White Paper

Innovation Process Management
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Executive Summary

Businesses today have no shortage of ideas; rather, they lack the ability to determine their value in a systematic, timely, and cost-effective way. According to the results of a global survey published by the Boston Consulting Group, 74 percent of the companies contacted planned to increase their spending on innovation, and 90 percent of them consider innovation “essential for success” in their industries. However, less than half were satisfied with the financial returns on their investments in innovation.

The purpose of this white paper is to outline the Innovation Process Management (IPM) and a solution for it based on the Microsoft® platform. It describes the tools and workflows to empower companies going from ideas to projects. This white paper also provides a high-level overview of the innovation management lifecycle, from brainstorming to production. The purpose of IPM is to rationalize, coordinate, and focus innovative thinking and efforts. Creative innovation supported by a structured framework will enable ideas to thrive and technologies to come to market. Plus, it examines how knowledge and ideas can be converted into improved products, processes, or services using IPM. This solution addresses the concerns regarding innovation through these phases: strategize, capture, formulate, evaluate, define, and select.

The solution for IPM based on the Microsoft platform enables the organization to:

**Widen the idea pipeline**
- Foster a culture of innovation
- Involve more of the right people at the right time
- Facilitate collaborative participation

**Formalize the innovation process**
- Balance creativity with process discipline
- Ensure key decisions and actions are taken at the right time
- Secure and manage intellectual capital

**Optimize return on investment (ROI) and time to market**
- Provide objective and strategic selection criteria to maximize relevancy
- Capitalize on business opportunities by improving the speed and robustness of idea selection
- Maximize the financial return of selected ideas
- Optimize budget allocation according to strategic value
What is Innovation?

Innovation is the conversion of knowledge and ideas into new or improved products, processes, or services to gain a competitive advantage.

Businesses today have no shortage of ideas; rather, they lack the ability to determine their value in a systematic, timely, and cost-effective way. Innovation process management helps companies encourage people to share their ideas, rate them, and make critical decisions about their associated risks, benefits, and strategic value.

To facilitate the innovation process effectively, organizations need a solution that allows them to manage innovation in an objective, strategic, and scalable manner. Because organizations often lack the resources necessary to act on all contributed ideas, they must manage innovation through a systematic process that facilitates the selection of optimal ideas which have the highest strategic value.

Invention is the Catalyst for Innovation

Invention has been defined by the American Heritage Dictionary of the English Language as “a discovery.” That "discovery" might be a concept, a process, an object, or a technique with an element of novelty.

Innovation is a process of converting knowledge and ideas into new or improved products or services. It improves efficiency and effectiveness of a product, process, or service. Innovation yields better ways of doing business to gain a competitive advantage. Innovation is fundamentally a business process. It transforms creativity, knowledge, and ideas into value and competitive advantage.

Innovation can come from anywhere: From a shop floor worker improving a process...to a customer giving feedback about a product feature...to an executive deciding to acquire a company to develop a new service line.

Innovation Case in Point: Enterprise Rent-a-Car

It is not that innovation always yields a new product or a new service. We can consider the example of the company Enterprise Rent-a-Car and how it excelled through innovative techniques.

Enterprise Rent-a-Car had four competitors—Hertz, Avis, Budget, and National—in a tough fight for the market share. The company started innovating its business model, channel, and customer experience by focusing on a different user need: a car to drive when a customer’s car is in the repair shop (Sources: www.hertz.com, www.enterprise.com, and www.businessweek.com). They built a channel with extensive network of local and neighborhood offices and developed a different business model where insurance companies pay for most of the rentals. These innovations led to Enterprise Rent-a-Car delivering rental cars to people for any purpose, resulting in a different customer experience.

The result was that all these innovations boosted revenue of Enterprise Rent-a-Car from $1 billion in 1995 to $7 billion in 2004, and the company left the former market share leader Hertz far behind.

Trends and Business Challenges
The latest industry trend is the transition from the knowledge economy to innovation economy. Creativity and innovation are the two propelling factors that contribute to giving a new shape to the corporate model. Innovation has become a top priority for CEOs because organizations cannot compete on cost alone. CEOs need to take a more systematic, improved process that caters to different needs of their businesses.

The move towards an innovation economy is further supported by this evidence:

For almost 90 percent of CEOs, generating organic growth through innovation has become essential for success in their industry [Source: Boston Consulting Group (BCG)].

The Gartner Group predicts that by 2008, 25 percent of Global 1000 companies will formalize and standardize end-to-end innovation management.

Of more than 900 CEOs surveyed, less than half are satisfied with the financial returns on their investments in innovation (Source: BCG).

According to a Doblin Group report, the global innovation success average, across all geographies and all industries, was only 4 percent (Source: Business Week).

Publications are now committing resources to this subject. For example, Business Week has created the Business Innovation & Design portal—www.businessweek.com/innovate.

Innovation happens because companies cannot compete on cost alone anymore, and they must ensure that their products and services will not be copied. Therefore, innovation has become the key growth driver. Some competencies that once were central to corporations—price, quality, and analytical work associated with knowledge—are fast being outsourced to emerging markets facilities in China, India, and eastern European countries.

Increasingly, the new core competencies are creativity and innovation, the right-brain power that smart companies are now harnessing to generate top-line growth. The game is changing. It is not just about math and science anymore. It is about creativity, imagination, and, above all, innovation. The current momentum of innovation is not just hype, but something that is here to stay.

Challenges cannot be ruled out in the way of introducing, applying, or implementing a process. The process of innovation also encompasses several challenges that must be addressed effectively in order to meet the business needs, such as accelerating growth, increasing competitiveness, and empowering all employees to contribute.

Based on Boston Consulting Group’s research on innovation, the primary challenges associated with innovation are as follows:

- Difficulty in investing in the right ideas in the right markets with the right resources
- No structured processes in place to drive transparency, metrics, or cross-functional collaboration
- No ideal method to measure innovation
Difficulty selecting the right ideas

Limited opportunity for all employees to contribute

Lack of coordination and customer insight

Few avenues with which to socialize ideas with a wide audience

**Experts’ Opinions about Innovation**

"The failure rate of innovation is huge, or you could say the success rate—4 percent—is pathetic."

*Larry Keeley, Doblin Group, 2007*

"With the pace of innovation heating up, any enterprise that fails to replace 10 percent of its revenue stream annually is likely to be out of business within five years."

*The Economist magazine, 2003*

"Improved competitive advantage, increased revenue growth and faster innovation are among the top 10 issues for CIOs."

*Annual CIO Survey, The Gartner Group, 2007*

**Scenario of an Innovation Process**

Here is a typical scenario of an innovation process in the business world. An employee has an idea about a product enhancement but there is no formal method or process in the company where this idea can be captured and evaluated. Based on some assumptions, the employee brings the idea to his manager.

The employee’s manager likes the idea, and suggests that he present it at the next leadership meeting. The leadership team also likes his idea but needs more business intelligence and creates a task team. Now the innovation process is fragmented. People are challenged to identify the right experts within the company to find what research may have already been conducted on the same topic. They don’t have tools in place to develop a comprehensive business case. They can’t socialize their idea with the entire company and also receive no rewards or incentives for the contribution and idea submission. It requires tremendous tenacity on the part of the person with the idea to push it through the organization.

The entire process contains the following top challenges:

- Long lead times
- Limited number of experts involved
- No structured processes in place to drive—transparency, metrics, cross functional collaboration
- A significant amount of work is required by employees to refine their ideas
- No method to socialize the idea with a wide audience and no incentive to contribute
The Solution: Innovation Process Management

The Microsoft platform helps customers address this end-to-end innovation management process through the following stages (see Figure 1):

1. Strategize
2. Capture
3. Formulate
4. Evaluate
5. Define
6. Select

![Diagram of Innovation Process Management Stages](image)

**Figure 1** Stages of Innovation Process Management

**Strategize**
In order to foster innovation, the organization must first establish and prioritize business drivers and metrics.

**Capture**
Ideas are captured in a centralized and collaborative portal. Employees can search to find experts both internally and externally, and they can search back-end systems to gather sales history data to develop a business case. Workflow and collaboration technology will then help create a cross-functional team and collaborative workspace for idea submission.

**Formulate**
Ideas are formulated according to business cases that include strategic impact, market potential, financial analysis, and SWOT analysis, and it can then be published for review. Other members of the community can provide ratings, reviews, and feedback to help determine the idea's priority and value.

**Evaluate**
Select ideas according to business parameters, analyze the portfolio, and objectively evaluate ideas. In this stage, high-rated ideas are approved.
Define
Build the project team and execute the project while taking into consideration design, market potential, and legal evaluation. After the review is finalized, a design document is prepared that provides a project workspace for team collaboration. Assign resources and skills to projects in order to track project progress.

Select
Give final funding approval to selected projects, and proceed to a delivery processes such as New Product Development (NPD), enabling end-to-end project management and tracking, from idea to retirement.

The focus Microsoft has on innovation process management solutions is built around three key aspects of the overall process of managing innovation. This process is facilitated by an integrated enterprise project management and business productivity infrastructure that includes collaboration, unified communications, business intelligence, enterprise content management, and enterprise search.

The three aspects of the overall process are:

**Ideation and knowledge capture** helps you and your teams share ideas easily and rapidly to promote a culture of innovation. This culture occurs by increasing participation and then the quality and quantity of contributed ideas. By collaborating to solve problems and develop ideas, teams can gain incremental benefit or create an entirely new product, service, or process. Collaboration encourages feedback, gauges interest, strengthens teams, and further develops concepts to transform them into well thought out ideas.

**Process and knowledge management (PKM)** helps you to investigate, formulate, evaluate, develop, and promote an idea from concept to sanctioned project while involving key stakeholders internal and external to an organization. PKM provides you with the capability to enforce process structure and discipline without stifling innovation. In addition, you gain the ability to manage the lifecycle of all-digital content flowing in and out of the solution.

**Project and portfolio management (PPM)** helps you to evaluate ideas according to governing strategic objectives, such as growth, globalization, innovation, and customer loyalty. PPM provides functionality to develop and implement operational parameters, such as workforce resource constraints, capital expenditures, project funds, and competing investments. PPM also provides performance metrics capabilities, such as sales forecasts, inventory, and budgeted versus actual expenses. You gain the ability to analyze macro environmental factors, such as market dynamics, market size, and industry trends. You can also track up-to-date progress against forecasted metrics, and make informed decisions to optimize budget, resources, and time constraints, so you can meet market demands, such as market windows of opportunity to gain first mover advantages.
Example of a Collaborative Innovation Process

The following scenario shows the collaborative Innovation process management. An employee has an idea about a product enhancement.

The employee can search for experts both internally and externally. He can:

- **Search** against server systems to gather key sales history data to develop a business case, workflow, and collaboration technology that will help him to create a cross-functional team and collaborative workspace.
- **Leverage** wikis and blogs to include the full employees' base in the ideas development.
- **Collaborate** securely in real time with people around the world.

The employee leverages search and social networking technologies to perform research, identify key stakeholders and experts, and expose the idea to a community of interested employees, who can then enter their views, opinions, and rating. The idea submitter then makes a commitment to develop the idea, therefore entering it into the business’s innovation process. The system creates a virtual workspace and invites the Innovation Management Office to evaluate the idea on its merits and answers to structured business questions.

The team evaluates the idea objectively and, if approved, it is weighed against other priorities in a portfolio. If the idea illustrates excellent strategic value, it is approved and granted appropriate budget for further development in order to ultimately decide whether the idea can become a successful business.

With the IPM solution and associated technologies, the innovation process becomes strategic, repeatable, measurable and facilitative. Finally, the idea is retained regardless if it is a “go” or “no” decision.

The following benefits of IPM are evident:
- More people contribute to the idea
- Ideas and knowledge are retained
- A transparent process exists so that people know how to contribute to the ideation process
- Less time required to screen ideas for value
- Management gains visibility into the idea pipeline and key metrics
- Intellectual property is retained by the business
Microsoft IPM Solution

Companies can draw upon the expertise of the solution for IPM based on the Microsoft platform to encourage sharing of ideas among employees, prioritize tasks, and make critical decisions about their value. Companies need to install the following software in order to facilitate the IPM.

- Microsoft Office SharePoint® Server 2007
- Microsoft Office InfoPath® 2007
- Microsoft Office Project Portfolio Server 2007
- Microsoft Office Project Professional 2007
- Microsoft Office Project Server 2007
- Microsoft Windows® Rights Management Services
- Microsoft Office Communications Server 2007

The solution for IPM based on the Microsoft platform is built on the Office SharePoint Server 2007, Office InfoPath 2007, and the Microsoft Enterprise Project Management (EPM) Solution, which facilitate the six stages of innovation process management in an organization (see Figures 2 and 3).

Figure 2 Microsoft Technologies for IPM
Office SharePoint Server 2007

Define and Manage: One of the major advantages offered by Office SharePoint Server 2007 is the ability to create a centralized idea portal. Members can capture their ideas and brainstorm with others on idea definition. Other members of the community can contribute to the process by providing ratings, reviews, and feedback on submitted ideas.

Some of the IPM solutions provided by Office SharePoint Server 2007 include:

Idea Facilitation: Office SharePoint Server 2007 offers solutions for defining ideas with increased clarity and lucidity, and boosts the idea sharing process. Ideas thus generated can be reviewed and rated on various research criteria.

Collaboration: Office SharePoint Server 2007 allows members to work cooperatively through familiar and common workspace portals. The tool enhances participation among members and leads generating and experimenting with ideas. The ability to leverage wikis and blogs facilitates the idea development process by providing users with strong platform to base and research their ideas.
**Process Management:** The Process Management process is simplified using the phase gates approach (a common process that breaks innovation into a series of sequential phases, with gates that must be cleared before one can proceed to the next phase) to customizing workflows.

**Office Project Portfolio Server 2007**

**Analyze and Optimize:** Office Project Portfolio Server 2007 can be used to establish and prioritize business drivers to foster innovation. Submitted ideas can be objectively evaluated against the established business drivers and selected based on their alignment to those business drivers. Office Project Portfolio Server 2007 helps to identify and deliver ideas that align with their strategic priorities. With Office Project Portfolio Server 2007, companies can derive prioritization scores such as strategic value, financial value, risk, architectural fit, and operational performance so they can objectively assess projects, programs, and applications. Office Project Portfolio Server 2007 empowers the following processes:

**Idea Analysis:** The Idea Analysis process involves an objective evaluation of ideas so that they can be strategically prioritized and aligned with business criteria. Ideas are evaluated on opportunity value and relative potential.

**Investment Optimization:** Investment Optimization options support optimum utilization of allocated funds and maximize the strategic value of ideas.

**Office Project Server 2007**

**Visibility and Performance:** Office Project Server 2007 can be used to manage selected ideas throughout the project lifecycle. Project managers can create workspaces for team collaboration, assign resources and skills to projects, and track project progress. Office Project Server 2007 enhances the following:

**Process Excellence:** Office Project Server 2007 provides solutions for acquiring visibility into the project life cycle. The use of best practices and repeatable procedures strengthens processes and imparts extended visibility on ongoing projects.

**Resource Facilitation:** Managers can assign resources on the basis of skills and optimize the level of the resources with Office Project Server 2007.

**Project Performance:** Office Project Server 2007 enables users to schedule project plans, track, and analyze projects by measuring actual spend against budgeted and enhance overall performance. The potential to assess risks at an early stage in the project lifecycle is pivotal; Office Project Server 2007 helps users complete risk assessment.

**Microsoft Office Enterprise 2007**
Create, Edit, and Authorize: The Microsoft Office InfoPath form allows users to create and edit ideas. With Office InfoPath 2007, data-capture capabilities improve the accuracy and management of ideas throughout the planning, design, and production with of easy-to-use electronic forms. Office Enterprise 2007 helps organizations to drive innovation and growth through tools that allow users to explore, develop, and share new ideas. Office Enterprise 2007 enables users to create forms and edit them offline.

Share and Manage: Office Enterprise 2007 provides the backbone to create, share, and manage information while significantly improving collaboration. With the 2007 Microsoft Office system, people can create collaborative form workspaces so that a diverse team can develop and evaluate ideas. An individual can invite experts from manufacturing, design, marketing—even suppliers—into the workspace to help co-develop an idea. Here the team can effectively evaluate the strategic value of an idea, develop a business case, and assess its feasibility. Collaborative workspaces integrate tightly with Microsoft Office enabling teams to coordinate projects via Microsoft Office Outlook® and collaborate with team members using instant messaging and Web conferencing technologies.

Rights Management Services
Restrict and Protect: Rights Management Services enables users to set permissions for classified documents and e-mail so ideas do not get leaked to the competition. Often companies want to share ideas with key suppliers, taking into account their unique competencies and perspectives. However, exposing ideas to the outside world can introduce risks to a company’s intellectual property. By using Information Rights Management, available in the 2007 Office release, organizations can restrict access to content, protecting proprietary and confidential information.

Office Communications Server 2007
Communicate: Office Communications Server 2007 allows team members and executives to communicate seamlessly. Office Communications Server 2007 delivers streamlined communications for executives and team members so they can find and communicate with the right person, right now, from the applications they use most.

Integrate: Close integration with Microsoft Office applications ensures that communications can occur in the context of the current application, without having to switch to a different program or method of communication. From an e-mail message received in Office Outlook 2007, you can view presence information and initiate real-time communication from within the message—all without the need to switch applications or search for a colleague.

IPM in Action: Solution Benefits
To effectively innovate, organizations must begin to establish core processes for innovation and align people, processes, and technologies. Microsoft provides a technology platform that helps in three primary areas:

- Empowering people to conceive new ideas
- Helping teams to work together for innovation
- Innovating with discipline and coordination

**Empowering People to Conceive New Ideas**
The greatest ideas for innovation often come from customers, suppliers, and employees. Enabling these people to participate in the innovation process is essential to establishing a world-class innovation ecosystem. With the solution for IPM based on the Microsoft platform, organizations can drive greater degrees of collaboration to support their innovation processes. All ideas can be captured, stored, analyzed, and protected.

For example, when people have ideas, they often look to identify subject-matters experts and thought leaders to help refine and shape their ideas. With Office SharePoint Server 2007, people can perform an enterprise search and quickly identify experts and find relevant collateral. Then, they can collaborate with experts using instant messaging, e-mail, or Web conferencing—all powered by Microsoft products.

Advanced social networking technologies such as blogs and wikis are also powerful tools for innovation. For example, an individual can post an idea in a wiki, and employees can provide feedback to help shape and refine that idea.

The net result is that more people can effectively participate in the innovation process. By supporting greater degrees of collaboration, Microsoft products can help people produce ideas that are more relevant and have the greatest impact.
Helping Teams to Work Together for Innovation
Advanced collaboration and workflow technologies can help people orchestrate resources across functional groups and geographies to reduce the time it takes to bring a concept to reality. With the solution for IPM based on the Microsoft platform, people can create collaborative project workspaces so that a diverse team can develop and evaluate ideas. An individual can invite experts from engineering design, marketing, even, suppliers into the workspace to help co-develop an idea. Here the team can effectively evaluate the strategic value of an idea and develop a business case. Collaborative workspaces integrate tightly with Microsoft Office, enabling teams to coordinate projects via Office Outlook and collaborate with team members using instant messaging and Web conferencing technologies.

A critical part of idea development is the creation of a business case. The Business Data Catalog, a feature of Office SharePoint Server 2007, enables people to easily include information in line-of-business systems, such as SAP and Siebel, helping to simplify the development of an accurate business case. However, exposing ideas to the outside world can introduce risks to a company’s intellectual property. By using Information Rights Management, available in the 2007 Office release, organizations can restrict access to content, protecting proprietary and confidential information.

Innovating with Discipline and Coordination
With a pipeline of ideas, companies must identify and execute those that are of the highest quality and have the greatest impact. Likewise, sophisticated portfolio management techniques can help people view the full innovation pipeline and balance ideas against resources and risks.

Office Project Portfolio Server 2007 helps to identify and deliver ideas that align with their strategic priorities. With Office Project Portfolio Server 2007, companies can derive prioritization scores such as strategic value, financial value, risk, architectural fit, and operational performance so they can objectively assess projects, programs, and applications. Innovation leaders can drill down from the portfolio level to view a status report for each investment. Using flexible report generators, they can create and publish templates to standardize and streamline reporting across the organization. Innovative companies use technology to create new value in existing product lines and services, develop new ideas and concepts, and determine how to commercialize those ideas and products and profitably deliver them to customers.

Other Benefits of the IPM Solution
The solution for IPM based on the Microsoft platform is focused on helping companies to capture, rank, and develop ideas more efficiently and create a transparent innovation process that can be easily managed.

Develop a culture of innovation: Enable more people to participate in the innovation process, and provide the tools and training they need to help generate valuable ideas.
**Increase visibility to the innovation process:** Supply clear and documented processes for developing concepts, evaluating ideas, and accessing a portfolio view of the innovation pipeline.

**Increase speed of the innovation process:** Compress the cycle of innovation, resolve issues faster, and increase visibility into your business with robust tools that provide real-time communications, effective IP management, and better integration server systems.

**Enable collaboration:** Increase knowledge and information sharing across teams through a centralized, portal-based collaboration environment.

## Conclusion

The importance of innovation and its potential to deliver game-changing benefits are being realized by more and more organizations. However, most companies are struggling with establishing a systematic approach to innovation. This white paper indicates that companies need to take a more formal, rigorous approach to encouraging and managing innovation. This solution for innovation takes into account the people, processes, and technology aspects, and the related factors.

A key issue with innovation is that it appears to be an ad-hoc process. However, for successful companies there are processes that provide a structure and methodology to guide invention to innovation. Good processes ensure that a company is doing the right things in the right way with efficiency. It ensures that organizations are focusing on innovation, consciously managing resources, making timely decisions, and balancing current needs with future goals.

A technology infrastructure can help support both human interaction and processes management to accelerate innovation across the organization. Technology can aid global teams to brainstorm together, identify expertise across the organization, and allow collaborative work on projects. New levels of collaboration within an enterprise and across multiple partners are now possible. Technology can facilitate the innovation process by integrating project management, portfolio management, and idea management. This helps to accelerate innovation projects and allows teams to focus on more value-added activities. Tools related to knowledge sharing allow access to global knowledge and information, ensuring that teams are not reinventing the wheel and are instead working on truly innovative activities.

The solution for IPM based on the Microsoft platform enables organizations to have a systematic method of fostering innovation by capturing, evaluating, and developing ideas to conclusion.

With the Microsoft IPM Solution, organizations can:
- Promote a culture of innovation by facilitating community and incentives.
- Build “innovation teams” of domain experts spanning disciplines.
Assess ideas rapidly according to their strategic value.

Secure and manage intellectual property from its inception.

Add transparency and discipline to the innovation process.

Optimize research and development by spending and incubating investments.

Drive growth and profitability, and increase competitiveness.