

Merck and company: the new product development process

[Business](#), [Marketing](#)



The business environment of the 21st century is very different from the business environment 200 years ago. Since the Industrial Revolution until today, businesses have developed more and more products to meet the needs of an ever increasing world population. The cycle of business has been changed dramatically since the invention of the Internet, which has shortened the selling cycle and made it more convenient for consumers to shop from the comfort of their own homes .

When online shopping, consumers are more likely to purchase a product spontaneously, or discard products more frequently, which results in a need for more products to purchase. The new product development process is essential to all businesses because the potential for profit is so large in today's consumption- based society. Products are developed quickly and merchandise is sold in a short period of time after production, thus generating revenue in a very short period of time.

This shortened selling cycle requires a detailed and efficient process which is able to guide the organization through the six new product development steps which include: idea creation, idea screening, project planning, product development, test marketing, and commercialization (Donnelly, P. J. , 2011). The new product development process at Merck and Company is a good example of an efficient and reliable process. Merck's ability to create great products for the needs of their customers has allowed the company to gain a competitive advantage in the pharmaceutical market.

Idea Generation Idea creation is the first component of the new product development process. Companies must identify specific needs of their

clientele and create ideas for new products. Many times, a preliminary analysis of the Strengths, Weaknesses, Opportunities and Threats is completed to determine needs. At Merck and Co. , idea creation is usually the result of the identification of a sociological, epidemic, pandemic or common need (Merck and Company Research, Discovery and Development (n. d)).

Merck and Co. then develops solutions to specific illnesses or conditions. Many businesses use customer surveys and input from departments within the organization to identify potential ideas. Ideas for new products can come from any source. Most companies obtain ideas from front line staff and customers. These companies usually have more than one avenue by which ideas or suggestions can be communicated to the company. However, it is not uncommon for organizations to get ideas from competitors, market research, and professional resources (Donnelly, P.

J. , 2011). After a disease or condition is identified, researchers at Merck and Company begin searching for possible solutions to destroy or treat the condition. At times, ongoing research is also presented to the company as possible projects to pursue. Customer feedback and feedback from doctors are important in refining already developed pharmaceutical products; meanwhile, intense screenings of research projects and ideas from the scientific and health community are more important in developing new products.

Scientists with independent labs can apply for funds with pharmaceutical companies if they can present relevant data stating that the research is

pertinent in the health community (Donnelly, P. J. , 2011). Idea Screening After multiple new ideas for products are generated, the organization must then begin the second step of the new product development process, idea screening. In this step, organizations analyze the possible alternatives and identify specific products to produce based on other factors such as budget, profit potential, and market potential.

Often times there are projects which are profitable, however, the organization decides not to begin mass production based on resources available to complete production or current market trends (Donnelly, P. J. , 2011). At Merck and Company, the process begins with an intensive screening of research projects and results. After successful research projects are identified, these projects are further analyzed for profit potential. The precise marketing segment to which the project will be marketed is identified and analyzed.

Market analysis includes health demographics, market trends and societal influence. The project is also analyzed for substitutes along with longevity. Pfizer and Bayer are top competitors of Merck and Company. These companies tend to closely mirror each other in products and marketing techniques (Merck and Company Research, Discovery and Development (n. d)) Project Planning Following the specific identification of a profitable project, the organization then begins to plan to implement production, marketing, and other components in creating the product.

Project planning is essential to organizations since projects are seldom successful unless a proper plan is in place. Planning can include finding

suppliers to supply the raw materials for the product, securing facilities to store the product, determining how the product will be marketed and packaged, determining where the product will be manufactured, and determining where the product will be distributed. A concept for the product is developed as well during the project planning process (Donnelly, P. J. , 2011). At Merck and Company, project planning is an extensive process.

On average one in every ten persons in the US are using medication on a regular basis (Merck and Company Research, Discovery and Development (n. d)). Pharmaceutical companies must adhere to strict regulations of the Food and Drug Administration as well as industry standards. Federal and state regulations are analyzed and incorporated into the planning process which includes patents and consumer protection legislation. Merck and Company also identifies the target market for the medication and features that are important to the consumer to purchase the product.

Merck and Co. also formulate methods to effectively market the product to patients (Merck and Company Research, Discovery and Development (n. d)). Common marketing techniques for pharmaceutical companies like Merck and Company include hosting lavish provider dinners and luncheons where the new product is demonstrated and providers are educated on its uses and given free samples. A more recent method of marketing includes direct patient marketing in which pharmaceutical companies market to patients using information commercials. (Ulrich, K.

T. , & Eppinger, S. D. , 2004). Product Development The next step in the new product development process, following project planning, is product

development. In this step, small samples of the product are developed in totality from content to packaging. At Merck and Company, the new pharmaceutical medication is developed along with packaging and necessary disclaimers (Merck and Company Research, Discovery and Development (n. d)). The concept that was determined during the project planning process materializes into the finished product.

This is a crucial step because the feasibility of production is also tested. Products can be easier or more difficult to produce than previously anticipated. Exact supplies are also determined during product development. Many times, more or less than anticipated supplies are needed to complete the finished product. These smaller batches of new medication are produced in small private affiliate labs, offsite from the main Merck and Company production facilities (Merck and Company Research, Discovery and Development (n. d)).

Test Marketing The fifth step of the new product development process, is test marketing. In this step, the product is tested on small groups of consumers to determine if the product is appealing, if the right marketing techniques were used to market the product, and if the concept elicited the best response from the consumer about the product (Donnelly, P. J. , 2011). Focus groups and surveys are normally used to obtain valuable consumer feedback. Consumer feedback is then incorporated into the product concept or development.

Feedback usually identifies problems or issues about the product before the product enters the market during mass production, saving the company

money and time to correct them. Errors are easily corrected and the product is then re tested (Donnelly, P. J. , 2011). At Merck and Company, test marketing is usually completed in the form of clinical trials (Merck and Company Research, Discovery and Development (n. d)). During these trials, Merck and Company is able to determine the effectiveness of the new product and the effectiveness of product marketing (Ulrich, K.

T. , & Eppinger, S. D. , 2004). Clinical trials normally involve double blind studies in which one group is given the medication while another group is given a placebo. Neither group is aware of which has the actual medication. In this way Merck and Company is able to test its medication effectiveness without participant bias (Merck and Company Research, Discovery and Development (n. d)). Commercialization After tests have proven the product is the very best that it can be, the product is manufactured in higher volumes and shipped to distribution points.

Marketing and promotions also work together to make consumers aware of the new product and where they can purchase the new product (Donnelly, P. J. , 2011). The product is launched and mass produced. At Merck and Company, different medications require different kinds of marketing and advertising. Drugs that are usually recommended to the consumer by the physician (these include specialty medications that the consumer would not think to ask for) are advertised using provider luncheon or dinners.

During these provider luncheons or dinners, providers are educated on the new medication, its side effects and benefits, as well as supporting unbiased research. Although provider luncheons and dinners are effective, recently a

new form of advertising has become important as well, direct advertising. In this form of advertising, the consumer is educated on the new product and directed to ask the doctor to prescribe the medication for a specific ailment (Merck and Company Research, Discovery and Development (n.)). Conclusion Merck and Company uses its new product development process to create innovative new products that address scientific and consumer concerns, while also incorporating the legal and ethical concerns of society today. Merck and Company's success stems from the company's ability to effectively implement each stage of the New Product Development Process which include, creation, idea screening, project planning, product development, test marketing, commercialization (Donnelly, P.

J. , 2011). Efficiencies in the New Product development process aide in the creation of unique products tailored to the consumer. For Merck and Company, this attention to detail and dedication to customers translates into increased profits and positive customer ratings. Without the development of new products businesses would not be able to continue their organizations for long periods of time.