

Product lifecycle management (PLM) – Innovation management

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white paper



- Product lifecycle management is an integrated set of business tools that streamline the mission-critical processes across a product's lifecycle, maximizing the value of corporate product information throughout the value chain.

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Innovation is at the top of executive agendas today across all industries, but no more so than in the consumer and packaged goods industries. With tens of thousands of products launched annually, and competition now on a truly global scale, companies must differentiate their products by more than just price and promotional activities if they are to gain a share of the consumer's wallet. They must create products that offer unique and novel consumer value. A lack of innovation will result in the inability to differentiate their products from their competitors and ultimately lead to market commoditization, declining margins and reduced product profitability.

What is innovation?

One good definition is that innovation is the process of taking an original idea and converting it into measurable business value to an organization. This can be achieved either by the commercialization of the idea into a product or service that can be taken to market or by the institutionalization of an idea, like a method or process, that enables the company to achieve higher productivity and quality at lower total cost.

The commercialization of the idea into a product or service that can be taken to market. This is the ultimate goal of a company and is one of the only ways to drive revenue growth for the business. Identifying the right idea and then taking that idea through a formal innovation process is critical for it to become a commercial success in the marketplace.

Innovation can be categorized in several ways. Product extensions or replacements are often the norm with as much as 70 percent of activity in a company falling into these two areas alone. Examples of innovation here include cost and complexity reduction initiatives, often considered as part of an ongoing value engineering program, as well as product upgrades. These initiatives offer prolonged revenue streams for mature products and potentially increase revenues through product upgrades with consumers who are brand loyal. Innovation also falls into several other categories: those of extending existing products or brands into new markets and completely new-to-world products. Initiatives here are referred to as breakthrough innovation. The

pioneering brands set new consumer standards and benefit from the first-to-market advantage demanding higher price premiums and capturing significant market share.

The institutionalization of an idea, like a method or process, into the business. Within all organizations is a wealth of untapped knowledge in their people. Often individuals have valuable experience on how the internal operations of the company can be improved. New methods, techniques or processes not only impact their day-to-day work environment but also lead to improved productivity and quality, ultimately hitting the bottom-line improvements on the company balance sheet.

However, in many companies this knowledge is untapped. There are no formal processes by which employees can nominate ideas let alone enable management to track and then implement them in a professional manner.

The challenge of innovation management is not just about the commercialization of an idea but also about the institutionalization of ideas into the business. Addressing both areas impacts both top-line and bottom-line improvements in the business.

The perception of innovation within an organization is critical to this process. In some companies it is ad hoc, different managers, departments and business units doing their own thing. In others it is truly a 'connected' or dedicated community of people incubating new ideas and accelerating them through a formal process.

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If a company is to succeed as a market leader with products that offer unique customer value, then a formal, respected innovation management process must exist with senior management commitment and underlying enabling tools to facilitate it.

Where does innovation fit into the corporate framework?

In many organizations innovation management is an integral part of the business framework. The graphic below illustrates this with the innovation pipeline taking input from competitor and market intelligence and driving that into the planning, new product development and new product introduction processes.

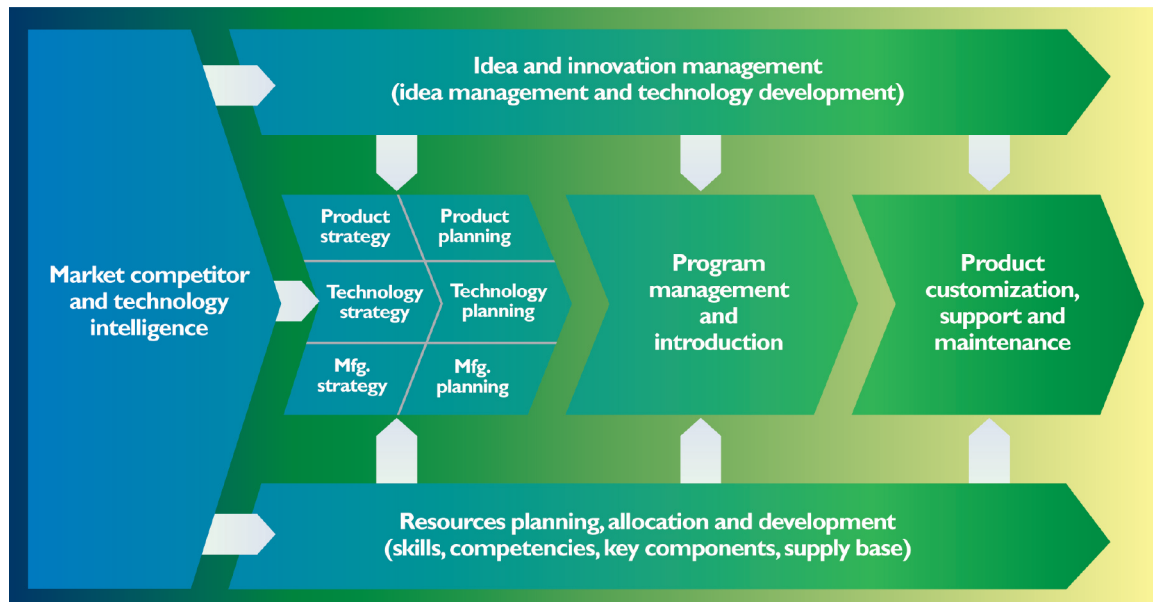


Figure 1

Looking in more detail at the innovation pipeline, critical steps in the innovation management process are identified. These include idea generation through filtering, selection and onto investment. With ideas originating throughout the business and from many external sources, it is easy to understand the complex process of people interacting and communicating with each other sharing information to pursue any one idea.

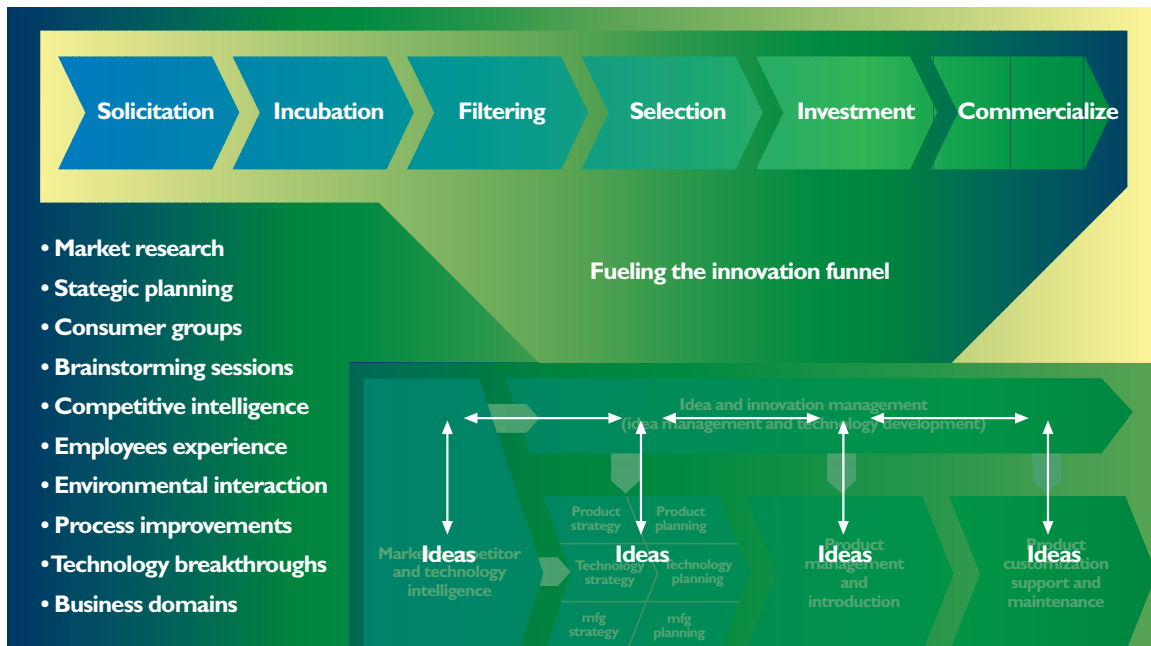


Figure 2

Where does product lifecycle management fit in?

Product lifecycle management is an integrated set of business tools that streamline the mission-critical processes across a product's lifecycle, maximizing the value of corporate product information throughout the value chain.

For a CPG company, this lifecycle starts with ideation – the solicitation, incubation, filtering and selection of an idea. Throughout this process, and on into commercialization or institutionalization, a huge amount of information (often referred to as intellectual property) must be captured and managed relating to the content and decision-making processes.

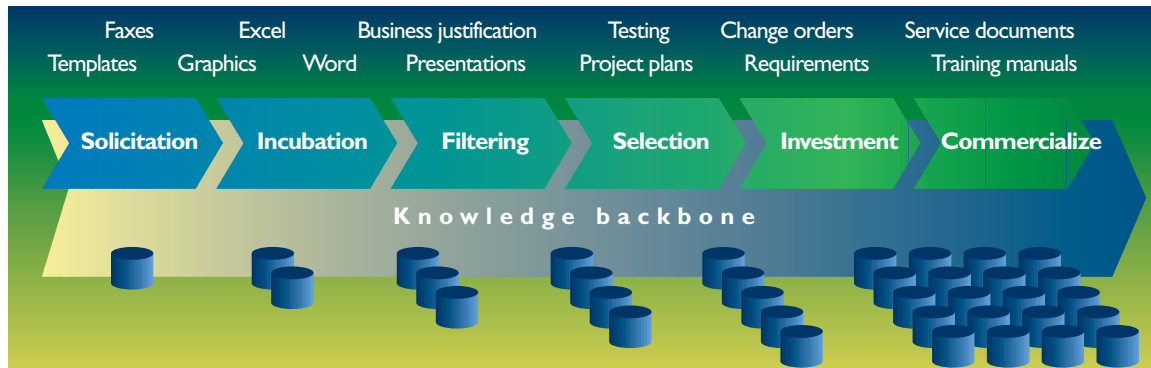


Figure 3

A PLM strategy, which historically originated out of product development and introduction, is ideal to encompass the ideation phase of the lifecycle. It extends the single source of product information concept across an organization by providing a common central backbone collecting all product-related information – including the continually expanding content of an idea as it passes through this process. It helps establish formal stage and gate, project management and decision-making processes enabling distributed groups of people to access, review and comment on initiatives at any moment in time with full knowledge that information is up to date and accurate.

Technologies like workflow, document management and change management are standard within the PLM suite of applications as well as customizable reporting facilities for management and project management staff.

Once ideas have been nurtured and matured and decisions have been made to commercialize or institutionalize them, all this information must be passed on to the corporate new product development process.

Utilizing the same solution as this corporate backbone makes this a seamless transition of information. In fact this backbone becomes the single source for all product-related information whether looking at initiatives within the innovation management or new product development or new product introduction lifecycle stages.

Benefits include:

- Single point of access to all product information across the CPG lifecycle
- Clear and transparent management reporting of all innovation pipeline activity
- Easy collaboration of information across the extended community, fostering innovation
- Capture of all ideas in a formal process, enabling traceability of all decision-making processes
- Information captured during the innovation management process readily available downstream in the lifecycle
- Ability of the extended community to search across the ideas database and re-use where appropriate in their discipline
- A single investment in technology, enabling easy maintainability by the IT community

About Siemens PLM Software

Siemens PLM Software, a division of Siemens Automation and Drives (A&D), is a leading global provider of product lifecycle management (PLM) software and services with 4.3 million licensed seats and 47,000 customers worldwide.

Headquartered in Plano, Texas, Siemens PLM Software's open enterprise solutions enable a world where organizations and their partners collaborate through Global Innovation Networks to deliver world-class products and services.

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