A NEW FRAMEWORK FOR ASSESSING YOUR INNOVATION PROGRAM: INTRODUCING THE INNOVATION MANAGEMENT MATURITY MODEL™ BY PLANVIEW

Background

Today, more than ever, product innovation is critical to maintaining competiveness in today's fast-paced, global market. Yet, as market studies show, many companies find it hard to assess and advance their ability to innovate across the product portfolio. Tools and methods for managing product development in organizations abound, yet none really provide a cohesive framework for assessing a company's innovation program encompassing the people, processes, and tools needed to speed time to market.

Seeing a way to fulfill this need, Planview created the Innovation Management Maturity Model™. Based on the Capability Maturity Model Integration (CMMI®) framework developed by Carnegie Mellon University[1], the Innovation Management Maturity Model gives organizations a critical tool for assessing the strength of their innovation program, which is essential to continue improving productivity, time to market, and commercial success.

This white paper explores the Innovation Management Maturity Model in detail including:

- The rationale behind the model;
- Each element that the model addresses including people, processes and tools;
- The five different levels which companies can score their maturity across people, processes, tools, and the innovation program as a whole;
- And, applying the model to your organization.

It also provides tips and tricks for leveraging the model within your organization, to empower you on the road to innovation management maturity success.

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Introduction

In a recent Tech Clarity Insight white paper, industry analyst Jim Brown asks: "Product innovation is critical to differentiate and remain competitive in today's fast-paced, global markets. Bolstering innovation to a core competency helps manufacturers drive higher revenue, lower cost, and mitigate risk. So why is it so hard for companies to improve innovation performance and drive meaningful business value?"

Why indeed? Best practices and methods for managing product development in organizations abound, yet none really provide a cohesive way to accurately measure the level of innovation associated with the process – which is key to gaining market share in today's increasingly competitive global landscape. So, how then does an organization determine where they stand from an innovation management perspective and identify ways to take it to the next level?

This is the question we recently addressed at Planview, where we've focused on project portfolio management (PPM) for the past 24 years. We wanted to put substance around the concept of innovation and give organizations a critical framework for assessing their innovation management maturity level, which we believe is essential to continue improving productivity, time to market, and commercial success.

A New Way of Measuring Innovation

The Innovation Management Maturity Model™ by Planview is based on the Capability Maturity Model Integration (CMMI®) framework developed by Carnegie Mellon University.[1] Designed for product organizations, the Innovation Management Maturity Model includes three factors which are essential to an effective innovation program: people, processes, and tools. This model encompasses the entire full product lifecycle from idea to launch and through to end of life. While the industry is hyper-focused on idea to launch, innovation does not stop there. Being able to manage it once each product is in market is important, as are the processes, effort, and money necessary to terminate it.

The Innovation Management Maturity Model gives organizations the ability to rank themselves on the strength of their innovation program in the categories of people, processes, and tools across five levels of maturity. Level 1 represents the lowest level of maturity while Level 5 is the highest, where innovation is highly optimized across people, processes, and tools. Programs can be given an overall ranking as well as a ranking across each category. The model provides not just a level, but also a way to compare your organization to the characteristics and best practices of other organizations across the categories.

|	Strategy	People	Process	Tools
Level 1	We are in a mature market where revenue is primarily driven from existing products and minor line extensions. There is some innovation in process and operations throughout the organization, but it is not required for company success. Our strategy is focused on conservative investments resulting in gradual and predictable growth.	• No cross-functional organization focused on innovation • Decision making about the product portfolio by executive leadership only, often with less than optimal data • Informal project leadership; resources assigned verbally • Execution and product launches happen slow and steady • Unclear connection/hand-offs throughout commercialization process	• Processes are departmentally focused and not documented • No formal gated process or templates for product development; projects rarely killed • Limited visibility into actuals, forecasts, post-mortem assessment, or roadmaps; no portfolio reviews • Processes surrounding ideation, roadmap development, and portfolio reviews do not exist	• Manual, decentralized, un-integrated spreadsheets and basic project tracking tools • Only one or two centralized applications are in use • New ideas for innovation captured informally • Reporting inconsistent and roadmapping rare, executed via local desktop tools
Level 2	Delivery of products, mostly line extensions and solid enhancements to existing products, is growing in consistency, but we typically operate in reaction mode. Our leadership is starting to understand the need for investing in innovation. Our innovation strategy centers on safe bets with occasional calculated risks, resulting in unpredictable outcomes.	• Individual leaders own day-to-day processes and are responsible for developing and delivering the product roadmap • Project managers not consistently following industry best practices • Cross-functional project teams not optimized for efficiency • Innovation leaders starting to emerge and introduce change	• Informal process for innovation and idea flow; templates in use • Portfolio reviews are more project status updates • Metrics for evaluating innovation are purely financial • Early realization of silo inefficiency and value of gated processes with cross-functional participation	• Moving to shared spreadsheets in central location • Ideation matured to being captured and prioritized • Projects managed via desktop tool but not shared • Roadmap communicated via static spreadsheet; rarely updated • Reporting and analytics starting to be shared and built manually
Level 3	We are becoming more proactive in seeking innovation as a key part of our product portfolio. Our innovation strategy and metrics are not clearly defined and communicated, and as a result we occasionally miss market windows and margin targets. Our leadership team is actively investing in tools, processes, and capabilities to operationalize innovation.	• Established roles in the commercialization process: process managers, project manager, resource managers, and gate-keepers • Beginning to champion innovation and portfolio management	• Documented and validated gated commercialization process in place based on best practice • Regular portfolio reviews and post-mortems conducted • Voice of the customer becoming more formalized • Governance workflow not yet consistently repeatable • A few projects being killed, but later than optimal	• Manual portfolio management using spreadsheets • Desktop project management tools in use • Soon to automate the commercialization process • Ideation centralized but not using a purpose built tool • Standard library of reports exist; created manually by IT
Level 4	Our innovation strategy is emerging and we are working to tie it to our strategic objectives for growth. The lack of connection between project execution and product/corporate strategy results in an unbalanced portfolio making it difficult to quickly respond to market changes. There is a growing innovation pipeline where we are getting to market faster, and we are achieving many of our performance metrics. Innovation efforts have visibility, but it's not yet embedded in our culture.	• Early formation of a "Center for Process Excellence" • Process managers and gatekeepers have clear direction, metrics, and ownership • Formalized portfolio manager positions at business unit and enterprise levels • Multiple strong champions for innovation • Project teams consist of cross-functional team members • Start of open innovation, co-development, and the use of external innovation consultants	• Fully implemented gated process across multiple teams with some automation • Gaining courage killing underperforming projects • Portfolio metrics expanded to include resource capacity and strategic alignment • Capturing voice of the customer with caution • Governance process becoming efficient and streamlined	• Product Portfolio Management (PPM) system in place automating the commercialization process • Resource capacity planning, roadmapping, and financial forecasting being piloted within PPM • Dedicated tool for capturing voice of the customer • Executive and project-level reporting and analytics are available and modifiable
Level 5	We have operationalized innovation with well-defined processes and formalized tools. Innovation is embedded in our company culture across all functions. We have a well-balanced portfolio with incremental and breakthrough innovation that yields positive revenue growth. We have the ability to launch products as planned and with confidence, meeting time to market targets.	• Executive leadership fosters innovation • "Center for Process Excellence and Innovation" is well-established and reports to executive team • Decision making is collaborative and efficient • Everyone throughout the commercialization process understands role • Project managers and scrum masters lead innovation and development teams leveraging best practices	• Fully automated and standardized processes that are easily adaptable • Portfolio metrics evolved to include competitive and environmental impact scores • Projects killed early and often during portfolio reviews • Voice of the customer captured on an ongoing basis • Continuous learning loop well established • Process covers idea to launch, and through to end of life	• Highly functioning PPM system integrated to other enterprise tools • Ideation collected for collaboration • Product roadmap tied to project execution and corporate strategy via PPM • Entire product catalog of in-market products, including the Product P&L, managed via PPM • Self-service configurable reports and metrics delivered across the organization

Innovation Management Maturity Model by Planview. Download a copy at Planview.com/InnovationManagementMaturityModel

[1] *Capability Maturity Model Integration Framework, http://www.sei.cmu.edu/library/abstracts/news-at-sei/featuresept98pdf.cfm*

The ability to rank each aspect of your organization's innovation management maturity is important for several reasons. To begin with, while innovation is on everyone's mind, there is no clear-cut path of how to manage it because it's widely believed to be a purely creative process. While this in large part is true, not having a way to measure and manage it leaves most organizations rudderless, with either nebulous approaches to drive innovation or a dependency on individual ideas that often turn into pet projects without validation of their true value in the overall product portfolio strategy. The Innovation Management Maturity Model provides a framework that defines the level of innovation management across the product portfolio and unifies it with strategy and execution, which is a very powerful combination. This ability to establish a definition of the true state of innovation management in the organization creates a benchmark of performance that can potentially unify disparate opinions, against which performance (either departmental or across the organization) can be monitored and measured. Ultimately, it is a powerful way to operationalize innovation and ensure it is embedded into every aspect of the product development process and the organizational mindset toward it.

This model has proven to be eye-opening for many organizations. In the *Fourth Product Portfolio Management Benchmark Study* more than 700 product development executives and managers were asked to evaluate their organization's level of innovation maturity. The majority of organizations, many large, global entities, ranked their innovation maturity between a two and three.

Which of the following best describes the innovation maturity level of your company in terms of people, processes, tools, and overall?
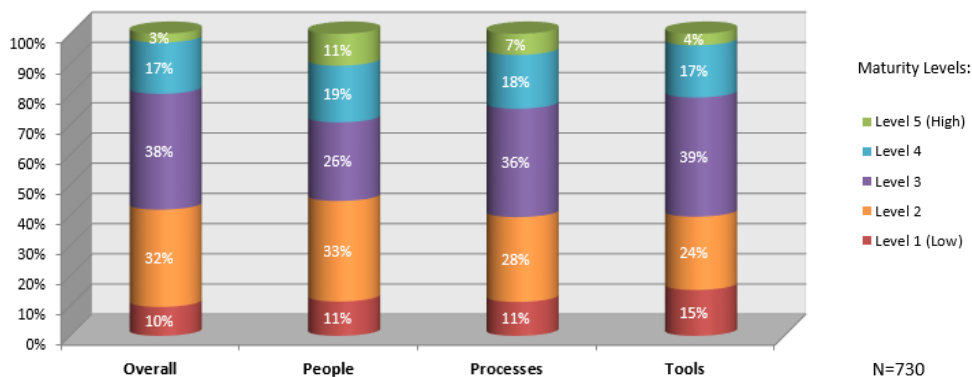
Yet, when asked to rank where they want to be in terms of innovation maturity, the majority of respondents indicated that they desired to achieve a Level 4 or 5.

Which of the following best describes your company's end goal in terms of desired innovation maturity level?
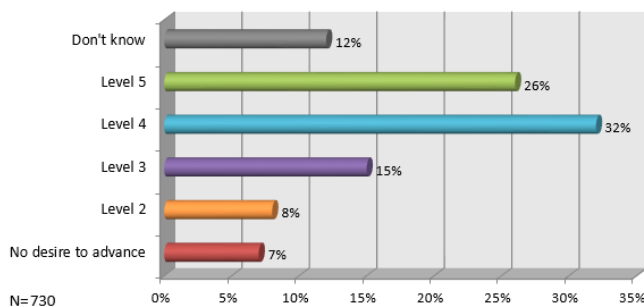
What also emerged in these findings is that often there is a disparate viewpoint across the organization as to the true state of innovation management maturity. One global manufacturer shared, "Upper management is thinking we are a Level 4 right now. While the vision and intention are there, most in our group would look at the description of Level 4 maturity and say we are not there yet. We are very financially focused but we are not resource and capacity aware."

The Innovation Management Maturity Model provides a tangible way to gain agreement across the organization of where things stand today, and what the desired level of innovation management maturity is. For some organizations, it will be important to strive for a Level 5 while others may be comfortable working toward a Level 3. Either way, this model is an effective tool to define goals and measure progress in a more uniform and more objective manner.

## Breaking the Innovation Management Maturity Model Down

> "Our motivation to move up in the maturity model is to increase shareholder value by obtaining and maintaining market share through innovation and growth which are key to those objectives." – *Consumer Food Manufacturer*

To gain an understanding of how the Innovation Management Maturity Model works, let's examine the individual categories of people, processes and tools.

People

This is about having an organizational structure that supports innovation, with people whose jobs are to manage the innovation portfolio. The highest maturity organizations have a Center for Process Excellence that is productive, well established, and well-staffed. They also have support from executive leadership and department heads who know that innovation is how the business will grow, meet the corporate strategy, and thrive. Decision-making in the high maturity innovation organization is collaborative and efficient. Everyone throughout the commercialization process understands their role and part in delivering against the objectives of innovation. Highly trained project managers and Scrum masters lead innovation and development teams, leveraging industry best practices to meet deliverable and product launch targets. While this is an ideal scenario, the majority of organizations surveyed in the *Fourth Product Portfolio Management Benchmark Study* ranked themselves as a Level 3 or lower.

Which of the following best describes the innovation maturity level of your company in terms of PEOPLE?
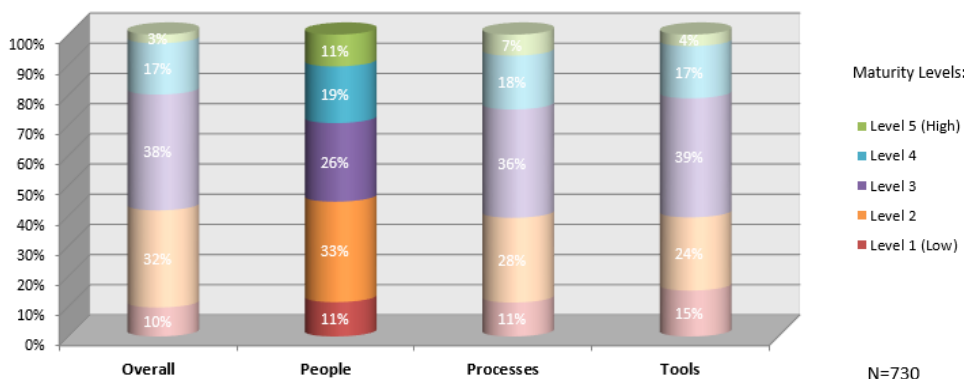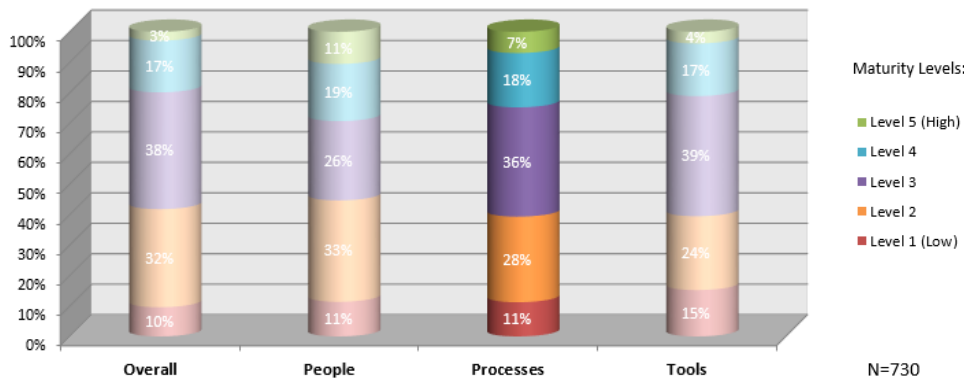

> "Our most pressing concern around product portfolio management is getting the organization to manage the people change management aspect required. The benefit of PPM does not exist at the individual marketing or innovation project manager, but to the broader organization and the innovation pipeline. In the long term, I believe project managers can become more successful. However, up front it is perceived to be added work they do not need." – *Fortune 1000 Company Executive*

Processes

This refers to the automation of the commercialization process. Organizations at the highest maturity level have dynamic processes that can easily be adapted as the market changes and the company evolves. They have fully automated and standardized processes that are in a regular state of continuous improvement, including process deliverables, templates, and reports. Portfolio metrics have evolved from being focused on product financials to include resource capacity, competitive impact and environmental impact scores. Projects are killed early and often during portfolio reviews.

Additionally, the voice of the customer is captured on an ongoing basis, using targeted challenges to drive innovation and maintain brand loyalty. A continuous learning loop is well established and effectively incorporates post-launch learnings back into the commercialization process. Similar to the rankings for People, the majority of organizations ranked themselves a Level 3 or lower in terms of Processes.

Which of the following best describes the innovation maturity level of your company in terms of PROCESSES?

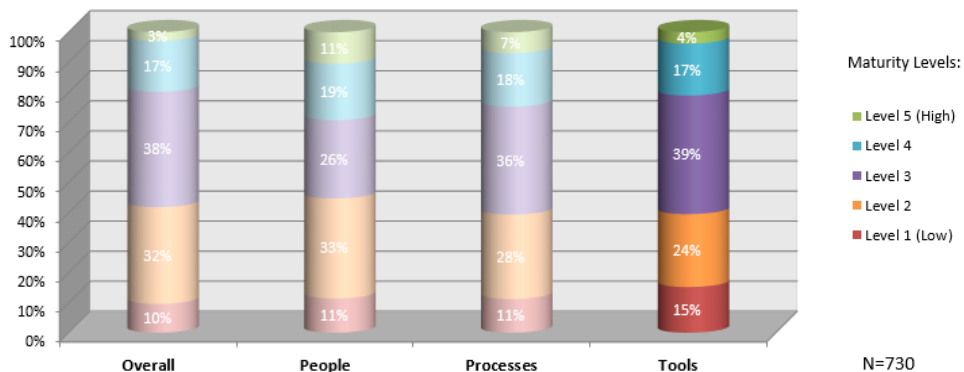|	Overall	People	Processes	Tools	
Level 5 (High)	3%	11%	7%	4%	
Level 4	17%	19%	18%	17%	
Level 3	38%	26%	36%	39%	
Level 2	32%	33%	28%	24%	
Level 1 (Low)	10%	11%	11%	15%	N=730

> "Some of our brands have a buttoned up innovation processes and others kind of wing it. As a company though, we are going through a stage gate improvement process to create better adherence to the process and this is driven top-down." *– CPG Food Manufacturer*

Tools

This refers to having a PPM system in place to automate processes, which are rolled out to everyone along the commercialization process. The PPM application is integrated with other enterprise applications, such as the ERP and the PLM. Ideas are collected via purpose-built, externally available applications for customer and company-wide collaboration. The product roadmap is tied to corporate strategy and project execution via the PPM application. What-if analysis is performed against resource capacity to consistently hit launch windows. The entire product catalog of in-market products, including the product P&L, is managed via the PPM application to leverage platform components across multiple products. Self-service, configurable reports and metrics are delivered across the organization to those who need access, in a format and device that works best for each individual user. As with People and Process, most organizations feel they are a Level 3 or lower when it comes to effective use of Tools in their product portfolio management.

Which of the following best describes the innovation maturity level of your company in terms of TOOLS?

	Overall	People	Processes	Tools	
Level 5 (High)	3%	11%	7%	4%	
Level 4	17%	19%	18%	17%	
Level 3	38%	26%	36%	39%	
Level 2	32%	33%	28%	24%	
Level 1 (Low)	10%	11%	11%	15%	N=730

> "We are honing our product innovation pipeline, we are a level 3, absolutely moving to level 4. What's holding us back right now is that collectively as a group we are not locked into the key tools to get us there, in fact 25–40% of our cross functional groups still don't know about PPM and we need better cross discipline buy-in." *– CPG Food Manufacturer*

Translating the Levels

To bring these categories together, what does an organization look like at each level?

Levels 1 and 2

Organizations at these levels tend to share many concerns, reflective of the fact that both lack, to a greater or lesser extent, the technological and process support structures that would lessen data, communication, and planning problems. They have also not established resource roles that ensure inter-team communication, as, in even the best-case scenario, individuals within business units own roadmap definition and execution.

However, in some cases, innovation management around a particular product is not an internal priority and an organization may intentionally stay at a Level 1 or 2. This is often seen in products that are considered "cash cows" according to the BCG Matrix, where innovation is less important than continuing to receive the revenue stream the product generates. This revenue can then be used to fund other products where a focus on innovation management is key.

Level 3

Organizations at this level have crossed the technology chasm from their lower maturity level colleagues by using technology to plan, find and leverage information, and keep execution on track. With gated commercialization processes in place and established process, resource, and project managers breaking down communication silos, these organizations are seeing definite benefits of moving up the maturity model.

Levels 4 and 5

These organizations have embraced the journey of advancement and, by and large, recognize that innovation maturity is not accidental. They have invested in planned growth across people, process, and tools to drive faster yet sustainable and repeatable innovation practices. They have formed cross-functional project teams that support open innovation; their processes are dynamic and adapt to change; and they leverage product portfolio management solutions to do it all.

Applying the Model to Your Organization

While the Innovation Management Maturity Model provides a method to assess the level of innovation maturity in an organization, there are some "tips and tricks" for getting the most out of it.

Bring Objectivity to the Process

While the model will help start the conversation in your organization about the level of innovation management maturity within people, processes, and tools, you will likely discover that there will be discrepancies between where people in the product development organization think the company is versus where executive leadership thinks it is. Uncovering any disconnects between perceptions of how evolved innovation is within the organization could present a problem. The model will help everyone take an honest look at each maturity level, and objectively assess and agree on where they stand and where they want to get to. Gaining agreement across the organization and establishing the right culture to support changes which enhance the innovation program are critical for this model to be truly effective.

Establish the Necessary Culture

High maturity companies have innovation embedded in their company cultures from the boardroom to individual contributor levels across all functions. It's essential to have a culture that isn't afraid to fail and, in fact, celebrates failure, learns from it, and moves on quickly. This necessary culture comes from the top down, which is why you can't do this on your own. Buy-in and support from executive management on down is crucial to having an effective innovation program.

Determine Where You're Going

If you're going to speed time to market and move quickly, you need to have a clear direction and strategy about where to go and how to get there. The Innovation Management Maturity Model not only lets you define where you are today, but also helps you decide where you want to go and develop a strategy for how to get there. And, linking that strategy to investments and execution is the way into the winner's circle.

Learn More about the Innovation Management Maturity Model

The Innovation Management Maturity Model by Planview is available at Planview.com/InnovationMaturity.

To see how your company compares to other organizations across the globe and to get more insight into innovation and the product development discipline as a whole, download the latest version of the *Product Portfolio Management Benchmark Study* conducted by Appleseed Partners and Open Sky Research and commissioned by Planview, at Planview.com/Benchmark.

IX. About the Author

Carrie Nauyalis, New Product Development Solution Evangelist at Planview, is passionate about establishing customer partnerships, developing market positioning, defining field enablement strategies, providing market-based feedback into Planview product development, and being an overall evangelist and thought leader for the Product Development market.

She is an active speaker, MBA guest lecturer, blogger, and vlogger on all things Product Portfolio Management, with warm places in her heart for the topics of innovation, Stage-Gate, and Agile.

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