SELECTING R&D PROJECTS & LOADING THE R&D PIPELINE

During the latter part of the 20th Century, numerous companies across industries realized that by increasing management’s focus on the product selection process, and by investing more in the precursor product and project definition processes, they could garner increased revenues and profits from new products - without having to increase R&D spending. Many new techniques were tried and tested and industry made great strides in understanding the types of activities and decision-making processes that yield the best results. Industry practices matured, and now in the early 21st Century they can be categorized into five basic approaches used by corporations. The usage of these practices differs depending upon whether corporations are selecting Advanced Development or Product Development Projects.

- 2.5 Step Selection Process [Concept Approval, Definition Approval, Project Approval]
- 2.0 Step Selection Process [Definition Approval, Project Approval]
- 1.0 Step Selection Process [Project Approval]
- No Step Selection Process [One or Two People Decide]
- Other Selection Processes [Customers Decide, Momentum Prevails, Unclear Practices]

Goldense Group, Inc. [GGI] conducted a survey of industry practices in product selection during the summer and fall of 2002. Approximately 90 companies participated in the research. About 75% of the participants were from companies or divisions of companies that had $500 million or less in revenues; about 25% had $500 million or more.

Product and Project Selection Processes

GGI has surveyed industry practices in product selection three times since 1993 and it is clear that companies are closing-in on the practices that get them the best results. About 80% of companies now use rigorous structured processes for Product Selection [see Figure 1].

Industry practices for Basic Research, Applied Research, and the selection of Advanced Development projects are more structured than a decade ago, but are still (necessarily) more informal than those used for Product Development. In comparison to Product Development, about half the companies use the same process structure and methods. Just about all companies execute their process more informally.

Product and Project Selection Practices

A more detailed examination of GGI’s findings reveals that the 80% of companies using 2.5 Step or 2.0 Step processes typically have 4-6 people involved in the decision. The average is five people [Figure 2]. These five people repre-
sent the managers that must provide either the financial or human resources to design and commercialize new products. Part of the maturing of industry processes was the realization that if “resource holders” were not involved in the original decision-making and approval process then they did not muster their resources in a timely enough manner to ensure that projects were given the best chance for success. In contrast, companies that use the 1.0 Step process only have (typically) three people involved. Companies using the No Step process have three or fewer people involved.

Just about all industrial and high-tech product selection decisions are now made in two face-to-face meetings involving all the decision makers. For most companies, gone are the days of informal hallway and front office decisions. At the point that management is considering approving a “raw” concept for further definition and study, about 53% of these meetings are face-to-face and formal in nature. At the point that management is considering approving a “defined and estimated” product/project plan for development and commercialization, about 79% of these meetings are face-to-face and formal in nature. This is clearly different from the industry practices used by most companies in the 1980s and before.

Summary

Best industry practices appear to be near maturation in terms of the types of processes and practices that are used to select products, and in the number of people that are needed to enable the best chance of success. Based on other findings from GGI’s survey, we predict that capacity management during the process of selecting and approving new products for development will be the next focus area for industrial and high-tech companies.\(^P\)