How to Manage Innovation as a Business

Understanding the Best Approaches and Tools to Manage the Complexity of Innovation

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Can innovation be managed without jeopardizing creativity?

This continues to be a frequently debated business question. There is a natural tension between the necessary freedom that innovators require and the business results that executives expect. To help overcome this, it is important to realize that innovation is not simply about capturing great ideas; it’s also about making sure that these ideas can turn into on-time, high-quality and predictable revenue-generating products and services. This does not happen by chance.

For leading companies, innovation is a well-defined process, tying together corporate strategy, product portfolio investment decisions, ideation and product development processes, as well as operations and sales performance. When managed like a business, innovation is a process that results in predictable return on investment.

Many companies mistakenly think all innovation must be disruptive, but those with successful innovation programs know that there is an ideal balance for any company between the need to develop new ideas to attract and retain customers, and the need for predictable revenue and margins based on evolutionary, iterative innovation. To succeed, a new product doesn’t have to be disruptive; it has to fit the overall corporate strategy within a portfolio, and meet target costs and forecasted revenue over time.

For example, the very first iPhone did not support 3G. This was clearly not a technology issue, nor was it by chance. It was a conscious business decision to first capture the domestic market before expanding internationally. Companies that run innovation like a business launch more products that meet their goals, which means they never hesitate to “kill” bad products. As Steve Jobs famously said, “innovation is about saying no to 1,000 things.”
The other important aspect that successful innovation management programs have is effective technology solutions that adequately support the business strategy and processes. Companies need to look for technology solutions that address all dimensions of innovation – including portfolio management, front end ideation, product development and launch – with a single, integrated, cross-functional product view. The solution must manage the innovation process from the time the decision is made to invest, all the way through the product’s end-of-life.

It is easy to discuss what successful innovation management looks like, but it is very hard to achieve in practice. To better understand the challenges, Oracle conducted an innovation management survey with a large number of companies in multiple industries in 2013. The outcome was stunning. While 76 percent of surveyed companies agreed that product innovation is a key strategic business priority, 90 percent of them admitted they are slow to market and often over budget; 84 percent confessed significant overhead to track people, cost and status; and last but not least, 84 percent had no time to focus on ensuring they are investing in the right things.

This paper will discuss the survey findings in more depth, and will make recommendations for processes and tools to help overcome common challenges to successfully manage innovation as a business.
Innovation Challenges and their Impact on the Business

The key takeaway from the Oracle innovation management survey is that while over 76% of companies surveyed identify product innovation as a top three strategic priority, they continue to struggle with maximizing the return on their innovation investment. Here are some of the most common challenges from the survey, and their impact on the business.
Common Innovation Management Challenges

Fragmented Processes & Data Silos

As the findings of the survey show, many companies (in the case of the industrial/manufacturing sector, 40%) still support their strategic product innovation processes with ubiquitous office tools, all of which are completely disconnected from the product lifecycle management (PLM) product record that stores all information about the product from idea to end-of-life. In fact, 87% of respondents confirm that their important product roadmaps are manually created in either Microsoft PowerPoint or Excel, and that 79% still use spreadsheets as their primary tool for managing their product portfolios and supporting investment decision making.

In our discussions with a major Tier 1 Aerospace Supplier, they confessed that, not only do they rely on Microsoft PowerPoint for their technology roadmaps, but also for their initial concept development. Maintaining this fragmented “innovation record” requires significant administrative effort to gather and collate information.

84% of respondents have innovation processes that are administratively burdensome, which lengthens already long planning cycles and results in product innovation investment decisions that are based on incomplete, inaccurate and often outdated information.
Failure to Take an End-to-End Lifecycle View

Who remembers today the original iPad 3? It’s been removed from Apple product portfolio, based on poor revenue performance and misalignment with the rest of the iPad products portfolio, and was repositioned as the iPad Retina.

A common misconception is that product innovation management relates to the activities from idea to launch. Maximizing the ROI from product innovation requires taking decisions at all stages of the product lifecycle, from ideas through market launch to retirement.

“We don’t have a shortage of ideas, we have a shortage of qualified concepts ready for development”

In fact, product innovation management is really about identifying the product mix that will deliver the best return on innovation in the short, medium and longer term.

Failing to think in terms of the entire lifecycle results in an inability to identify and eliminate underperforming products, product proliferation and product cannibalization, all of which impact the ROI performance of the overall product portfolio.

1. Articulate an innovation strategy
2. Keep the front-end fuzzy
3. Systematically turn ideas into design concepts
4. Manage portfolio and investment allocation for breakthrough products
5. Measure achieved results
Difficulty Selecting the Right Opportunities to Commercialize

Profitable innovation is not just about executing efficiently and doing things in the right way; it is also about investing in doing the right things. Eighty-four percent of survey respondents acknowledged that after improving the efficiency of their product development and launch processes, they need to focus on ensuring investment in the right opportunities.

When deciding on the right ideas and product opportunities to invest in, the organization must have the ability to measure the potential value of opportunities in a consistent way so that they can be evaluated on a like-for-like basis. Over 69% of respondents reported that they lack any systematic method for valuing product opportunities. Consequently, investment decisions end up being subjective and based on “gut-feel,” leading to sub-optimal decision making.

“Almost half of our new products fail to meet profit targets, largely due to not delivering on customer expectations.”
Not Exploiting the Expertise and Knowledge of the Value Chain

The world’s leading product innovators have successfully looked outside the four walls of their businesses for the best new ideas. They have recognized the power of capturing the voice of their customers early and leveraging the knowledge and expertise of their value chain partners. Yet, less than half of the survey respondents (49 percent) said that their company enabled external parties, such as customers and suppliers, to participate in the ideation processes.

Many market leaders rely on these external partners to release competitive products. Great examples of leading practices include the aerospace and automotive industries in the 80s, (Airbus), the electronics and high tech industry in the 90s (Dell), and consumer packaged goods in the last decade (Starbucks, Nespresso). Today, we see the same trends in financial services, telecom service providers and pharmaceutical.

For those companies, the game is almost over!
Impacts Innovation Management Challenges Have on a Business

1. Misaligned and Sub-Optimal Portfolios

For product-led companies, the innovation strategy should drive the product and project portfolio breakdown and provide the game plan of how the business plans to deliver on the corporate strategy. Therefore, it must contain the right balance of maintenance projects, new breakthrough ideas, product enhancements, and line extensions to meet the goals and targets of the business in the short, medium, and long term.

However, 81 percent of respondents consider their product portfolio management processes to be weak. As a consequence, there is a widening gap between business strategy and the product portfolio, with over 70 percent of respondents struggling to ensure that their product portfolio investments are aligned to their corporate strategy.

2. Too Many Low-Value Projects in the Pipeline

This widening gap between product strategy and execution leads to misaligned product portfolios, increased product failures and lost market share. Analysis of a typical project portfolio shows that 90% of the projects are of incremental value while only 5-10% of the projects contribute to top and bottom line growth.

3. Over-committed Resources

Resources (i.e. budget, people, and capacity) will always be a constraint on product innovation. All too often, companies try to do too much, with the inevitable result of resource bottlenecks stymieing the whole process and negatively affecting the ability to deliver. This is illustrated in the survey results, which show a staggering 89 percent of respondents who admit to having too many product development projects in relation to the available resources.
4. Lack of a Strong Idea Pipeline

For any company, especially those working in highly competitive markets, it is crucial to be able to capture ideas, scope them effectively and quickly identify the best new ideas to develop.

The survey findings highlight a clear lack of focus and priority around the idea generation and management processes, with over 60 percent of respondents confirming that they have neither a central idea bank nor anyone who is accountable for managing the idea generation and evaluation process. Interestingly, only the CPG and retail sectors buck this trend.

Ideas are the fuel of innovation machine; without a sufficient supply of ideas the innovation process will find itself running on empty.

5. Failure to Meet Customer and Market Needs

Clearly understanding customer needs is identified as a major problem area for survey respondents; more than 65 percent acknowledge that most product failures in the marketplace are the result of poorly defined product requirements.

6. Delays and Lack of Responsiveness

Although an optimized product portfolio and approved roadmap are important, proper execution is vital if the business is to deliver the required ROI. The survey shows that 90 percent of respondents think projects take too long to get to market and often go over budget. Eighty percent believe cross-functional portfolio reviews take too long. Delays in delivering the product roadmap not only impact ROI but also can severely damage the reputation of the business.

From an operational perspective, this places a strong emphasis on doing projects the right way by ensuring high-quality project execution, reducing cycle times, and lowering the costs associated with product development.

Process governance is therefore a key activity to ensure that the roadmap is delivered on schedule and on budget, while also meeting the defined strategy: Companies need to do the right things, and they need to do them right.
The Vision of Innovation Management

To run innovation like a business, business leaders need a comprehensive view of innovation performance and must be able to see whether the strategic corporate objectives are being met. Obtaining that view means bringing together information and data from a large number of different functions that operate in both go-to-market and in-market environments.

Idea & Proposal Management
- Capture ideas from multiple sources into central ideas bank
- Share, discuss, vote
- Create business case proposals for best ideas
- Analyze idea pipeline KPIs

Requirements Management & Concept Design
- Define & scope requirements
- Create new design concepts based on requirements
- Assess requirements fulfillment
- Compare multiple designs to identify best concept design

Execution to Commercialization
- Project management
- Project scheduling
- Resource allocation
- Deliverable management

Product Portfolio Management
- Assess business case for balance, strategic fit
- "What-if" scenarios
- Resource allocation vs. planned capacity
- Roadmapping

Single system of record for Product Innovation
The Characteristics of Good Innovation Information:

The Scope of Information Spans from Ideation to End-of-Life

Leaders need access to all of the information required to help make wiser decisions about where to allocate resources. Information should indicate:

1. Whether the pipeline of new ideas, concepts, and products is sufficient to meet the corporate goals
2. How product launches are performing in the market place
3. Whether established products are performing to expectation
4. When a product has come to the end of its lifecycle and needs to be pulled from the market and replaced with a new product

Information Is Viewed as a Portfolio

Information should be available as a series of dashboards that provides a one-glance status of how the innovation pipeline is performing. From this high-level view, users should be able to quickly and easily dig deeper, for example, to see the requirements that are underpinning an idea or a product.

Information Is Unbiased

Information should represent the unvarnished truth at the strategic level or the detailed item level without interpretation from “middlemen”. Only a single source of information will provide this unbiased view.

Information Enables Continuous Learning

Users should be able to perform side-by-side comparisons to understand how one product performs against another, and use that knowledge to make decisions. Significant learning will be gained from the ability to compare assumptions with actual performance. Learning from launches is a must to improve the new product development process.

Information Is Tailored by Function

Information reports should draw from the same single source but be customized for the needs of the end user. Sales, R&D and marketing teams all need to see function-specific information to excel at their jobs.

Information Is Owned

A company should always know who is accountable for the quality of information; who maintains it and keeps it reliable. Every piece of information should have an owner.

Information Enables Better Decisions

Too many dashboards (or too few) will not help the manager make better decisions. It is about the right information that should be easy to turn into action that helps leaders predict trends and make wiser choices.
Getting Started with Innovation Management

Like most transformational changes, taking the first step of running innovation like a business can be daunting. Too often, implementing with a “big bang” leads to failure and a waste of resources. A pragmatic approach can allow innovation business leaders to think big, yet start small and build on incremental success.

Here are four key steps to getting started.

1. Assess current capabilities and align on a vision
2. Develop a strategy that delivers incremental benefits
3. Ensure the solution experience is tailored to unique user groups
4. Develop a pragmatic implementation approach
1. Assess the Current State and Define the Future Vision

Many companies find themselves in the lower left side of the innovation management maturity model. These companies are characterized by disconnect between strategy and operations, poor data integrity, no standard processes, and the near-exclusive use of gut feel to make decisions.

Management needs to agree on the future vision and aspire to build:

- A portfolio aligned with strategic objectives
- Resource allocation based on unbiased information
- A view of the full lifecycle of a product from idea to end-of-life
- Real-time information
- Enterprise-wide tools
- Information ownership

The gap between the current state and the future state helps identify the gap and the resources needed to bridge that gap.

2. Develop a Roll-Out Strategy that Achieves Incremental Benefits

The figure shows examples of roll-outs that provide ever-increasing value over time. It typically starts with “getting your house in order” by aligning portfolio with strategy, and establishing governance and processes. Companies can then take the next steps of building new capabilities that will help improve return on innovation, such as consumer insights, lean development and global resource management.
3. Ensure Solution Experience Is Tailored to Unique User Groups

Different user groups have different innovation information needs. Executives want to know how their division is performing against corporate targets. Line workers, on the other hand, want to know the impact of their activities on the innovation process; they need information at a detailed, granular level. With each deployment phase, identify the needs of each group and explain what information will be provided to them.

<table>
<thead>
<tr>
<th>Executives</th>
<th>Analysts</th>
<th>Line Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>How is my organization / division performing against targets?</td>
<td>Why / what is causing this performance?</td>
<td>How do I perform my job / task?</td>
</tr>
<tr>
<td>Examples: Executive scorecards Interactive summary dashboards</td>
<td>Examples: Ad hoc analysis Interactive drill-down reports Spreadsheets</td>
<td>Examples: Static operational / detail reports</td>
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4. Develop a Pragmatic Implementation Approach and Focus on Quick Wins

Turn the roll-out strategy into a roadmap that clearly shows what will be achieved in each phase. The phased approach reduces risks, breaks the implementation into manageable chunks and minimizes organizational impact.

Include a value realization work thread to determine if innovation management is delivering the expected value. Establish metrics upfront and track them over time to show progress towards goals. For example, establish current project cycle time for a packaging development project and start tracking improvement towards a goal of 70% improvement.
The Impact of Effective Innovation Management

Innovation management provides a new, connected way of working that helps achieve business goals. However, it is important to understand what to expect on the innovation management journey. Here are some key considerations.

Impact on the Organization – Breaking Down Organizational Silos to Improve Efficiency

Organizations are built around functions and in most organizations, these functions operate in silos; they are not seamlessly connected with other functions in the go-to-market process. More and more companies realize that large efficiency gains can be made by connecting functions and implement end-to-end processes and enterprise software solutions.

The transition from functioning in a silo to functioning in an end-to-end process means a radically different way of working for all stakeholders, so a strong focus on organizational change management is extremely important. The role of middle management will be more affected than others by the new way of working. Middle managers play an important role in managing the quality and quantity of the inputs and outputs of their functions in silos. With an enterprise system, users have cross-functional visibility across the entire pipeline, helping identify bottlenecks and fix inaccuracies without the need for middle management involvement. The system will do much of the tracking and notifying. In the new way of working, the role of middle manager can evolve from managing inputs and outputs to predicting and prescribing: from being reactive to becoming proactive. This increased visibility means careful change management is required.

Impact on Processes – Establishing Governance to Ensure Alignment

In the new, connected way of working, processes need to be aligned with systems and data, and an oversight needs to be established to ensure that alignment is maintained. A typical example is the request from a function to change an activity in the new idea-to-launch process. A change in one activity will always have an impact on other activities in the new process. This new activity will also have an impact on the system and on data quality.

The interaction between process, system and data can be visualized as a building with three...
pills. Each pillar has the same three components: users, monitors, and owners. Users apply the process and maintain the system; monitors make sure the process is followed and the system is maintained; and owners judge whether changes should be made and what the impact will be on the organization, end-to-end. The roof of the temple is where owners of each pillar come together to ensure alignment between the pillars.

It is possible to establish a governance model during the implementation of innovation management and evolve into a governance structure that can be easily sustained following go-live. This assures continuity from the planning to the execution stage.

**Impact on the System – Connecting Seamlessly to Meet Business Needs**

In the old, siloed way of working, tools were developed to support the activities of each function. Connections were not necessary. The new, connected way of working can only happen when tools are connected seamlessly. For IT departments, this may mean a transition towards a proactive strategy of connected architecture and system platforms.

**Impact on the Data – Maintaining High Quality Data to Enable Better Decisions**

High-quality data is the result of optimal alignment between people, processes and systems. That is why we put data in the center of the triangle. Data integrity is jeopardized when users do not follow the process or do not use the system properly.

Data quality directly correlates to product quality. Good data quality enables wise decision making and results in good product quality and. Conversely, if data is not maintained or of poor quality, product quality will be poor as decision making will rely on intuition.

When companies implement innovation management, they will transition from a document-centric way of working to a data-centric way. This is a large transformation. Instead of creating and maintaining documents, companies maintain data that can be used to create documents through templates. There are many stakeholders and the strongest adoption happens when benefits are identified with all the functions involved.
Conclusion

Companies can increase the return on innovation investments with a systematic approach to capture, select and invest in the right ideas and bring them to launch successfully. Innovation management enables bottoms-up innovation for stakeholders to participate in the product invention and definition processes, while also providing key portfolio owners with simultaneous, top-down financial impact analysis and strategic fit visibility during and after the investment decision.

For the first time, managers will have access to information about a product from idea to end-of-life. The information is stored in one place and is available in real time. Instead of maintaining documents, the new way of working is data-centric. There will be significant time savings and the quality of information will enable better decisions about resources. This new cache of information empowers a true learning organization.

The bottom line? Companies that have good, reliable information through innovation management make better decisions that ultimately lead to products that meet the needs of consumers and directly contribute to the top and bottom line.
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