, stages.
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I. ABSTRACT

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II. INTRODUCTION

Product development is the overall process of organization, concept generation, strategy, product and marketing plan creation and commercialization of a new product. A particular product development project tends to be part of a constellation of other projects within an organization. Here we consider the decisions relating to product strategy and planning, product development organization, and project management that set the stage for an individual development project. The multifunctional process of new product development includes several activities carried out by groups with different abilities, knowledge elements, resources, competences and cultures. A successful product development process meets market demands and needs with an appropriate technical solution. This paper is for the understanding of the value of alternative design strategies for product development outcomes. More specifically, the value of extending the role of designers beyond that of functional specialists to having a wider role either as part of multifunctional product development teams or as product development process leaders. The product development process consists of the activities carried out by firms when developing and launching new products. A new product that is introduced on the market evolves over a sequence of stages, beginning with an initial product concept or idea that is evaluated, developed, tested and launched on the market. This sequence of activities can also be viewed as a series of information gathering and evaluation stages. In effect, as the product evolves, management becomes increasingly more knowledgeable (or less uncertain) about the product and can assess and reassess its initial decision to undertake development or launch.

2.1 Product Strategy And Planning

Product strategy and planning involve decisions about the firm’s target market, product mix, and project prioritization, resource allocation, and technology selection. In structured development environments, product planning often results in mission statements for projects and in a product plan or roadmap, usually a diagram illustrating the timing of planned projects. Specific decisions include the following. What is the firm’s target market? What portfolio of product opportunities will be pursued? What is the timing of the product development projects? What assets will be shared across products? Which technologies will be employed in the planned products? Efforts are generally made to coordinate these decisions with the firm’s corporate, marketing, and operations strategies. Product planning is the set of decisions
that ensures that the firm pursues the right markets and products from a strategic viewpoint.

New product development can be described as a process, beginning with generating ideas and progressing to marketing completed products. In between are processes where you evaluate and screen product ideas, take steps to protect your ideas, and finalize design in an R&D stage. This encompasses all of the basic stages of models found in the literature. It is based on extensive surveys, in depth interviews, and case studies and, as such, appears to be a fairly good representation of prevailing practices in industry. Following are details on each stage:

The stages of the model are as follows:

1. **New Product Strategy**: Links the NPD process to company objectives and provides focus for idea/concept generation and guidelines for establishing screening criteria.
2. **Idea generation**: Searches for product ideas that meet company objectives.
3. **Screening**: Comprises of an initial analysis to determine which ideas are pertinent and merit more detailed study.
4. **Business Analysis**: Further evaluates the ideas on the basis of quantitative factors, such as profits, Return-on-investment (ROI), and sales volume.
5. **Development**: Turns an idea on paper into a product that is demonstrable and producible.
6. **Testing**: Conducts commercial experiments necessary to verify earlier business judgments.
7. **Commercialization**: Launches products.

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**Figure 1**: Global Product Planning—Strategic Alternatives

<table>
<thead>
<tr>
<th>Strategy 1:</th>
<th>Strategy 2:</th>
<th>Strategy 3:</th>
<th>Strategy 4:</th>
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<tbody>
<tr>
<td>Same</td>
<td>Product Extension</td>
<td>Product Extension</td>
<td>Dual Extension</td>
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<tr>
<td>Different</td>
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III. **DIFFERENT STAGES OF PRODUCT DEVELOPMENT**
IV. STRATEGIES INVOLVED IN THE PRODUCT DEVELOPMENT

IV.1 Subsets of Product Development Strategy

1. Product Development Diversification Strategy

This strategy is employed when a company's existing market is saturated, and revenues and profits are stagnant or falling. There is little or no opportunity for growth. A product development diversification strategy takes a company outside its existing business and a new product is developed for a new market. An example of this strategy is a company that has sold insurance products and decides to develop a financial education program aimed at college students. The new product is not revolutionary as there are other companies producing similar products, but it is new to the company producing it.

2. Product Modification Strategy

Product modification strategies are generally aimed at existing markets, although a side benefit may be the capturing of new users for the new product. An example of this strategy is toothpaste. Toothpastes that promote whitening ability or anti-cavity attributes are built on existing plain toothpastes that only promise clean teeth.

3. Revolutionary Product Development

 Revolutionary products are those for which there was no real prior need. Computers and cell phones are good examples. Before these products appeared on the market, consumers did not know they needed them. But, the germ of an idea on how to better communicate resulted in products that have changed the world and have drastically changed the competitive landscape.

4. Benchmarking the Process

Whatever strategy is employed, the new product development process must be carefully thought through. It also requires a series of benchmarks along the way. These evaluate whether the process should be continued as new product development is usually expensive and time consuming.

Figure 2: Stages for the development of product
5. Consumers Front And Center

Whatever product development strategy a company selects, consumers need to be front and center and involved in the process from start to finish. Set aside enough budgets for consumer evaluation of the new product at the concept, prototype and the final product stage.

IV.2 Steps for Planning A Strategy

The growth strategy requires changes in business operations, including a research and development function that is needed to introduce new products to your existing customer base. As a part of successful product development your role will require you to have a greater appreciation of a new emphasis placed on marketing. There are several important steps you will need to plan into your product strategy.

1. Define your product:
   An accurate description of the product you are planning will help keep you and your team focused and avoids pitfalls such as developing too many products at once, or running out of resources to develop the product.

2. Identify market needs:
   Successful development of product requires a thorough knowledge of your target market and its needs and wants.
   a) What is the target market for the product I am proposing?
   b) What does that market need?
   c) What is the benefit of my proposed new product?
   d) What are the market's frustrations of existing products of its type?
   e) How will the product fit into the current market?
   f) What sets this product apart from its competition?

3. Establish time frames:
   a) Your objective to race against your competition will require efficiency from your team.
   b) Your aim to achieve a specific launch date will be influenced by demand for seasonal products and calendar events.
   c) Your aim to be responsive to your customers' needs and demands will require time for research to ensure you develop the right products at the right time.
   d) Your objective to stick to business as usual and maintain other schedules will affect the resources you make available for product development.

4. Identify key issues and approaches:
   There are many tasks involved in developing a product that is appropriate for your customers. The nature of your business and your idea will determine how many of these steps you need to take. You may be able to skip or duplicate certain stages, or start some of them simultaneously. Key tasks include:
   a) Generating and screening ideas.
   b) Developing and screening concepts.
   c) Testing concepts.
   d) Analyzing market and business strategy.
   e) Developing and market testing products.
   f) Implementing and commercializing products.

V. CONCLUSION

These new product introductions are part of a strategy that companies take to ensure they continue to grow. Just like a plant, if a company does not have a process to continually help the plant grow, it will die. New sales and new markets are a critical aspect of sustaining growth for any company, and that is why companies develop products: to ensure they can continually penetrate existing markets and potentially enter new ones. Product development is the improvement of existing products or the introduction of new products into a market. You see, companies realize that the tastes of consumers in the market
are ever-changing, and in order for these companies to not lose ground, they need to stay current with those changes.

REFERENCES

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