Overcoming Barriers to Sustainable Market Differentiation

Part 2: Making Product Portfolio Management Real
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Executive Summary

Product portfolio management is a business process used by organizations to determine the innovation investments they will fund—and those they won’t—in order to achieve performance goals. Among the principal prerequisites to effective portfolio management are (a) clearly defined business objectives, and (b) a clearly specified set of candidate investments from which to choose. For most firms, these investment options extend across the entire innovation lifecycle and include early-stage ideas, new product concepts, development or commercialization initiatives, and in-market products. They can also encompass other types of investments, such as process innovation (e.g., cost-reduction initiatives) and commercial innovation (e.g., branding and promotion initiatives).

It is no overstatement to say that portfolio decisions determine how successful a business will be. The effectiveness of innovation investments directly impacts an organization’s competitive strength, market position, and whether or not it achieves its financial performance in both the short and the long term. Studies have shown that businesses that excel at portfolio management not only deliver on expected revenues, but also enjoy an increase in profit margins of up to 19 percent.¹

However, the portfolio management process is a challenge for many firms. A recent CGT-Sopheon study indicated that nearly 60 percent of respondents believe that resources are stretched “too thin” because of too many active projects. More critical is the fact that over 40 percent of companies participating in the study said that they have no way of knowing if their portfolios are aligned with strategic targets.² Because of these and similar issues, when it comes to making difficult portfolio decisions, politics and inertia frequently win the day.

This paper, the second in a series discussing the barriers to achieving sustainable market differentiation, introduces new methods for managing portfolios. In Sopheon’s experience, these methods consistently have positive impact on the business performance of firms that adopt them. They are organized around four best-practice principles:

- Define robust targets and strategies.
- Collect high-quality portfolio and resource data.
- Optimize the portfolio with scenarios.
- Enable rapid response to change.

These principles serve as a framework for designing and implementing a portfolio management process that firms can use to effectively allocate scarce resources and drive sustainable growth.
Executive teams in most firms face a critical imperative as they strive to bring more value to shareholders. They must find new ways to achieve business growth, oftentimes despite unprecedented resource constraints. The essential role of innovation as a growth engine is undisputed. Eighty-four percent of the senior executives participating in a recent global survey by McKinsey said that innovation is extremely or very important to their company’s growth strategy. Sixty-eight percent said that they believe new products and services in existing markets provide the most direct path to organic growth.³

Fact is, even the most innovative products can be reduced to commodities over time. As this happens, their financial value to the business steadily diminishes. The challenge is to avoid the usual trajectory of decline by creating a predictable, evergreen pipeline of innovative, high-value products that ensure sustainable market differentiation and demand.

Over the years, in our work with prospects and customers, we have identified four common barriers to creating sustainable differentiation through innovation. Part 1 of this white paper series focused on the challenges to successful innovation performance, and in particular how to effectively execute a gated process. This paper addresses how to maximize the value of the investment decisions made at the portfolio level (avoiding “bad bets”) while ensuring that those decisions align with goals and strategies both for the short and the long term. Part 3 of this series addresses the front end of innovation, and how to ensure that a strong pipeline of high-value ideas and concepts feeds into the execution process.

The most common reasons companies fail to differentiate themselves in the long term are:
- Poor execution of gated innovation processes.
- Too few good, high-value ideas for new products.
- Resources not being invested in the most promising products.
- Failure to align strategy with product development activity.

**Figure 1: Barriers to Innovation Success.**

Sopheon’s research and experience have determined that there are four primary reasons companies struggle in the pursuit of their innovation objectives.

- **Innovation Execution**
  - 54% Most companies have gated innovation processes, but only 54% have processes that are ‘really’ used.
  - Product Development Institute

- **Portfolio “Bad Bets”**
  - 50% Across industries, only 50% of new products are profitable.
  - PDMA

- **Too Few Good Ideas**
  - 79% 79% of top managers say their company doesn’t have enough high-value projects in their portfolio.
  - Product Development Institute

- **Lack of Alignment**
  - 80% 80% of executives say they have a gap in alignment between strategy and product development activity.
  - Gartner Research

- **41%** 41% of products miss product launch deadlines.
  - Aberdeen Group

- **40%** Across industries, 40% of resources spent are wasted on unsuccessful products.
  - Product Development Institute

- **2x** Across industries, low-performing companies introduce 2x as many incremental products as high performers.
  - Research & Technology Executive Council

- **27%** Most companies identify “areas of strategic focus” for innovation, but only 27% connect those to resource allocation.
  - Product Development Institute
About Product Portfolio Management

Let’s begin with two definitions:

A portfolio is a set of candidate investments that must be considered as a whole in order to ensure the achievement of specific business objectives. In order to successfully manage portfolios, organizations must have repeatable, scalable processes for effectively defining both.

The outcome of the portfolio management process is an agreed upon set of investments—which might include ideas, product concepts, development projects, or launched products—that will receive financial and/or human resources so that their potential contribution to the business performance of the organization is realized. This set of investments is then monitored and amended on an ongoing basis in response to internal and external changes to ensure the portfolio is constantly optimized.

This all sounds pretty straightforward. But in most companies portfolio management is anything but simple. The reasons vary; most are traceable to weaknesses in business process. But one of the principal underlying causes is conceptual complexity. Effective portfolio decision-making typically requires the assessment of a large number of candidate investments—each of which may encompass a large number of dimensions—against a broad set of diverse and sometimes conflicting business objectives.

This can make portfolio decision-making seem like a house of mirrors. And it is one reason why automated portfolio tools are typically required to ensure that the portfolio management process is optimal and repeatable. To elaborate, let’s further break down each component of portfolio management, including the process itself.

Business Objectives

There are many kinds of business objectives, but we see two common and useful types. First and most most tangible are financial targets. Here are some examples:

• “ Deliver $20M in profit for Brand X in Fiscal Year 2016”
• “Grow revenue for Business Unit Y by 10% CAGR in Fiscal Years 2015-2017”
• “Increase the NPV of our innovation investments by 50%”

Objectives such as these are relatively uncomplicated in and of themselves. But things can quickly become challenging when several targets are being pursued at once. Typically, for example, revenue, profit, and NPV goals must be achieved simultaneously.

Additionally, financial targets are often defined differently from level to level within an organization. For example, targets defined at the corporate level are regularly decomposed differently within and across various business units, brands, product lines, or geographical regions. Well-run organizations will have a method for rolling up and
Making Product Portfolio Management Real

Business strategies can be short-term or long-term and, like financial objectives, may also be defined differently by different business units, product lines, brands or regions.

rationalizing these targets across the business, but the result is still a broad set of diverse targets, each viewed from a different perspective within the business.

Complexity grows when one thinks about a second, less tangible but critically important form of objectives: core strategies. Strategies define at a high level how an organizational unit plans to achieve its financial targets. In some companies, sets of strategies are themselves viewed as portfolios of market opportunities, but for many firms they are more often viewed as big-picture goals or themes that bring focus to the organization and that drive the prioritization of investments in a specific direction. Strategies can be short-term or long-term. And like financial objectives, they may also be defined differently at various levels within an organization, including business units, product lines, brands or regions.

Here are some examples:

- “Enter the green materials market in 2016”
- “Reduce the sodium in all of our brands by 25% within five years”
- “Capture the fast-growing market of ‘value shoppers’”

Both financial targets and business strategies need to be considered during the portfolio management process. Candidate investments must be assessed in light of both types of objectives, simultaneously, within each part of the business where they apply.

Candidate Investments
The second component of portfolio management is the set of investments—ideas, concepts, development initiatives, in-market products—that are candidates for inclusion or exclusion within a portfolio. These candidate investments must be analyzed from a similarly wide variety of perspectives in order to determine their level of fit within a portfolio. Common investment dimensions include:

- Financial value - the level of financial value expected from an investment (e.g., revenue, profit, ROI, NPV).
- Customer/consumer value - the level of need and benefit perceived by the consumer/customer.
- Strategic value - the degree of alignment with market and technology strategies.
- Feasibility – multiple dimensions that assess the likelihood that the investment will succeed both commercially and technically, typically viewed from the perspective of different business functions.
- Resource demands – the level of resources that is required for the investment to succeed. These include both financial and human resources, as well as the timeframe within which the resources will be needed.

The Portfolio Management Process
These diverse business objectives and candidate investments come together in the context of the portfolio management process. Portfolio decisions generally follow the cadence of the annual planning cycle. But in order to be responsive to a dynamic market environment, the process must be iterative and not constrained by the once-yearly nature of an annual planning cycle. The corporate planning process typically focuses on defining and updating business objectives. Similarly, the annual operational planning (AOP) process includes a focus on defining resource commitments. However, portfolio decision-making may be activated at a number of points during the fiscal year. Quarterly portfolio reviews are most common, but portfolios may need to be reconsidered at any point in the year when material gaps or bottlenecks are identified.
Lastly, the portfolio management process does not stand alone. It must be tightly connected to the broader set of innovation management processes encompassing product ideation, development and commercialization. For example, aspects of the core data that drive portfolio management decisions should also drive decisions in individual gate meetings. The cadence of all of these decision-making processes should also be coordinated within the broader business cycles. See Figure 2 below for an example of this integrated view, along with the typical timing of these decision points.

Quarterly portfolio reviews are most common, but portfolios may need to be reconsidered at any point in the year when material gaps or bottlenecks are identified.

Common Portfolio Management Challenges

Unfortunately, the conceptual complexity noted earlier is not the only reason why companies have difficulty with portfolio management. During our years of supporting the portfolio management processes and practices at hundreds of companies around the world, we have identified four business process issues that often challenge execution and results:

1. “Our portfolios are disconnected from our objectives and strategies.”
   Although most organizations go through a process of defining innovation objectives and growth strategies, too often these are created and managed in a vacuum and stored only in Microsoft® PowerPoint® files. There is no tangible or lasting connection between these goals and strategies and the initiatives that are being executed across the company. Because of this disconnect, it is impossible to tell when gaps or misalignments exist between plan elements and operational activity. In other words, if there are initiatives underway that are not consistent with existing strategies, there is no way of knowing. Even more problematic, there is no way to determine whether the right initiatives are in place to successfully deliver on those strategies and enable the achievement of performance goals.
2. “We lack good portfolio and resource data.”
Access to accurate, objective information is the foundation of effective portfolio management and cannot be taken for granted. Too often, companies don’t have processes for taking a regular inventory of their projects. When such processes do exist, the information they generate is frequently low in quality. Some organizations need as much as 90 days to pull together the data required for portfolio reviews, and then find that the information is already out-of-date.

Even when an organization has a clear view of its candidate initiatives, it often doesn’t have the right data to conduct an effective analysis. A common example is the set of resource demands that are required by each investment. These include both human and financial resources that are required within specific timeframes to successfully take full advantage of an opportunity. Without a clear view and understanding of resource requirements, it is impossible to see when and where demand exceeds capacity—what many call the resource “waterline.” Without good resource data, business leaders aren’t able to identify where the hard decisions must be made to ensure the success of high-value investments.

3. “We can’t assess the business implications of different investment scenarios.”
Even when good data exists, it can be difficult to help business leaders understand the impact of alternative investment scenarios. At its essence, portfolio management is an analytical and decision-making process. It is not a reporting process. Effective management requires more than just rolling up the data and visualizing it against business targets. What business leaders and other decision-makers require is a means to model or simulate possible investment scenarios, visualize the implications of those scenarios on a number of dimensions, and use them to determine the optimal means of achieving business goals.

When this critical enablement is missing, important questions can’t be answered. Among them: “If I add or remove a project from the portfolio, what are the implications to my budget or revenue plan? How will this scenario address my resource constraints or support my business strategies? And is it even possible to complete the project in the timeframe we want?”

4. “We can’t adjust our portfolios quickly enough in response to market changes.”
The final challenge many companies face in their efforts to optimize portfolio management is to identify and respond to external and internal changes quickly enough to either avoid negative results or take advantage of new market opportunities. Because of earlier-cited impediments, it is often impossible to steer away from icebergs as they appear on the horizon. But in today’s fast-moving, dynamic marketplace, new threats and opportunities are a given. To optimize the business value of product innovation, an organization must be able to conduct portfolio management reviews and make adjustments on an ongoing basis, and certainly more often than once a year.

Principles of Effective Product Portfolio Management
To overcome challenges such as those described in the previous section, it is important for companies to implement portfolio management processes that reflect the following best-practice principles:

1. Define Robust Targets and Strategies
To assess strategic alignment, one must first have a clear view of what the innovation objectives of the organization are. When the methods used to define and monitor innovation targets and strategies are inconsistent, it is difficult to effectively evaluate candidate investments.
Among the many firms with which Sopheon has worked over the years, we have seen a variety of methods used to determine targets and strategies. Regardless of which of these methods is deployed, our experience clearly shows that the financial targets and strategies selected by the user must be robust, exhibiting the following characteristics:

• They must reflect a vision for both the short-term and the long-term.
• They must be measurable.
• They must be rationalized across the different levels and locations of the business, each of which may have its own targets and strategies.
• They must be connected in a rigorous way to a set of investments—typically execution initiatives—that will adequately support their achievement.
• They must be adaptable and open to change as it occurs.
• They must be communicated in a way that is easily understood by others and that drives their actions.

These are high standards from a business planning standpoint. But unless they are met, it is unlikely that the targets and strategies will have the desired material impact on the business. Hypothetically, one way to address these requirements is to hire a large, dedicated planning team whose focus is to facilitate the target and strategy development process, but most organizations don’t have the resources to do this.

A more efficient and ultimately cost-effective way is to leverage enabling technology. Automated portfolio systems, for example, can do the heavy lifting required to organize and rationalize the broad set of business targets and strategies that are created at different levels and locations across the company. What’s more, they can connect these targets and strategies in a clear, visible way to the set of investments that will deliver on them. Such technology can also help business leaders identify gaps or misalignments between the targets and what is being rolled up across planned innovation initiatives. This capability enables business leadership teams to minimize the amount of time spent on data creation and management, and maximize the time available for analysis and decision-making.

2. Collect High-Quality Portfolio and Resource Data

Once the targets and strategies have been effectively defined, the next requirement is to ensure the availability of accurate and objective data about the candidate investments. Acquiring this data can be challenging since it typically “lives” in many places and is owned by a variety of people. Good portfolio data must be rooted in quality cross-functional input from such sources as innovation directors, brand managers, strategic planners, resource owners, financial analysts, R&D scientists, operations managers and project managers, among others.

The trick is to capture the data without creating additional work for people who are already busy. Ideally, this is done by ensuring that data collection is closely integrated with the business processes that are already central to the day-to-day job activity of potential key contributors. Then the data is captured whenever and wherever it is naturally created. This is one reason why we strongly recommend that portfolio management systems be tightly connected to gated decision systems. Such integration effectively kills two birds with one stone by collecting required data for both portfolio management and gated process decision-making at the same time, eliminating the need for double-data entry.

However, there are many circumstances in which it isn’t possible to connect portfolio management to gated processes. For example, it may be that an organization has to find
a way to improve the effectiveness of its portfolio investments even though it is not ready for the discipline required by gated processes. In such cases, automated systems can still provide significant help by streamlining the data collection and management process. Standardized templates can make it efficient for cross-functional domain experts to provide required data across multiple projects at once. And where complex data must be created, top-down modeling tools can reduce the effort required to provide the level of data needed to support decision-making.

A good example is resource data. This type of data is typically the most difficult to capture in a sustainable way. The challenges it presents are especially intimidating because the first inclination many people have is to capture it “bottom up” by aggregating each of the hundreds or thousands of tasks that are specified in detailed project schedules. Such schedules may be effectively used for some projects, but for most firms it is unrealistic to expect this process to be repeated across each of the hundreds of projects in the enterprise portfolio.

Automated systems enable a different, more scalable approach to capturing resource demands; in fact, they may be the only practical way to unlock this puzzle. Sopheon has deep experience in working with firms to help them use automated, “top-down” resource planning models that capture resource demands in an efficient manner, but with the level of rigor required to drive decision-making.

3. Optimize the Portfolio via Scenarios
Once a business has confidence in its objectives and its data, the real decision-making process begins. Business leaders must use the portfolio data to assess the current state of the business (“what-is”) in the context of its business objectives, identify where gaps or misalignments exist, and explore the alternatives for addressing them. We refer to this part of the process as portfolio optimization.

Optimization goes beyond the creation of reports that display portfolio data. Such reports can help to identify gaps, but they can’t help close them. What is also needed is the ability to create and evaluate scenarios that will allow decision-makers to visualize alternative approaches to achieving business objectives. This enables business teams to explore options in which portfolio investments or initiatives are added, removed, accelerated or decelerated.

Such what-if questions can also be complex. For example, sometimes the answer is not to add or remove a project, but rather to increase or decrease the number of human or financial resources assigned to it. Or it may be that the way to resolve a resource bottleneck is to fund an overall increase in capacity in specific skill areas, the cost of which will be paid back by the funding of additional initiatives.

Good scenario analysis not only allows for such exploration, but it also highlights what effects such changes will have on business outcomes. For example, delaying a project by six months may help to overcome a resource constraint, but it might have the adverse effect of reducing revenue potential for the coming fiscal year. Additionally, since there is rarely a “perfect” investment scenario, such analysis must also allow the side-by-side comparison of scenarios so that the trade-offs associated with each investment option can be understood. Lastly, these scenarios must be considered within the context of the broader set of business objectives across the entire organization. Ramping up the investment in one project may be good for Product Line A, but what happens to Product Line B which was counting on using those same resources to deliver on its own revenue plan?
When managed effectively, insightful “what-if” scenarios enable a practical assessment of investment options, eliminate guesswork, and reduce the conceptual complexity inherent in portfolio management. Again, however, automated tools are likely the only means of achieving this goal.

4. Enable Rapid Response to Change

The leadership team has now conducted scenario analysis, completed its decision-making process and locked down on a selected set of investments. But their work is not yet done. The team must now continue to monitor the current state of their portfolios, assess business and technical risks, and stay alert to new gaps or bottlenecks that may result from changes in the business or market environment. Such issues may be identified at any point in time, but regularly-scheduled portfolio reviews can minimize the likelihood that the business is taken by surprise.

This is the area where straightforward reports that display portfolio data are most valuable. Dashboard-style views can help the business team remain focused on the big picture. They can aid in spotting trends, identifying red flags before they create significant difficulties for the organization, and confirming that projects and initiatives are still aligned with strategies.

Dashboard-style portfolio views can help the business team in spotting trends, identifying red flags before they create significant issues, and confirming that projects and initiatives are still aligned with strategies.

Examples of views that are useful in this regard include:

- **Inventories of project status and risk.** The most basic level of visualizations, this dashboard enables senior business leaders who conduct operational reviews of the portfolio, often on a monthly basis, to assess business and technical risks.

- **Forecasted portfolio costs and rewards.** These views enable the ongoing monitoring of the portfolio against financial targets and ensure the optimization of financial and shareholder value.

- **Launch calendars and roadmaps.** These views enable examination of the pipeline against calendar timelines, showing the key phases of investment for each release, and when each product will be introduced to market. Such views can tell you if product launches are sufficiently spread out, or if they are stacked up during a narrow time period in a way that will likely cause problems.

- **Portfolios mapped against development cycle stages.** These views assess the degree to which current investments are balanced across different categories of the product life cycle. They help to ensure, for example, that the company has sufficient investment in candidate initiatives at the front end of the cycle to support success in the long term.

- **Portfolio risk vs. reward.** It is no surprise that high-value projects often entail significant levels of risk. As leaders push the business toward more innovative products, it is important to not place all of the eggs in one basket. These views help ensure that the mix of investments is appropriately weighted toward high-value projects, with reasonable risk levels.

While the high-level presentation of information plays a vital role in the monitoring process, portfolio teams also need to be able to drill down on demand for more detailed data relevant to a particular division, function, market, or point in time. It should be easy to explore the data dynamically, without developing code or creating new views or dashboards. For example, if a high-level dashboard indicates a disproportionate investment in a particular product line or geographic market, one should be able to easily explore the more detailed underlying data to view and better understand the issues at play before any decisions are made on corrective action.
Lastly, as is evident above, there are a number of ways these dashboards can visualize portfolio data. But the most important requirement is that they go beyond views of a single point in time. The first question a good business leader should ask when reviewing a report is “what has changed?” Good portfolio views should answer this question clearly, and highlight those parts of the portfolio that have changed for better or for worse since the last time it was reviewed. This makes it easier to spot changes and respond by taking appropriate measures.

How Sopheon Can Help

There are a number of ways in which Sopheon can offer practical assistance for the development and execution of your product portfolio management processes:

1. We can help you establish the baseline of where your company stands compared to companies considered best-in-class in product innovation.

2. We recognize that organizations vary greatly in the maturity and sophistication of their innovation and portfolio management practices. Regardless of where your organization stands in these areas, we can demonstrate how our Accolade® solution will enable you to manage your portfolios with confidence. Among other benefits, Accolade will allow you to:

   ✔️ Increase the “batting average” of your product portfolio investments, achieving product success rates of 80% or more.
   ✔️ Bring high-value products to market ahead of the competition.
   ✔️ Focus limited resources on the greatest growth opportunities.
   ✔️ Enable secure, real-time monitoring of portfolios at strategic and operational levels.
   ✔️ Reduce the effort required to create and manage portfolio data.
   ✔️ Ensure your portfolio and resource plans and processes can be adapted as your business and markets evolve.

Accolade integrates Sopheon’s years of experience in innovation processes into a set of capabilities and best practices specifically designed for optimal product portfolio management.

- It provides unmatched support for innovation planning, resulting in the definition of robust financial targets and innovation strategies.
- It is the only solution on the market today that enables you to tightly integrate portfolio data collection into your existing business processes, ensuring high-quality data.
- It provides unique capabilities to choose “shirt-size” resource models based on the complexity of your projects, and greatly reduces the amount of time required to create resource plans for innovation initiatives.
- It provides the most powerful support for “what-if” analysis available in the market today, enabling you to explore scenarios from nearly every possible angle, right down to the individual resource level.

We encourage you to engage us in further discussion on how we can assist you in executing and maturing your portfolio practices. Although effective portfolio management is challenging to achieve, the benefits are both significant and attainable. Successful implementation will ensure you are well positioned to reach new levels of sustainable market differentiation that can help ensure your company’s business growth for years to come.
Reference Notes

2 CGT Magazine (September 2011). New Product Development: Product launches hindered by major challenges.
4 This definition is adapted from the Project Management Institute’s definition of a portfolio as “Projects, programs, subportfolios, and operations managed as a group to achieve strategic objectives”. See the PMI Lexicon of Project Management Terms at http://www.pmi.org/en/PMBOK-Guide-and-Standards/PMI-lexicon.aspx#P.
5 Note that a “candidate” investment includes any type of potential investment for the future. This includes both new candidates for investment and existing projects currently underway that still require investment in the future. Both are considered “candidates” for investment because there should be no guarantee that existing project investments—especially those that are of low-value—will continue to receive funding in the future.

About Sopheon

Sopheon partners with customers to provide complete Enterprise Innovation Performance solutions including software, expertise, and best practices to achieve exceptional long-term revenue growth and profitability.

Sopheon’s Accolade® solution provides unique, fully-integrated coverage for the entire innovation management and new product development lifecycle. For the first time, businesses can access a single source of the truth across Strategic Innovation Planning, Roadmapping, Idea and Concept Development, Process and Project Management, and Portfolio and In-Market Management.

Sopheon’s solutions have been implemented by over 200 customers with over 60,000 users in over 50 countries, including industry leaders such as BASF, Corning, Electrolux, Honeywell, Northrop Grumman, PepsiCo, Philips, Total Petrochemicals and many more.

For more information on Sopheon and its software and service offerings, please visit www.sopheon.com