

**The Factors Affecting New Product Success: Cross Country
Comparisons: Case Finland- research project**

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Table of Contents

1. Introduction	3
2. Outline of the research	4
2.1. Scope, purpose, methodology and objectives of the research project	4
2.2. Outline of the research	4
2.2.1. Research design	4
2.2.2. Choice of methodology	5
3. New product development process (NPDP)	6
3.1. New product development process	6
3.2. Factors affecting the success of new products	7
4. Schedule of the research	9

1. INTRODUCTION

The development and introduction of new products to the marketplace are vital to corporate profitability and growth. The companies most successful in carrying out these activities use approaches and techniques that, although only slightly different from those employed by their less successful competitors, result in significant performance advantage.

Booz, Allen & Hamilton Inc. 1982¹

Product development process is a long and tedious process. It starts from idea generation and hopefully ends with a successful launch into the market place. There has been put much emphasis in Finland on the product development. Technology and research regarding new products play a significant role in the Finnish economy. The amount of research done and the funds used for research both in the private and public sector in relation to the size of Finnish economy has increased steadily during last 30 years and currently stands around 3.5% of GNP. This is one of the highest figures in OECD countries. Research in fact is a major competitive factor for Finland. Thus it is absolutely essential that the research process is efficient and as much as possible is known of all the factors affecting the success and failure of the various research projects done.

It has been evidenced in many studies that the meaning of R&D and the continuous introduction of new products is extremely important for the prosperity of companies.² The meaning of new products seems to be growing from the profitability point of view.³

¹ Booz, Allen & Hamilton: New Product Management for the 1980s, p.1.

² See Ashok K. Gupta, David L. Wilemon: Accelerating the Development of Technology-Based New Products, p.24, Richard T. Hise, Larry O'Neal, James U. McNeal and A. Parasuraman: The Effect of Product Design Activities on Commercial Success Levels of New Industrial Products, p.43, Robert G. Cooper: New Products: What Distinguishes the Winners, p. 27, Robert G. Cooper, E.J. Kleinschmidt; Resource Allocation in New Product Process, p. 249 and Teck Hua Ho: Product Design Strategy Analysis: The Marketing-Manufacturing Interface, p. 1.

³ Booz, Allen & Hamilton: New Product Management for the 1980s, p.4. See also Sharad Sarin, Gour M. Kapur: Lessons from New Product Failures, p. 301.

2. OUTLINE OF THE RESEARCH

2.1. Scope, purpose, methodology and objectives of the research project

There has been quite a bit research done regarding the factors affecting the success and failure of new products. Comparative data between various parts of the world in this regard is, however, lacking. The scope of this research is to investigate the factors that affect the new product success irrespective of the industry where the New Product Development (NPD) is done.

The purpose is to join an international research initiative, in which research will be done in various parts of the world regarding the success and failure of new products. The following sections of the research have already been completed: China, South Korea and Canada. Finland will join the initiative as the first European country. Other countries will follow the suite. Also comparisons to the earlier studies will be done.

The methodology of study is to use a questionnaire consisting of approximately 80 statements developed by R.G. Cooper. Commercial successes and failures will be compared. When determining the sample, the information sources of Statistics Finland will be used.

The objectives of the research project are to gain more in-depth practical knowledge regarding the factors that affect the success and failure of new product development process. Also comparisons to other countries should increase the understanding in this regard.

2.2. Outline of the research

2.2.1. Research design

This research uses the research design in which the event under research is described and then hypotheses are produced to explain it. The objective of the nomotetic approach based on positivism is within the scope of the research sampling frame to look for correlations describing relationships between properties. The goal is primarily to show causal or at least correlative relationships. Sampling frame is collected from a wide population and it will be dealt with statistical methods. The results are statistical averages and other statistical measures and thus an individual company might be totally different from the average company.⁴

⁴ Tauno Olkkonen: Johdatus teollisuustalouden tutkimustyöhön, p.48-50.

2.2.2. Choice of methodology

This research includes conducting a direct mail survey using a questionnaire. The questionnaire also includes questions regarding the size of the business unit, its' products, the proportion of R&D of sales, sales to foreign markets and the background of the respondent.

To test some of the hypothesis it is necessary to divide the sample population into two different groups. The division will be done as follows. Every other respondent will be asked to answer the questionnaire as far as their successful product launches are concerned and every other respondent will be asked to answer the questionnaire as far as their unsuccessful product launches are concerned.

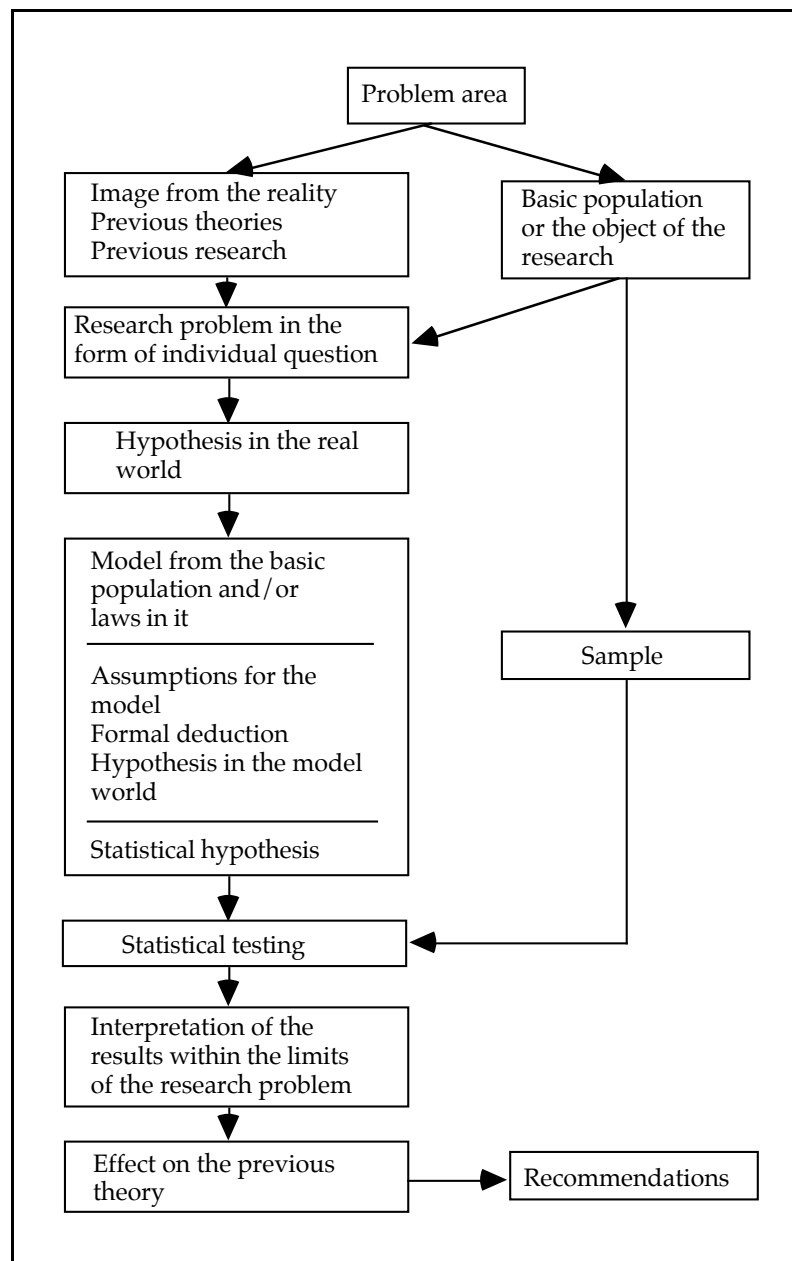


Figure 1. The structure of the research.

3. NEW PRODUCT DEVELOPMENT PROCESS

“Managing a business superbly starts with developing products the public wants.”

Booz, Allen & Hamilton

3.1. New product development process

New product development is one of the riskiest, yet very important, endeavours of the modern corporation.⁵ Managing new product development successfully requires a commonly applied, disciplined process that is consistently used and understood by all managers. Companies use a variety of approaches to develop new products. According to the researches of Booz, Allen & Hamilton and Thomas D. Kuczmarski, the new product development process can be presented in 10-step model, which identifies the activities performed in bringing new product ideas to the marketplace.

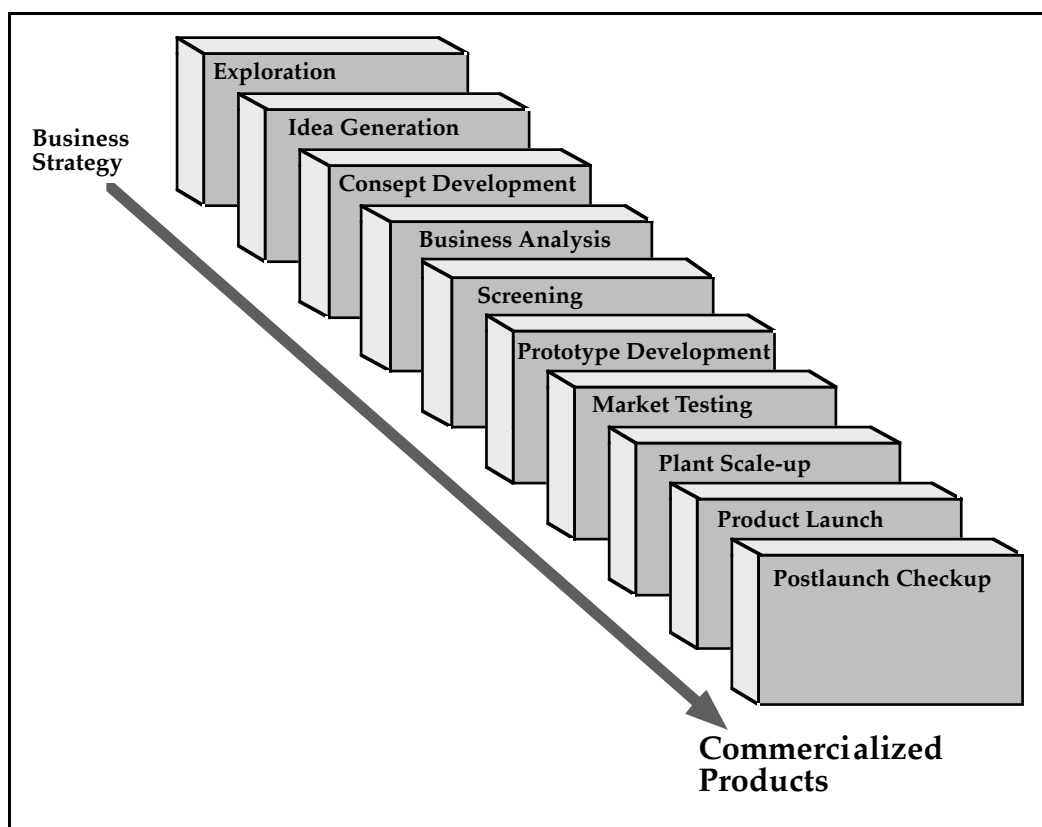


Figure 2. The new product development process⁶

⁵ Robert G. Cooper: Winning at New Products, p. 4.

⁶ Booz, Allen & Hamilton: New Products Management for the 1980s, pp.3.

Robert G. Cooper⁷ has developed the generic stage-gate new product development process. Cooper's stage-gate system breaks the new product project into discrete and identifiable stages, typically four, five or six in number, depending on the company or division. Each stage is designed to gather information needed to progress the project to the next gate or decision point. Each stage is multifunctional and consists of a set of parallel activities from different functional areas within the company. A stage-gate system is both a conceptual and operational model for moving a new product from idea to launch⁸.

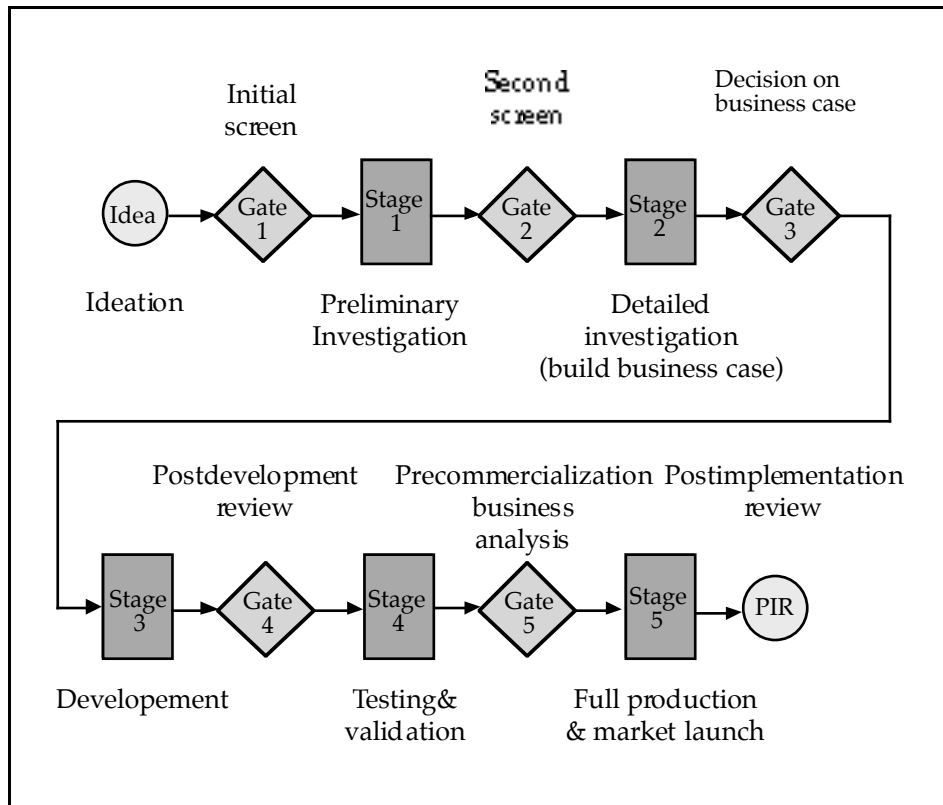


Figure 3. A generic stage-gate new product process by Cooper.

3.2. Factors affecting the success of new products

There has been completed a number of research projects concerning the success of new products. The perhaps most well known are the studies by Booz, Allen and Hamilton⁹, the

⁷ Robert G. Cooper : *Winning at New Products*, p. 108.

⁸ Robert G. Cooper: *Stage-gate systems: A new tool for managing new products*, *Business Horizons*, May-June 1990, p. 44.

⁹ Booz, Allen and Hamilton: *New Product Management for the 80s*. Booz, Allen and Hamilton, Inc. 1982.

Conference Board¹⁰, Cooper and Kleinschmidt¹¹ as well as de Brentani.¹² The findings can be summarized as follows:

Table 1. Correlates of New Product Success.¹³

Correlate of success	Booz, Allen and Hamilton	De Brentani	Cooper and Kleinschmidt	Duerr
Match customer needs	*	*	*	
High value to customer		*	*	
Innovative		*	*	
Technical superiority	*		*	
Screened on growth potential		*	*	*
Favourable competitive environment	*			
Fit internal company strengths	*	*	*	
Communication among functions		*	*	
Top management support	*		*	*
Enthusiastic champion				*
New-product organisation	*			*
Use new-product process	*		*	*
Avoid unnecessary risk		*	*	

Match to the customer needs is perhaps the strongest indicator of success. In the Booz, Allen and Hamilton study for example, "Product Fit with Market Needs" was the most important factor in approximately 85% of the cases, whilst the second most important factor was "Product Fit With Internal Functional Strengths", which was mentioned in 61% of the cases. "Technological Superiority" was the third most important factor, which was mentioned in about 51% of the cases. Urban and Hauser further emphasize customer needs to be important throughout the NPD process.

¹⁰ M. G. Duerr: The Commercial Development of New Products. Conference Board. New York. 1986.

¹¹ R.G. Cooper and E.J. Kleinschmidt: "New Products: What separates Winners from Losers. Journal of Product Innovation Management, 4, 1987, p. 169-184.

¹² U. de Brentani: Success and Failure in New Industrial Services. Journal of Product Innovation, 6 (4), 1989, p. 239-258.

¹³ Glen L. Urban, John R. Hauser: Design and Marketing of New Products, p. 52.

4. SCHEDULE AND BUDGET OF THE RESEARCH

The research will be conducted according to the following timetable:

2003	Definition of the research problem The strategy of the research The method of the research Previous studies and theories The clarification of the problem The objectives of the research The outline of the research hypothesis
2004	The choose of the object of the research The decision of the research method The outline of the research instrument The testing of the questionnaire The mailing of the research questionnaires The coding of the responses Preliminary statistical analysis of responses The analysis of the results Conclusions and directions for future research The writing of the results

Table 2. The schedule of the research.