

Why are some NPD projects more successful?

As many innovations and new product development (NPD) projects succeed, many more fail. In my research study "Innovation Management in Multi-Divisional Firms: Factors that Lead to Successful Development of New Products", I look at why projects succeed or fail, and what can you do to improve their success rate.

Intro

A few years back, I conducted a research study on the topic of "Innovation Management in Multi-Divisional Firms: Factors that Lead to Successful Development of New Products" as part of my Management of Technology Masters degree. The unique part of the research, at least at the time, was to analyze the new product development success factors from the influence of newness: newness of the technology and/or newness of the market.

You can access the research and its findings here. However, a quick summary would be worthwhile to share. Please note that, the projects used for this research took place in a single firm, within the computer and peripherals industry. Why new projects fail or succeed?

There have been many studies done to uncover the reasons why new development projects fail, including in the established firms. Winning at New Products: Accelerating the Process from Idea to Launch, Third Edition by Robert G. Cooper, The Innovator's Dilemma: The Revolutionary Book that Will Change the Way You Do Business (Collins Business Essentials) by Peter Drucker, and Commercializing New Technologies: Getting from Mind to Market by Vijay K. Jolly are few of the books on this topic. Here are a few reasons why projects fail:

- Lack of understanding of the real needs in the marketplace;
- Poor execution of the new project;
- Inability to overcome the difficulties faced by established organizations:
- Lack of management skills for new product development;
- Lack of processes within the organization to nurture the vagueness of new product concepts;
- Organization's inability to network and bridge its competency gaps to bring the new product to market;
- Concerns on cannibalizing the existing businesses;

With that said, studies also highlight common factors that influence new product development success:

- Importance of having a good understanding of the marketplace;
- At the project level, quality of the execution and players involved;
- Importance of organization's top management support;
- Establishing the needed synergy and alignment with existing competencies;
- Organization's ability to network;
- Effort and skills employed in order to effectively communicate the characteristics of the new product offering to the marketplace;
- Skills and past experiences of the management team with new product development;
- Recognizing the project characteristics and managing project differently for high-technology uncertainty vs. low-technology uncertainty; Research Focus and Propositions

Project focus was understanding the impact of product "newness" and key organizational factors on new product development success: perceived degree to which project's commercial and technology objectives have been achieved. Factors studied include:

- R&D and marketing interrelation/intercooperation;
- Organizational networking: division and project teams' ability to network;
- Top management support;
- Project management execution;

Each of these factors further analyzed for contingency relationship to technology or market newness; basically if the factor is more important for products with higher degree of technology or market newness. Conclusion "There is nothing more difficult to plan, more doubtful of success, nor more dangerous to manage than the creation of a new system" - Niccolo Machiavelli, The Prince

The main purpose of this study was to investigate the role of a product's technology and market newness, R&D/marketing intercooperation, organizational networking, top management support and project execution in the success of new product development, and whether the product's technology and market newness influence the success of the innovation indirectly. There are obvious limitations to the study, such as the sample size used, as well as the subject variability. However, regardless of the limitations, insights gained from the study are also beneficial.

The results of the study showed that the product's market newness, top management support and project execution have direct influence in the innovation's success, while technology newness indirectly influences the organizational variables studied. Implications and recommendations for management can be summarized as follows:

- Top management support and project execution has strong influence on product commercialization success. As such, management should:
 - Establish new product development lifecycle to ensure the activities that must be undertaken during the development;
 - Encourage, if not require, quality project execution proficiency from development teams: special focus on initial screening, preliminary market assessment, preliminary technical assessment, business/financial analysis, product development and customer test;
 - Continue to screen projects to separate low potential projects from high potential projects;
- Technology newness characteristic of the new product has definite influences on the project's success. As such, the management teams should:
 - Recognize the innovation characteristics and adjust organizational processes accordingly;
 - Alter their organization's social interaction model based on the technology newness, as information exchange will help reduce the associated risks and uncertainties with new technology;
 - Management must provide necessary resources for the new product development activities, including product concept testing with customers;
 - Organizations need to re-adjust their business requirements to foster the new product development, especially around financial expectations for the new product.

Though these findings are not a complete surprise, they do highlight the complexities associated with new product development. This is one area where sweating the little stuff definitely does matter. Good luck!