

WHITE PAPER

Project and Portfolio Management for the Innovative Enterprise | June 2011

project and portfolio management for the innovative enterprise

accelerating the rate of return
from innovation

James Ramsay

Principal Consultant, CA Technologies

Project and Portfolio Management for Innovation

agility
made possible™



table of contents

EXECUTIVE SUMMARY	3	SECTION 4	10
SECTION 1	4	CA Technologies Project & Portfolio Management solution overview	
Challenge		Define strategy and goals	
Do the right things, not just do things right		Capture and prioritize ideas	
“Silos of innovation”		Scope requirements	
Lack of visibility impacts decision making		Optimize the portfolio—the decision engine	
Capturing the voice of the customer		Execute and deliver	
Wherever there is a roadmap, there is a planning process needing governance and resources needing managing			
SECTION 2: Opportunity	7	SECTION 5	19
Need for project and portfolio management		About the author	
Addressing the innovation needs of the entire enterprise			
Faster and smarter innovation portfolio decision making			
SECTION 3: Benefit	9		
Maximizing innovation ROI			

executive summary

Challenge

Even in a challenging economic climate, innovation around products and services is the major driver for increased profitability, competitive differentiation, and shareholder value. How can your organization deliver the right innovations to meet market and customer need? And how can your organization break down silos of innovation that inhibit your growth and financial performance?

Opportunity

Addressing the needs of the entire enterprise enables sales and market share growth, while maintaining control over costs. The right portfolio mix enables you to target the needs and priorities of your customers, helps you adapt to changing business environment, and respond to new market trends.

Project and Portfolio Management (PPM) solutions enable business to integrate and manage innovation across the enterprise to drive business agility and help you make decisions with confidence.

Benefits

Managing the innovation lifecycle with the right PPM solution provides for better management of the entire innovation process, from capturing the voice of the customer through execution and delivery.

The right PPM solution provides the insights necessary to enable collaboration, optimizing time-to-value and return on investment by aligning your portfolio of innovation initiatives with business strategy, while balancing cost, resources and risk.

Section 1

Challenge

Even in a challenging economic climate, innovation around products and services is the major driver for increased profitability, competitive differentiation and shareholder value.

Do the right things, not just do things right

In order to realize the significant value of the innovation dividend, many organizations have looked to increase the return from their innovation investment by focusing primarily on improving product development execution. Recognizing product innovation as a business process that can be enhanced through the use of technology like all business processes, these organizations have invested heavily in introducing new development processes and technology tools to ensure that things are done in the right way.

Much of this investment has been focused on IT initiatives such as ERP, Product Lifecycle Management (PLM), or niche “product development” systems with the emphasis being firmly placed on improving process efficiency, reducing errors and speeding time to market.

Whilst being able to claim a level of proficiency in getting products to market, can these organizations be sure of delivering the right innovations to meet the market and customer need? Or that their product portfolios have the right mix to deliver the required financial performance?

To be competitive and achieve business goals, organizations must ensure that when it comes to innovation they are not only doing the things in the right way, including delivering development projects effectively, but that they are investing in doing the right things like having the right mix of products to provide sustainable financial performance.

“Silos of innovation”

Much of today’s product innovation activity is still characterized by high rates of failure, missed deadlines, excessive rework and cost overruns. Despite this continued investment, the majority of businesses remain disappointed with their rate of return from innovation. A major contributing factor is that the technical enablement of an organization’s innovation processes often fails to adequately address the critical “people-driven” innovation disciplines such as strategic planning, product portfolio management, pipeline capacity planning, and project and resource management.

Managing these key “people processes” is not a core competency for the likes of ERP or PLM systems, so organizations have had to complement significant IT system investments with a plethora of point solutions, custom applications, Excel spreadsheets and PowerPoint presentations in order to support management decision making and communication needs. This creates fragmented “silos of innovation” IT landscapes, which are often the root cause of many of the most common obstacles to innovation success, including:

- Poor portfolio decision making—difficulty selecting the right opportunities to commercialize
- No objective means of prioritization
- Products and services not meeting customer requirements

- Outpacing innovation with resource constraints
- Overly-long development cycles
- High administrative overhead to manage process and get status updates
- Inability to identify and kill bad projects early
- Difficulty measuring innovation performance

Lack of visibility impacts decision making

A direct consequence of the “silos of innovation” landscape is that organizations lack an holistic view of their innovation portfolio. This leads to a significant management reporting overhead, in which most companies struggle with the manual collation and consolidation of information. As a result, important investment decisions around innovation opportunities are often based on incomplete or inaccurate information. Many organizations then find it difficult to answer the following questions accurately and in a time effective manner:

- How are we performing against our strategic innovation targets?
- What should be my optimum product mix?
- Which market opportunities should we be targeting and how does this match our current investment?
- How do we compare against our competition?
- How does this idea align with business strategy?
- How does the product compare against other ideas?
- Which consumer requirements are most important?
- What is the status of my development projects?
- Do we have the available capacity and budget to deliver on our plans?

Capturing the voice of the customer

For any company, especially those working in highly competitive markets, it is crucial to have the ability to capture more ideas, scope them effectively, and accurately identify the best new ideas to develop. Too often, the important idea generation and management process is not given the priority or focus it deserves. Common issues include:

- Lack of a culture that encourages ideas: Organizations need people to submit ideas, but people will only continue to submit ideas if they see value in participating, including whether it is viewed as important to the business, the mechanism for capturing ideas is easy, and they are updated on the progress of their ideas they have submitted.
- Failure to look externally, as well as internally for new ideas: Organizations need to recognize that good ideas will not just come from within. Capturing the voice of their customers and leveraging the expertise of their partners are key ways of improving business performance.
- No link between idea generation and business strategy: Often the struggle is not so much with the number of ideas being captured in the idea funnel, but getting the right type of ideas submitted. Idea

generation activities and campaigns can be most productive if focused on target areas like business priorities or markets that are in line with business strategy.

- Inability to screen ideas effectively: Valuable time, money and resource effort is wasted if the wrong ideas are pursued. Many organizations do not take a portfolio management approach, which can significantly improve idea screening by enabling the objective comparison of all ideas in the funnel which helps to ensure only the best ideas are progressed.

Wherever there is a roadmap, there is a planning process needing governance and resources needing managing

Product roadmaps are a key deliverable of the product innovation planning process. There will always be many different types of roadmaps in use across an organization, including strategy, market, product, technology and feature-function roadmaps. Many roadmaps utilize a graphical, Gantt-style tool that is used internally, and occasionally externally, to depict plans and strategy for a given period.

The vast majority of organizations still utilize PowerPoint as the primary medium to communicate their roadmaps. Not only is this approach to a producing roadmap administratively burdensome, it is also prone to inaccuracies, inconsistencies and delays. There is no value in having a visually appealing roadmap if an ineffective innovation planning process drives its creation. Common innovation planning and roadmapping challenges faced by organizations include:

- How to enable the roadmap to align with strategy and to be delivered in line with resource and budget constraints?
- How to establish consistency of process and roadmaps across the business?
- How to avoid executives having to review multiple roadmaps from multiple business units in multiple different formats?
- How to consolidate roadmaps at a division and corporate level?
- How to manage the interdependencies between the various different roadmaps across the business and be able to quickly highlight inconsistencies?

This paper discusses why adopting a project and portfolio management solution is a fundamental step in addressing these common barriers to innovation, and how such a solution provides the “decision engine” needed to optimize an organization’s innovation “machine”. It will explain why managing the end-to-end innovation lifecycle is critical for success in every organization today.

Section 2: Opportunity

Need for project and portfolio management

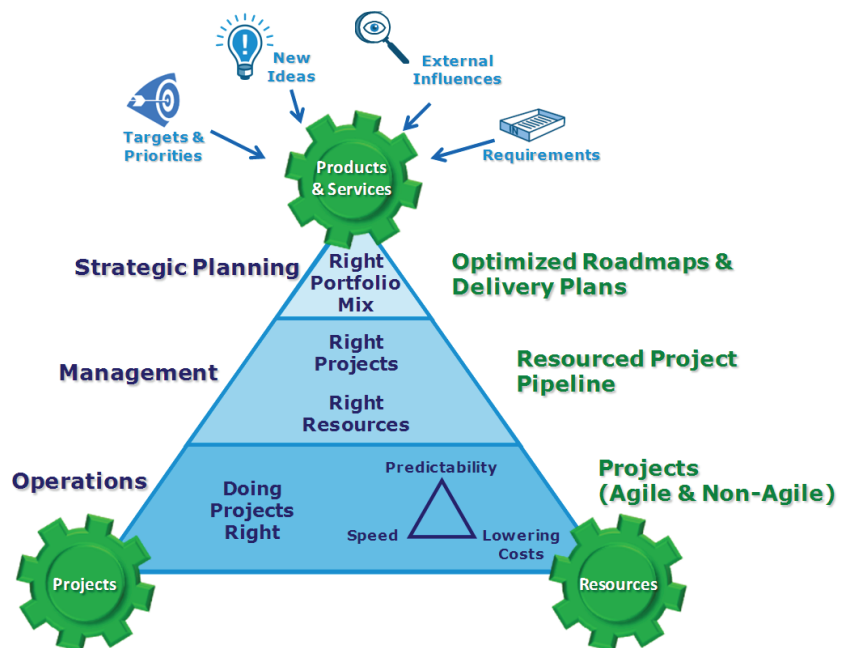
Addressing the innovation needs of the entire enterprise

Businesses strive to enable continued growth in sales and market share, whilst maintaining control over costs in order to maximize profits. Increasingly they must have their portfolios of products and services target the needs and priorities of the increasingly knowledgeable customer, and they must be able to adapt to the changing business environment and new market trends.

Project and Portfolio Management (PPM) is the key business process discipline for better managing the innovation process, optimizing time-to-value and the return on investment through aligning the portfolio of innovation initiatives with business strategy and balancing cost, resources and business risk.

Figure A

The Innovation Pyramid



PPM facilitates innovation process improvement in a number of ways (depicted in Figure A). First, a PPM solution enables organizations to manage three key aspects of their business in one place: the portfolio of product and service offerings, the portfolio of development projects, and the people and investment resources that support innovation activity.

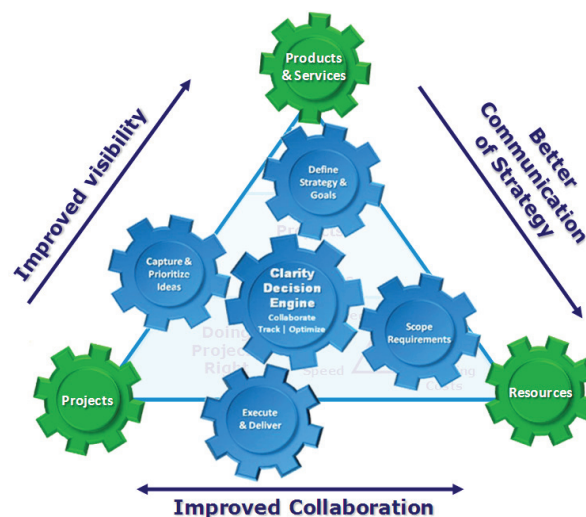
Second, PPM addresses the specific needs of the various innovation process stakeholders at each level of an organization:

- **Operations**—responsible for product development project execution. The emphasis is on doing projects right, including the quality of project execution, reducing cycle time and lowering the costs associated with product development. At this level, the focus of PPM is on delivering process efficiency and the appropriate level of control to enable timely, consistent and predictable delivery to the market, whatever the development methodology employed.
- **Management**—is responsible for delivery of the strategy laid down by the business leaders. A PPM solution helps ensure that the development project portfolio is aligned with corporate strategy at all times, and that the right resources are prioritized to the highest value opportunities to effectively maximize the value delivered from an often-constrained resource pool.
- **Strategic Planning**—focuses on optimizing the product portfolio and roadmap. The product portfolio is a manifestation of the business strategy, and management of the product portfolio is all about how a company can better invest and optimize its innovation resources. By facilitating product portfolio management processes, a PPM solution enables a company to make better decisions on how to invest and optimize its resources, which is crucial when looking to increasing sales, market share and accelerating time to value.

Faster and smarter innovation portfolio decision making

Businesses do not operate in a vacuum. Success mandates being able to respond quickly and effectively to a rapidly changing environment. This mandates business leaders becoming more agile, in order to take advantage of new market trends, adapt better to the threat posed by competitor activities and the impacts of increasingly stringent legislation

Figure B
The Decision Engine



Senior managers must be able to make faster more informed decisions, which requires them to have better visibility and transparency of the portfolio of innovation. With the right PPM processes and solution, they not only have a holistic view of the entire innovation portfolio including new ideas, requirements, current development projects and in-market product performance, but critical information that supports better decision making. The right PPM processes and solution also enable them to communicate strategy and priorities more effectively, to all levels of the business.

In bringing together strategic portfolio planning and new product development activities, including managing the product, project and resources portfolios, PPM provides businesses the requisite agility, visibility and control to become more effective innovators. Ultimately, it promotes the creative process instead of placing a management strait jacket around it.

Section 3: Benefit

Maximizing innovation ROI

Organizations need executive visibility throughout the entire innovation lifecycle to make important investment decisions with confidence based on complete, accurate and timely information.

To win with your innovation strategy, you need a framework to support the innovation process and align the product development portfolio with your business strategy. You need to maximize the value generated by your resources and improve execution, whilst ensuring that a management strait jacket is not placed round the creative process.

A best-of-breed PPM solution like CA Clarity™ PPM is designed from the ground up to address the “people-driven” innovation disciplines. Consequently, organizations are able to eradicate long-established “silos of innovation” and directly address the most common barriers to innovation.

Planning and achieving high performance demands a best-of-breed PPM solution as part of the IT framework supporting any organization’s innovation effort, because it complements other strategic business systems including ERP and PLM solutions. To summarize, the value of a PPM solution can result in:

- Healthier product portfolio—better alignment of business and innovation strategy
- Increasing ROI from new products—objectively score, rank and select winning initiatives
- Increasing the rate of innovation—efficiently capture new ideas, rapidly progress the best ideas through the idea-to-launch process.
- Optimization of development resources—plan for and manage scarce and specialized skill sets to ensure availability, consistency and development efficiency
- Shortening time-to-value—standardize and streamline complex, cross-functional product development and introduction processes, enabling consistency and launch predictability.
- Decreasing development costs—ensure development projects are executed efficiently, bureaucracy is reduced, decisions are made right the first time to reduce waste and iterative correction loops.

Successful management of innovation can be achieved with a PPM solution that provides the requisite agility, visibility and control throughout the innovation life cycle. Bringing the voice of your customer into your portfolio planning process, making the right investments and selecting the right portfolio mix, scoping requirements to meet customer needs, and delivering results based on proof—not just possibilities—are critical for achieving success. CA Technologies can help you develop the right products at the right time, control your development costs, and prioritize your development resources on the highest value initiatives.

For more information, please visit: www.ca.com/ppm

Section 4

CA Technologies Project & Portfolio Management solution overview

CA Technologies recognizes that innovation is not just about getting from “idea to launch”, but also about improving performance during all stages of the innovation lifecycle from discovery and product development to post-launch in-market performance.

Figure C

The PPM solution from CA Technologies



The CA Technologies solution provides the “decision engine” to enable organizations to better prioritize the right opportunities, collaborate on developing the right products, track and optimize the innovation portfolio at every stage of the innovation lifecycle.

Define strategy and goals

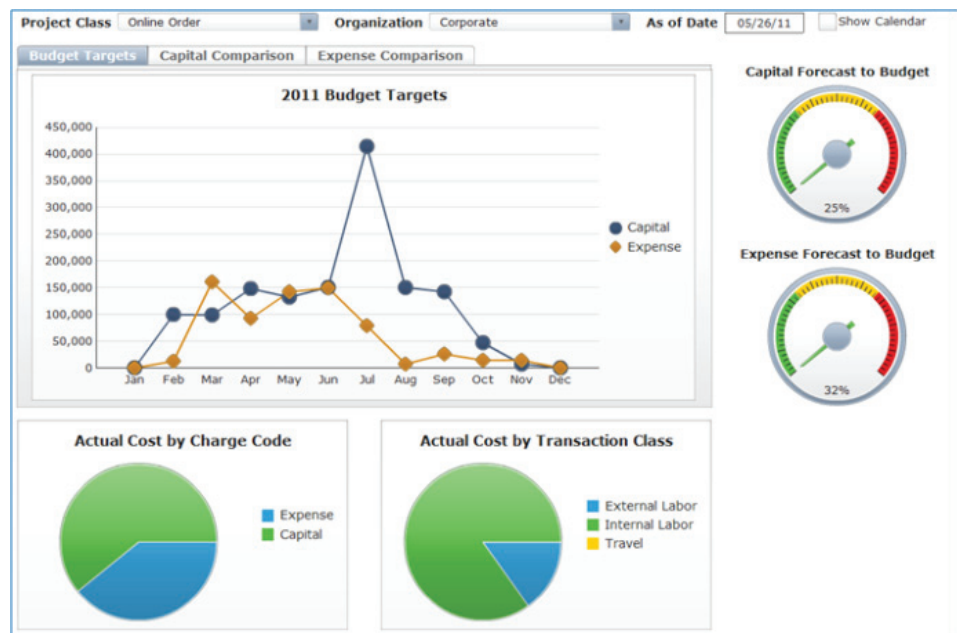
CA Technologies provides organizations with the ability to capture innovation targets and goals, and report actual performance versus target using interactive real-time dashboards. KPI examples include average TTM, % launches on time, % revenues from new products.

Dashboards can be easily integrated with information from other business systems, giving business leaders a single destination for management information to support agile decision-making for innovation.

Adopting a PPM solution from CA Technologies enables an organization to:

- Align strategic investments with business goals
- Enable investment decisions to align with business goals
- Easily establish investment evaluation criteria that suits your business
- Evaluate an unlimited set of optimal investment scenarios

Figure D
CA Clarity PPM



Capture and prioritize ideas

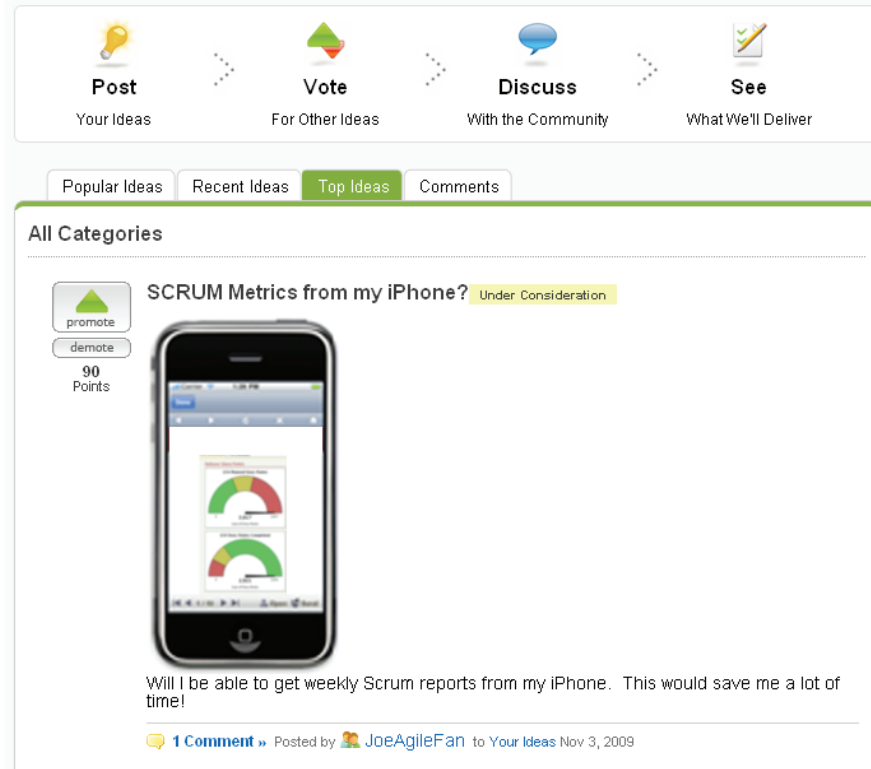
CA Technologies enables organizations to more effectively reach out and capture new ideas across customers, partners and employees to increase the value of their idea pipeline.

By actively leveraging the “power of the crowd,” organizations can identify the highest value ideas while providing customers and partners with a voice on the roadmap of future products and services. The CA Clarity™ PPM solution from CA Technologies enables an organization to:

- Create a culture that encourages ideas, improving collaboration and expanding ideation process beyond the “four walls” of the business
- Link idea generation activities to business strategy
- Quickly analyze and prioritize the impact of new ideas
- Close customer feedback loop and drive improved customer satisfaction
- Make portfolio management an inherent part of the idea screening process

Figure E

CA Idea Vision:
capture and manage
ideas



Scope requirements

In order to maximize the return on your innovation investment you have to enable the product to be launched at the right time and at the right price and to meet the requirements and expectations of your customers and the market. CA Technologies enables organizations to integrate important requirements gathering and release planning activities into the overall innovation process. Using the CA Clarity PPM solution from CA Technologies enables an organization to:

- Organize requirements by customer priority
- Manage products, features and requirements in one place
- Scope requirements in terms of resources and cost
- Build release plans
- Effectively assess the impact of changes in scope

Figure F

CA Product Vision:
scope requirements

View: Traceability Matrix		
Requirement Level 1	Requirement Level 2	User Story Level 1
Application must be accessible via chrome		As a user, I need to access the app via chrome
	Product also needs to work on mozilla	As a user, create a user story
Headphones must offer noise reduction		
Headphones must work with Apple products		
	Experience labs must be portable	
	Headphones must be multi-device functional	
	Headphones must work on the iphone	
	Headphones must work w ipod nano	
	headphones must work with ipad	
	Headphones must work with older ipods	
Headphones must work with Wii products		
	Sizeable Ear Buds	
Headphones need to have the ability to quick link to yout		
Multi Language Support - Phase I		
New requirement		
Pandora availability straight into headphones		

Optimize the portfolio—the decision engine

Innovation planning does not happen overnight: it is not a one-off journey that you start, then three to five years later you arrive at your chosen destination. It is a cyclical, iterative process that starts with a clear definition of strategy and goals, and has the flexibility to easily adapt to the business environment around it. Changing business priorities, competitor actions, the impact of new legislation and changing customer requirements are all normal and expected in day-to-day business, and the right solutions help organizations adapt to succeed.

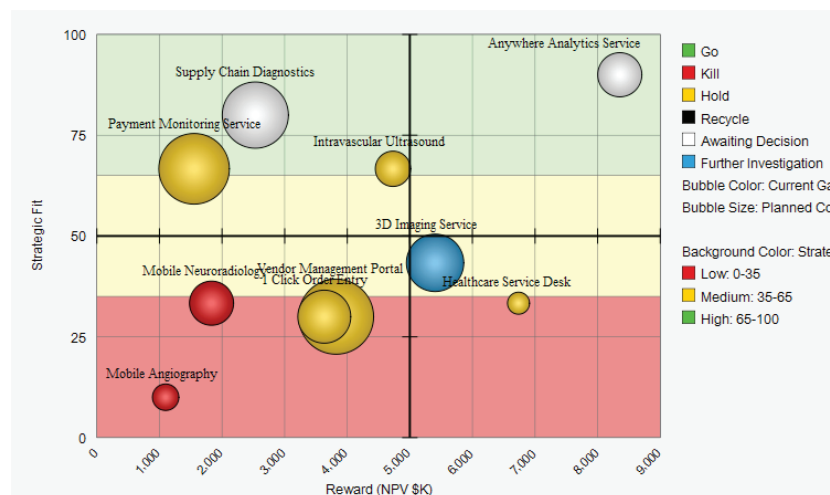
Powerful portfolio management capabilities enable organizations to make faster more informed decisions about how best to optimize their product portfolios, including:

How does this new idea align with business strategy? How does it compare against our other investments?

As part of the planning process, it is important to determine how well opportunities align to business strategy and how they rank against each other.

CA Clarity PPM enables the scoring of an opportunity against user-definable measures. This enables all innovation investment opportunities to be scored on a like-for-like basis that facilitates objective decision making.

Figure G
Align Strategy

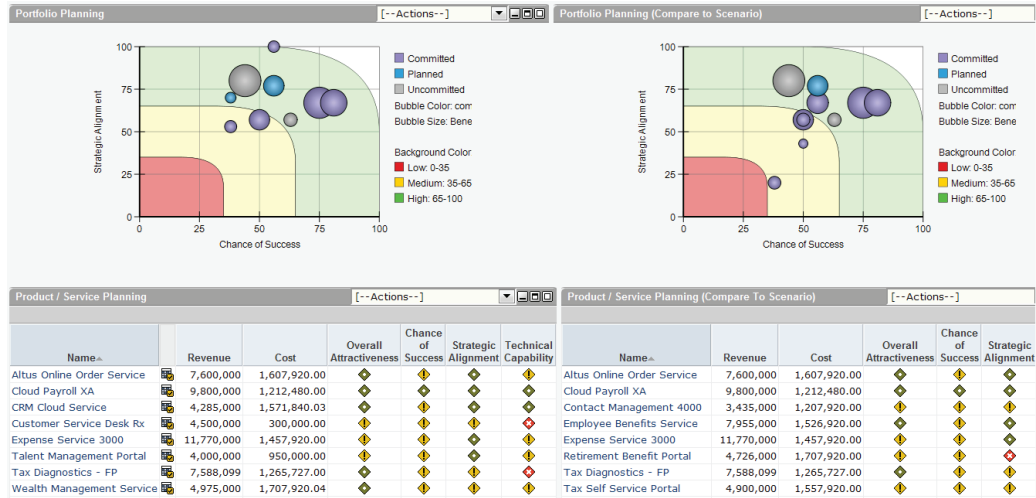


What is the optimal portfolio mix?

CA Clarity PPM facilitates innovation investment analysis, enabling organisations to optimize their product and service portfolios utilizing powerful what-if scenarios and efficient frontier functionality.

Decision makers can quickly and easily model and compare different scenarios to identify the best mix of investments that are most likely to deliver the requisite business performance.

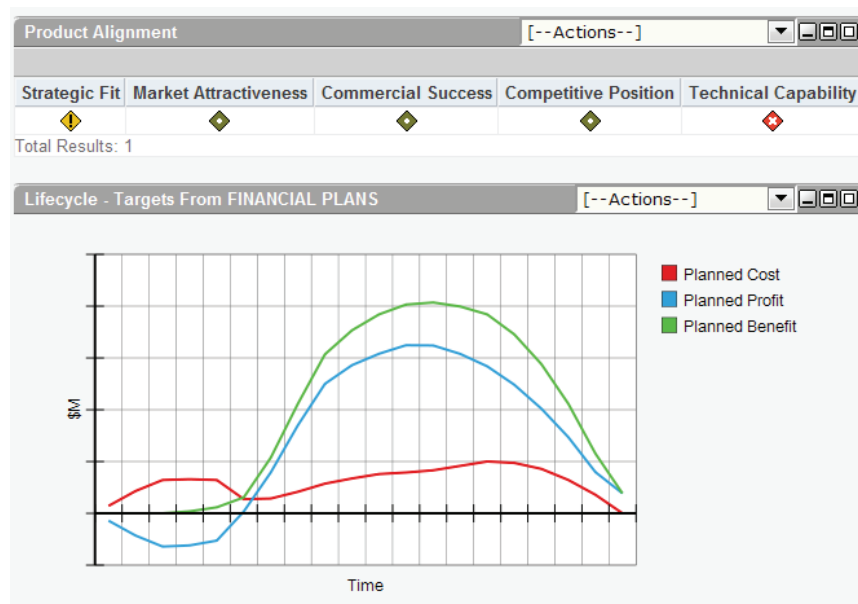
Figure H
Portfolio Planning



How are my products performing across their economic lifecycle?

CA Clarity PPM provides an holistic view of the product portfolio. Users are able to quickly drill down to review details about product ranges or individual products, including the ability to review cost and benefit plans against actual revenues to understand product profitability across the entire product lifecycle.

Figure I
Product Alignment



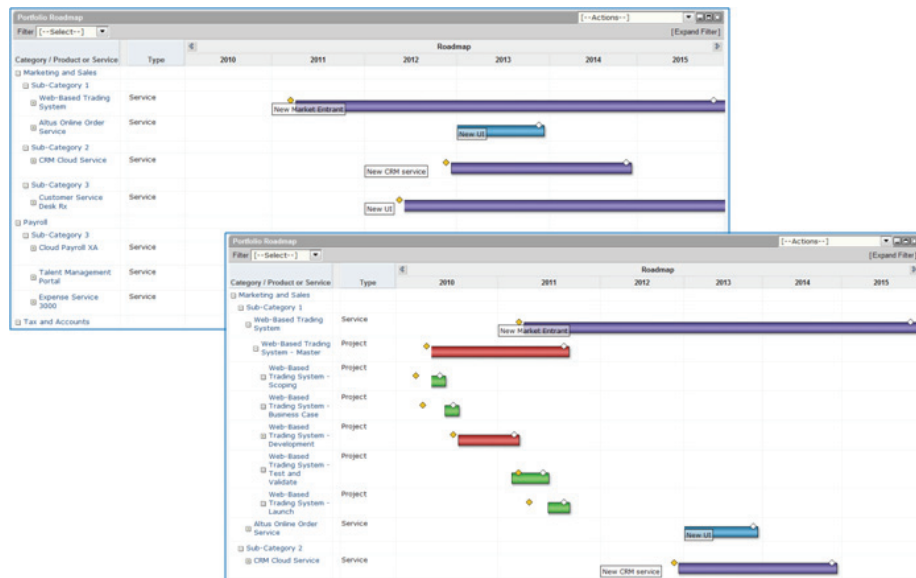
What is the status of my Product Roadmap?

Using the powerful portfolio management capabilities, organizations can plan and develop their product roadmaps more effectively and efficiently, eliminating the need to develop roadmap plans manually in PowerPoint.

CA Clarity PPM recognizes the pivotal role roadmaps play in communicating plans and strategy, and therefore enable organizations to move away from the traditional static depictions of roadmaps, to roadmaps that combine product, project and resource information and act as interactive dynamic dashboards driving the innovation effort.

Figure J

Manage Roadmaps



Execute and deliver

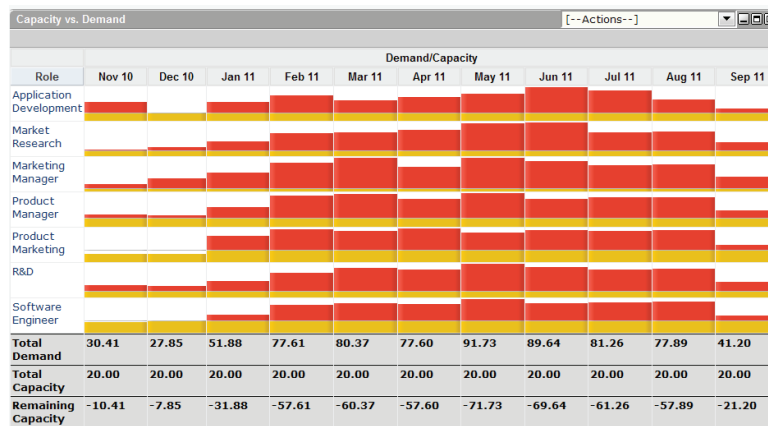
The CA Clarity PPM solution makes it possible to manage product portfolios, portfolios of development projects and resources (both people and money) in one place, which places organizations in a stronger position to deliver on their innovation plans. A PPM solution from CA Technologies enables organizations to better:

Plan and prioritize resources

CA Clarity PPM improves the use of resources and reduces development costs through comprehensive program, project and resource management. This ensures that development projects are executed efficiently with less waste.

Figure K

Resource Capacity vs. Demand

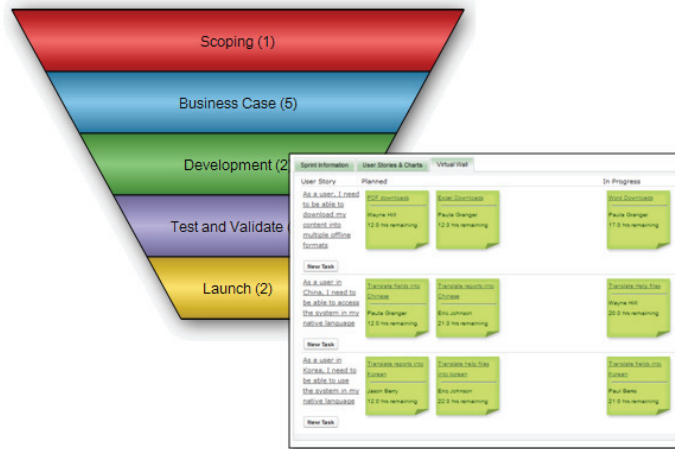


Role	Demand/Capacity										
	Nov 10	Dec 10	Jan 11	Feb 11	Mar 11	Apr 11	May 11	Jun 11	Jul 11	Aug 11	Sep 11
Application Development											
Market Research											
Marketing Manager											
Product Manager											
Product Marketing											
R&D											
Software Engineer											
Total Demand	30.41	27.85	51.88	77.61	80.37	77.60	91.73	89.64	81.26	77.89	41.20
Total Capacity	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Remaining Capacity	-10.41	-7.85	-31.88	-57.61	-60.37	-57.60	-71.73	-69.64	-61.26	-57.89	-21.20

Understand the status of the product development projects and to manage their execution

By linking top-down portfolio planning with bottom-up program execution, CA Clarity PPM enables fast drill down into the status of the product development pipeline, irrespective of whether an organization employs a traditional stage-gate methodology, Agile development methods, or a hybrid approach.

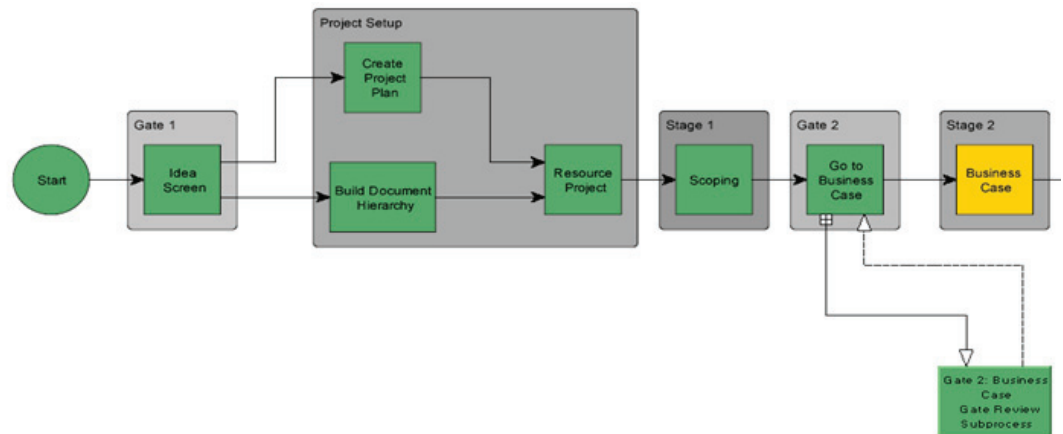
Figure L
Product Pipelines



Process automation

CA Clarity PPM provides a powerful workflow engine that enables organizations to automate their business processes to reduce the administration overhead, and to improve process efficiency.

Figure M
Workflow Management



Section 5

About the author

James Ramsay has over 10 years experience working on Product Lifecycle Management initiatives with leading global organizations, across a range of industries including consumer products, high tech and electronics, retail and life sciences.

At CA Technologies, James' focus is the CA Clarity PPM solution and working with our new and existing customers to help improve their product portfolio management and new product development processes.

Prior to working in the software industry, James was IT manager for a large international textile manufacturer. James received his degree in Computing for Industry from the University of Northumbria.

CA Technologies is an IT management software and solutions company with expertise across all IT environments—from mainframe and distributed, to virtual and cloud. CA Technologies manages and secures IT environments and enables customers to deliver more flexible IT services. CA Technologies innovative products and services provide the insight and control essential for IT organizations to power business agility. The majority of the Global Fortune 500 rely on CA Technologies to manage their evolving IT ecosystems. For additional information, visit CA Technologies at ca.com.