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## THE NEW PRODUCT DEVELOPMENT PROCESS FOR COMMERCIAL FINANCIAL SERVICES

by

Scott J. Edgett

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**The New Product Development Process for Commercial Financial Services**

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## **Abstract**

To achieve their goals, executives are increasingly reexamining their organizations' approach to development and launch of new products to determine if the process can be redesigned for faster reaction time, better utilization of limited resources and improved success rates. This article examines the new product development process within the setting of corporate/commercial financial services. Its conclusions provide executives with some broad principles for their own new product processes to help them in their quest for competitive advantage through winning new products.

## The New Product Development Process for Commercial Financial Services

The attention of senior executives in the financial services industry is increasingly being focused on how well the new product development process is working within their institutions. This focus on product development results from the combined pressures of increased competition, a rapidly changing marketplace, new technology, and new and pending legislative changes. All of these factors underscore the need to be able to design, develop and launch, in a timely fashion, new products that are winners. A strong new product initiative is now considered an essential weapon in both offensive and defensive initiatives.

To achieve their goals, executives are increasingly reexamining their organizations' approach to development and launch of new products to determine if the process can be redesigned for faster reaction time, better utilization of limited resources and improved success rates. This article examines the new product development process within the setting of corporate/commercial financial services. Its conclusions provide executives with some broad principles for their own new product processes to help them in their quest for competitive advantage through winning new products.

### BACKGROUND

The critical success criteria for new tangible products have been well documented by researchers, as has the impact of the product development process itself [i.e. 1-3, 6, 7, 18]. However, the service sector has only more recently attracted similar attention. Research has begun to identify the characteristics of successful new product development in service sector settings, given the intangible nature of the products under development. Some of the more comprehensive studies have been able to demonstrate that specific development activities do influence success for new services. The framework provided by Cooper et al. [5] separates the factors that influence new product performance for the service sector into five main areas:

*Product advantage*, which includes aspects such as unique benefits, satisfying customer needs or problems, market entry and product/service quality [i.e. 4, 5, 8-10, 12, 13, 23].

*Marketing support* at the launch stage, which includes aspects such as marketing efficiency, communications strategy, brand image, sufficient resources, front-line and staff training [i.e 4, 5, 8-10, 13-15, 23].

*Nature of Marketplace*, which addresses both attractiveness and competitiveness. This area includes market growth conditions, size, customer loyalty, market fit, customer familiarity and competition [i.e. 4, 5, 8-10, 13-15, 23].

*Corporate environment*, which includes such aspects as internal synergies with marketing, technology and operations; synergy with resources and the requirements of the project; and internal alignment with existing product portfolios and strategies [i.e. 4, 5, 8, 9, 13-15].

*Nature of the process*, which refers to the activities within the product development process and their impact on performance. This includes the development activities as well as the quality and the detail of execution [i.e. 4, 5, 8-10, 12-16, 18].

This last factor, nature of the process, is expanded upon in other studies which have examined the actual process used for developing new products to determine the impact process has on success. This is in contrast to the previous mentioned studies that explored the impact of the various development activities on specific projects. However, as noted by Edvardson and Haglund [17], the development process in a service organization is complex, as a result analysis of the process for developing intangible services is more difficult and time-consuming than similar analysis for tangible products. Some models have been put forward [i.e. 20, 21], and case approaches have investigated the new service process [16, 17]. These studies need to be expanded, however, via broader, more in-depth empirical research.

In this vein, and building upon the lessons learned from the tangible goods sectors, a number of studies have explored the links between product/service development activities and the development process itself. These studies have determined that a strong market-driven new product process with thorough execution of the required steps does impact positively on new product outcomes [4, 5, 9, 10, 12-14]. This article further explores these links.

The findings presented in the following sections provide some additional insight into the impact a new product process can have on the marketplace performance of new products in a subset of the financial service sector -- commercial products.

## **THE RESEARCH**

The research presented in this article focused on answering two principal questions revolving around issues of the new product process and its links to performance:

1. How extensively are the activities in a typical new product process used; what is the level of completeness of the process, and what is the quality of execution for each of these activities?
2. How are these activities (or stages) in the new product process linked to an institution's overall new product performance rate?

The answers to these questions were obtained from 82 financial institutions. The research results (presented in the next several sections) were derived from a larger empirical study that investigated new product development in a broader context within the financial services sector. The study took place in the fall of 1995 with financial institutions from both the United States and Canada participating. From this larger study, which included both retail and commercial financial products, a subset of respondents who developed and targeted new products aimed only at commercial markets/clients was identified and isolated. The resulting 82 usable cases were comprised of American institutions (71% of the respondents) and Canadian institutions (29%). Sectors represented included banking (39%), insurance (43.9%), leasing (7.3%) and others (9.8%). Most questionnaires were completed at the executive level (86.5%). For more detailed information on the research methodology used see the box insert -- How the Research was Conducted.

### **The New Product Development Process**

The first stage of the analysis determined what occurs during a typical development project. As previous studies have suggested [i.e. 1-3, 6, 7, 11] the development process itself and the quality of the execution for the various stages are strongly linked to new product performance after launch. By modifying descriptions of the process activities previously linked to success in the tangible goods industry [i.e. 1, 2, 6, 7] and adding/deleting stages of activities profiled from the service industry [16], a list of development activities for financial services was compiled to enable respondents to trace the typical new product process used within their organization and to evaluate each activity. In Exhibit 1 each stage is listed and described. Each respondent was asked to consider a typical or average new product project in their company (division). Respondents were then requested to rate each of the typical development activities by considering how common an occurrence each activity is for the new

### **How the Research was Conducted**

The data collection involved a detailed mail survey of American and Canadian financial institutions, including banks, insurance firms, trust companies and other financial institutions, for example leasing, reinsurance and mutuals. Institutions were identified from industry directories. Questionnaires were directed to the senior executive in charge of product development initiatives. To encourage participation all respondents were promised a "best practices" summary report. The term "new product" was defined for respondents as a product that is new to their company. Where new referred to all types of new products including significant modifications to existing products. Products that had undergone only minor modifications were excluded.

Following a second reminder mailing 347 institutions responded with 82 useable cases representing business-to-business new products (58 U.S. and 24 Canadian). Mean scores were tested to determine if any country of origin differences existed; the results were negative, thereby permitting pooling of the data from two countries. Respondents of the data subgroup were 86.5% executives with the remaining 13.5% comprised primarily of product managers.

The questions pertaining to this article were gauged using 1-5 Likert-type scales with anchored phrases. The success performance measure was measured as a percentage.

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product process in their company and how well each activity is typically carried out.

Exhibit 2 profiles the frequency of occurrence of the new product process activities, as reported by respondents. For example, the screening of new ideas was conducted most or all of the time in 57.5% of the institutions. Preliminary market assessment reflected the highest level of occurrence (87.1%). Many activities, however, fell into the mid-range with only about half of the responding institutions reporting these as regular activities (i.e. preliminary technical assessment, business/financial analysis, system design and testing, personnel training and full-scale launch).

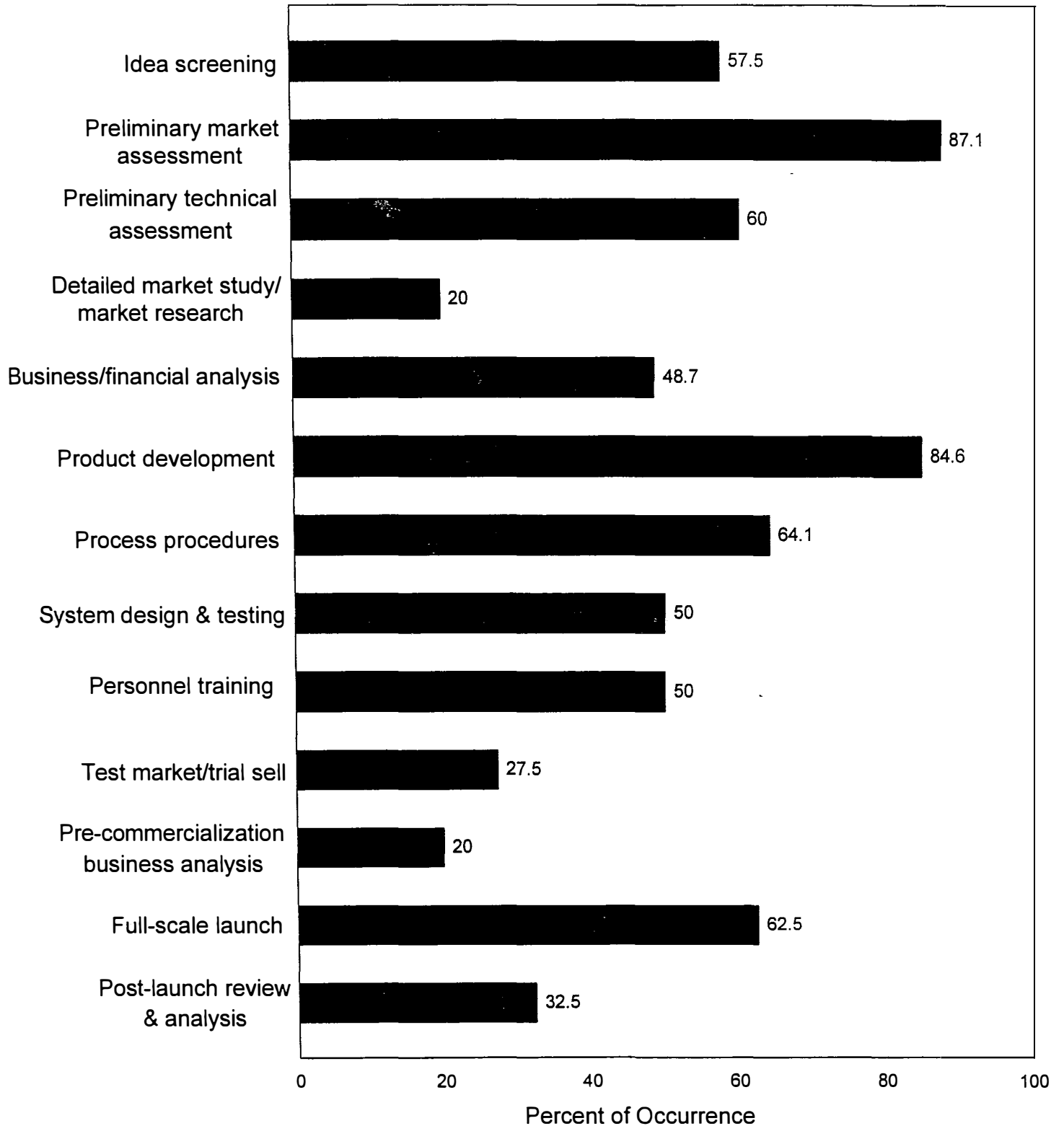
A leading indicator of successful new products in previous studies [4, 5, 8-10, 12-16, 23] has been the undertaking of a detailed market study or market research before the new product enters the development/design phase. A surprisingly low percentage of institutions reported conducting this activity on a regular basis (20.0%). Other activities scoring low were test market/trail sell (27.5%) and pre-commercialization business analysis (20.0%). The low score for the test market is, perhaps, explainable by the nature of the products. In many instances it is just not practical to sell the new product on a trail basis. The low score for a final business analysis is harder to explain away. In many instances the respondents indicated that once the new product had gone through system development there was no incentive to question the feasibility of the new product. In other words, the new product had so much internal momentum it was going to be launched anyway due to the amount of money and time already invested in it.



### Exhibit 1: New Product Development Process Activities

Process Activity	Description
Idea screening	The initial Go/no go decision where it was first decided to allocate funds to the proposed new product idea.
Preliminary market assessment	An initial quick look at the market
Preliminary technical assessment	A quick assessment of the technical merits and difficulties of the project.
Detailed market study/market research	Marketing research, involving a reasonable sample of respondents, a formal design, and a consistent data collection procedure.
Business/financial analysis	A financial or business analysis leading to a Go/No Go decision prior to product development.
Product development	The actual design and development resulting in, e.g. a final product
Process	Process (procedures) design and testing
System design & testing	Systems are properly debugged.
Personnel training	All involved personnel are trained, e.g. training materials are prepared and people are trained in how to use and sell the new product.
Test market/trial sell	A test market/trial sell is conducted to a limited or test set of customers to test the plan for full launch.
Pre-commercialization business analysis	A financial or business analysis, following product development but prior to full-scale launch.
Full-scale launch	The launch of the product, on a full-scale an/or commercial basis: an identifiable set of marketing activities
Post-launch review and analysis	Conduct a review and analysis after the new product is fully launched.

## Exhibit 2 Frequency of New Product Activities Typically Conducted



Another useful method for evaluating the thoroughness of the development process is to examine the completeness of the process itself. Responses from all 82 institutions were assessed on the basis of how many product development steps or stages were typically carried out. Exhibit 3 illustrates how the institutions rated in terms of completeness of the new product process. The chart clearly illustrates that most institutions do not employ a full new product development process on a regular basis. Instead institutions appear to be divided into three distinct types. One type seems to follow a fairly complete process (10 or more of a possible 13 activities); another type seems to follow just over half of the described activities on a regular basis (7-9 activities), while the remaining institutions have what appears to be a very ad hoc approach to new product development. These findings are similar to past research on tangible products that determined that new product development activities were frequently omitted during the new product development process [i.e. 1, 2, 6, 11, 19].

The new product process can also be evaluated according to how well each stage or activity has been carried out. For example, not only was the question asked whether institutions conducted market studies but whether they believed they had conducted effective market studies. Respondents were asked to rate the quality of execution for each activity on a five point scale, where 1 = very poor (handled badly) and 5 = excellent (very well handled). Exhibit 4 presents a profile (mean) of the responses. The quality of execution score for all 13 activities averaged together produced a mean of 3.11, which reflects a less than optimal result with stages in the process requiring in-depth marketing activities scoring particularly low.

Examining the results by dividing them into four categories of strength, suggest that many aspects of the process could be improved.

*Strong quality of execution (> 3.7)*

- preliminary market assessment
- product development

*Moderately strong quality of execution (3.2 - 3.5)*

- preliminary technical assessment
- process: procedures design and testing
- full-scale launch

*Moderately weak quality of execution (3.0 - 3.2)*

- idea screening
- business/financial analysis
- system design and testing
- personnel testing
- post-launch review and analysis

*Very weak quality of execution (< 3.0)*

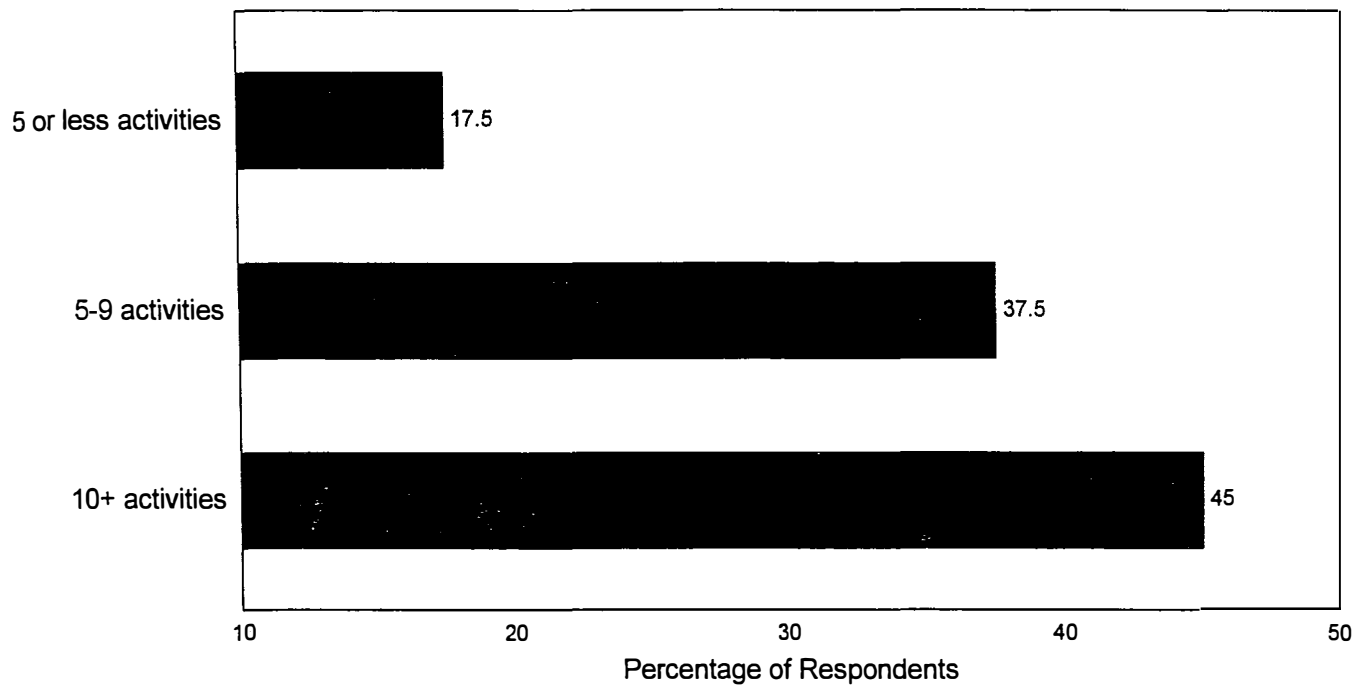
- detailed market study or market research
- test market or trail sell
- pre-commercialization business analysis

Surprisingly, given that these are financial institutions, was that both activities which captured the business case were poorly executed (the predevelopment and final prelaunch analysis). The initial business case is used to determine if the new product does indeed make financial sense. This activity is conducted before the more expensive system work is undertaken. The second financial analysis is undertaken before final launch to once again review the financial viability of the new product now that a final version of the product is available. This last chance to review the financial implications of the new product, if used properly, can stop the project if the business case is not strong.

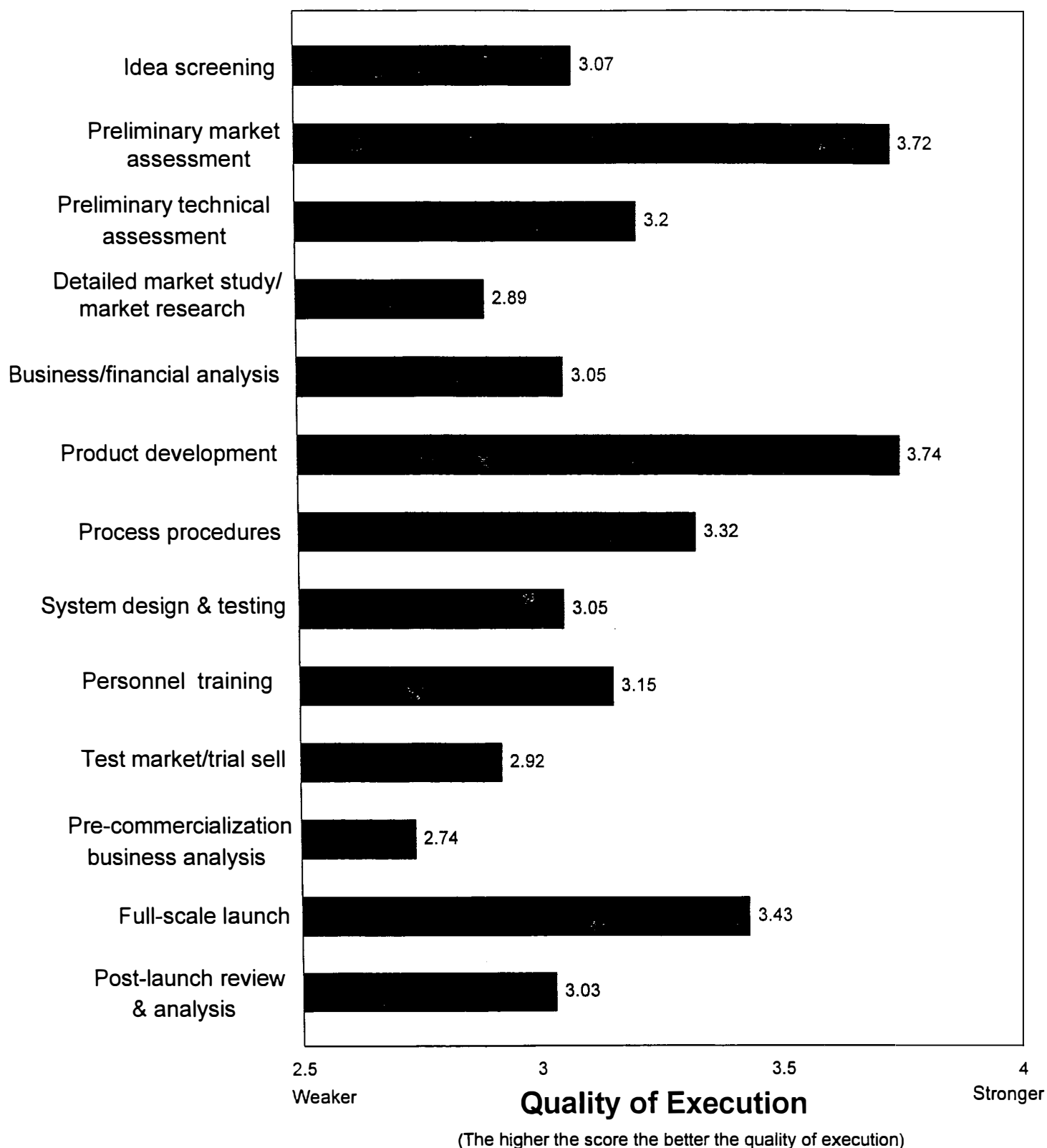
Assessment of the new product development process from the information presented in the previous exhibits suggests that many financial institutions are not developing new products via systematic development processes. Instead the norm among respondents indicates ad hoc approaches in many institutions. As one executive noted, "We know our process is not what it should be; however we just can't seem to get it all together on an ongoing basis. I hope our competition is no better". This comment leads to the next part of the analysis where the question is addressed as to whether the new product process does indeed affect product performance.

## Exhibit 3 Completeness of New Product Process

Activities/Stages Completed (out of a possible 13)



## Exhibit 4 Process Activities: Quality of Execution



### Linking Performance and the Process

The second aspect of this study was to determine what links may exist between the new product process and the success rate of the institution's new product program. Success was gauged on the overall performance of new products that entered development and had significant amounts of money spent on them over the previous three years. Mean success rates across all firms were reported as follows:

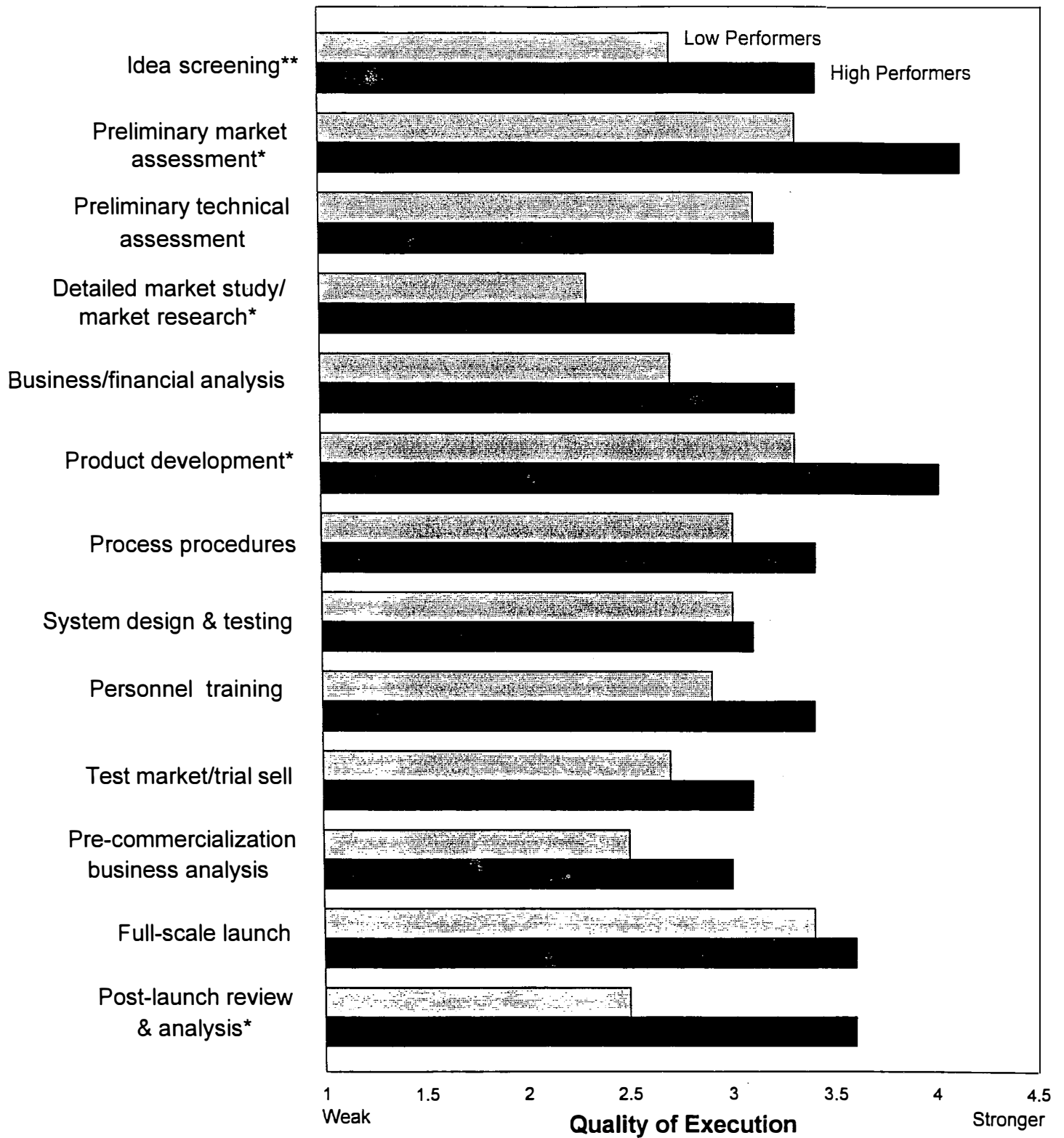
Percent of projects that were launched and were commercial successes	62.5%
Percent of projects launched and were commercial failures	19.8
Percent of projects killed or cancelled prior to launch	17.7

A success rate of only 62.5% suggests that most institutions have significant room for improvement in their approach to product development. This raises the interesting question: Do institutions that better perform in specific aspects of the development process have higher success rates than other institutions? To explore this possibility, a comparison was made between those institutions scoring in the top third and those scoring in the bottom third in relation to their reported success rates, with break points of greater than 75 percent successful and less than 51 percent. Exhibit 5 illustrates the comparison between the two performance groups (top third and bottom third) in terms of the quality of execution in the development activities.

To validate the results, a regression analysis was also undertaken. The regression analysis yielded strong results with an R-square of .628 and a significance level of F of .047, thereby strongly linking quality-of-execution to new product performance (success rate of new products launched) versus quality-of-execution of the 13 key activities listed in Exhibit 1.

A quick overview of Exhibit 5 suggests that the top third performers do indeed score higher in the quality of execution for the development activities, suggesting a more thorough approach be taken to the new product process. However, even this group has room to improve. The activities with statistically significant differences (at the 0.05 level or better) in means included: idea screening, preliminary market assessment, detailed market study/market research, product development and post-launch review and analysis. Except for post-launch, the activities which most strongly distinguished the high performers can be grouped under the theme of pre-development activities. In other words, institutions that have taken the time to conduct good, up-front analyses have produced better results. By spending the extra time in the predevelopment stage, these institutions ensure that new product projects enter the more expensive development stage with more complete information on markets, competition, and financial viability. This, in turn, should lead to tighter specifications for the system people to work with, thus producing better end products and in a more timely fashion.

# Exhibit 5 Quality of Execution: Comparison of High vs. Low Performers



Bottom third of performers     Top third of performers

(\* = significant at 0.05; \*\* = significant at 0.01)



## **Managerial Implications and Conclusions**

The findings presented in this article (Exhibits 2-5) suggest that the new product process impacts the success rates of new products. Conclusions that can be drawn suggest that, as a group, financial institutions do not have a sophisticated product development process. However, the results show that some institutions do have more complete processes with higher quality of execution than others, and that this group has a higher percentage of successful new products. Over time, as more successful new products reach the market, this group of institutions should be in a position to reap the competitive benefits of a "high quality" new product process.

This research has a number of implications that executives seeking to improve their new product development process should consider:

- 1. A rigorous new product process is important to success:** The results suggest that having a complete new product process with "high quality" execution of the activities in all the process stages can positively influence success. Institutions with better processes have higher success rates. Without a well-thought-out process that is rigorously applied to development projects, the probability is high that errors and omissions will occur in the critical stages of development. This is particularly relevant for the early, pre-systems stages that have been strongly linked to overall product success. A clear process model can aid in ensuring that process participants are all working on the same level and understand at which part of the project what activity should occur [2]. This helps to better allocate scarce resources to the various stages.
- 2. Early upfront marketing activity is essential:** Institutions that achieved higher success rates tended to do a better job in the early stages of product development before the new product entered the system development phase. Each of these early stages serves to help identify winning products and spot losers. The benefits are that better ideas are approved and sharp product definition is achieved before the more expensive system development begins.

To have a solid pre-development phase, institutions need to ensure the following activities are included in their processes (each of these activities was shown to have a strong link to projects with successful outcomes):

*Idea screening:* An idea screening system should be in place to ensure that good ideas are approved and move forward in a timely manner, while poor ideas are stopped before they gain internal momentum and additional resources are allocated.

*Preliminary market and technical assessment:* A quick check of the technical requirements of the new product and a similarly quick check of the market is necessary at the beginning. These activities provide insight as to whether the

new product idea suits the organization. These stages also permit rapid assessment of the resources required and the market factors that will affect the new product. These steps allow an institution to assess the degree of synergy with existing technology, markets and business directions.

*Detailed market study/market research:* A complete analysis of the market including traditional market analysis information (i.e. competition, market size and client needs) is required. This stage of activity is designed to provide much needed information for the business case. It also provides valuable input for defining the project scope. The tighter a promising new product's definition can be made, the better job the systems development people will be able to do (faster, cheaper development that is focused on customers' needs). It is more effective to take time here, before the expensive and time consuming system work begins.

**3. Quality of execution is a must:** Despite the emphasis here on its importance, a process is only a plan of action. To be an effective process, it must be well executed. Institutions with winning products ensure that each part of the process is executed to consistent standards. For example, in one insurance company, no project could enter systems development before a solid business case was developed that demonstrated its financial viability and set out a strong marketing and competitive analysis.

**4. Success is manageable:** Success or failure in the marketplace should not be a gamble. Solid development work can improve success rates. Institutions with less-than-desirable new product performance should closely examine their new product processes. If the process is not effective, it should come as no surprise that new product efforts are unsuccessful.

The research results presented in this article demonstrates that institutions with good success rates do have better overall management of their new product processes. These findings are consistent with the knowledge base that has developed on new product research into tangible goods: successful management of the new product process is not a gamble but the result of well executed product development initiatives [i.e. 1, 2, 7, 11]. With today's rapidly changing marketplace, speedy product development with effective utilization of scarce resources (people and money) has become a competitive necessity. This study suggests that institutions can take decisive steps to increase the chances of success for their new financial products.

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