BRADFORD L. GOLDENSE | Contributing Technical Expert

Product, Project, Technology, and IP Portfolios

In the 1990s, life was simple. Marketing, or product management, maintained the "Product Portfolio." In the largest companies, there was perhaps also a "Technology Portfolio." Today, having both a technology and a product portfolio is considered the rock-bottom minimum regardless of company size. Just about all companies actively maintain these soft assets—only the degree of formality differs. This past decade, these portfolios became more closely tied together with the advent and acceptance of roadmapping. (Roadmapping charts the path taken by new technologies and products as they evolve into commercially readiness). In between each and every portfolio snapshot in time, the roadmap provides guidance on activities needed to reach the portfolio's next incarnation.

It would be great if we could just call it a day with two portfolios and the roadmaps that tie them together. But that is no longer best practice. We now also need a project portfolio and an intellectual-property (IP) portfolio to be a best-practices company.

Project portfolio. As previously defined (in my June column), a project is a temporary organizational vehicle used to develop products. When a project ends, the product(s) it creates live on. The need for project portfolios has been partially driven by the tremendous growth in project managers and project-management organizations. These now-large organizations need to prioritize and sequence their inventories.

The real driving force for project portfolios was the advent of the platform-derivative development strategy developed for IBM's PC in the early 1980s (as mentioned in my March column). By 2008, platform-derivative had become the predominant corporate product-development strategy. Growth in that strategy lead to many companies having gigantic projects that ran many years to develop the platform and the first several of its derivatives.

The root of the need for project portfolios lies in the difficulty of economically justifying the platform by itself. The platform's value is largely realized through its derivative products that are subsequent to the platform, not the initial platform. As such, the initial platform and several derivatives had to be bundled together to earn a high enough ROI for management to give the thumbs up. The approval package would then be turned into a project containing many insufficiently delineated sub-projects running over many years.

But the vast majority of companies execute gigantic all-in-one projects very poorly. All of a sudden, many companies had several gigantic projects on their books. Never mind the turnover in project staff every couple years causing discontinuity. Lean thinking is clear that small batch sizes are both better and faster.

Project portfolios are far more than accounting diagrams for an inventory of projects. Project portfolios are active management tools for configuring projects in size, sequence, staffing levels, elapsed time, and actual time to realize a best mix of projects in support of product and technology portfolios. Alas, for too many companies, these portfolios remain an accounting diagram and are contrarian to lean thinking and smaller batch sizes.

IP portfolio. The discussion of an IP portfolio and its associated best practices would be longer than allowed by this column. Suffice to say, given how easy it now is to separately monetize IP rather than monetizing it in a product (as mentioned in my July column), and the need to protect IP, then an integrated IP strategy is now the best product strategy for most companies. Companies cannot safely conduct focus groups, use contractors, or contact suppliers and distributors these days until the IP has reached a certain level of preparedness. In many ways, IP portfolios have many of the same attributes of technology portfolios. The lack of readiness directly limits the ability to commercialize products.

Most companies compete today by improving their product and technology portfolios and associated roadmaps. An increasing number of companies now are becoming more IP savvy. Their challenges are more related to combining IP with product development. Historically, IP was a separate arms-length organization. md

BRADFORD L. GOLDENSE, NPDP, CMfgE, CPIM, CCP, president of Goldense Group Inc. (GGI) (www.goldensegroupinc.com), has advised over 300 manufacturing companies on four continents in product management, R&D, engineering, product development, and metrics. GGI is a consulting, market research, and executive education firm founded in 1986.