Guide to

Product Management

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Technology Multipliers

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Technology Multipliers

What is Product Management?

One of the secrets of successful technology companies is the capability and capacity of their product management function.

Awareness for product management need arises from signs such as:

- disconnect between the strategic vision of the CEO and day-to-day product development activities,
- lack of communication and coordination between engineering, marketing, sales, finance and legal groups
- missed launch dates,
- lost opportunities in competitive situations with large accounts.

Product management, as a function, may reside within the marketing or the product development group. Regardless of where it sits in the organization, success comes from clearly defined roles and responsibilities and sincere, open channels of communication between the CEO, the executive leadership team, and product management.
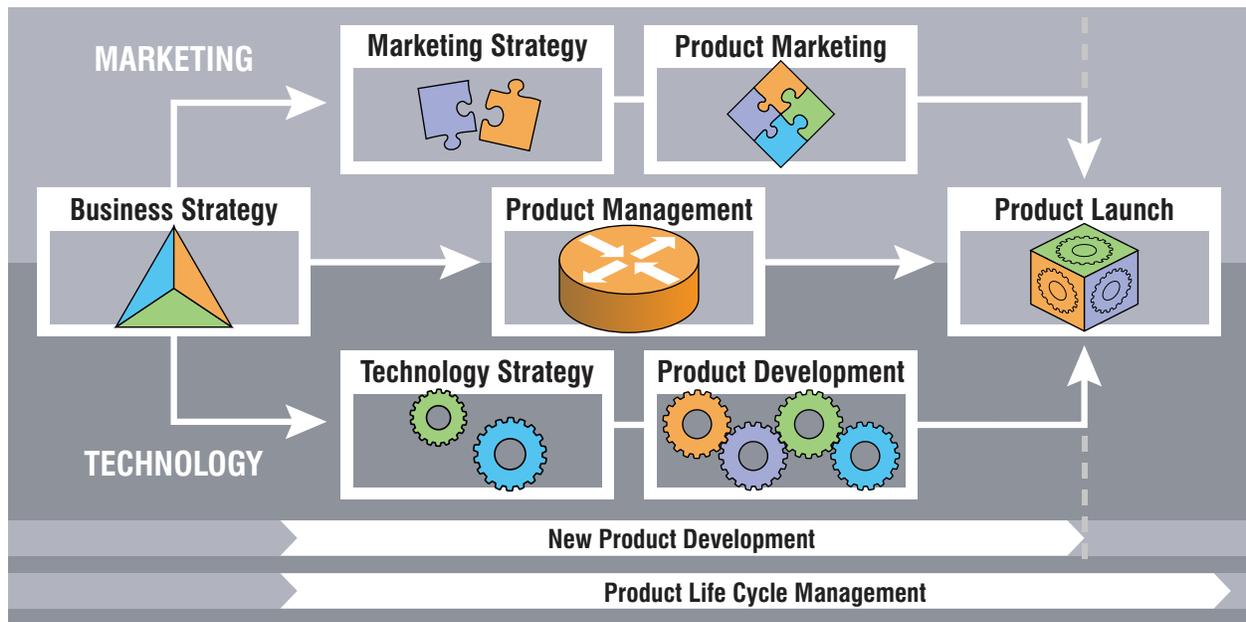

CHART 1. PRODUCT MANAGEMENT

In most technology startups, the founders are the first product managers. If and when the founders succeed, they realize they don't have the capacity to do product management full time. So, they recruit and mentor product management professionals to execute their strategic vision, business strategy with product strategy and new product development initiatives.

Strategic and Tactical Roles

The strategic vision is usually set by the founders or by the CEO. Product manager's strategic role is to link the strategic vision with the day-to-day product development activities. First, the strategic vision needs to be linked to a platform strategy. Once the platform strategy and subsequent product line strategies are defined, individual product strategies need to be linked with the product development processes.

Technology companies that are in growth mode often ignore the sanity checks necessary to balance strategic vision with realities of limited resource and time. Another important strategic responsibility is to monitor the current marketing and development programs, projects, and pipeline in order to assist the executive team in maintaining a strategic balance.

Some companies create a specific, VP or Director level role for product strategy management, project portfolio management (PPM), and pipeline management. Others assign the strategic role to VP of Product Management and tactical roles to Product Managers.

Roadmap development starts as a strategic activity with visionary and market roadmaps. It turns into a tactical activity with platform or product specific roadmaps. One of the most effective sales tools in the arsenal of a successful technology company is a sharp product manager who can prepare and present roadmaps to key decision makers in a competitive situation.

Requirements management, beta program management, and product launch process management are clearly the tactical roles necessary to set realistic launch dates and manage the launch process.

Portfolio Management

Portfolio management is the optimized allocation of resources on the right projects, specifically those aligned with the business strategy. Technology companies that apply portfolio management to their innovation management, NPD, and PLM processes are more likely to succeed in bringing new products to launch, creating profitable growth, and extending lifecycle returns.

Inadequate or ineffective portfolio management results in:

- too many active projects competing for the same scarce resources

- project delays and missed launch dates

- premature launch or retirement of products

- poor prioritization of projects

- projects that are not aligned with the strategic balance

Portfolio Management has four primary objectives:

1. Maximized Value of Portfolio and Pipeline – Allocation of resource to projects can focus on increasing profitability or ROI, or reducing risk. For startups and small technology companies, the value of their project pipeline is sometimes more important than profitability of existing products. Net Present Value and Expected Commercial Value are two popular methods of calculating portfolio value.
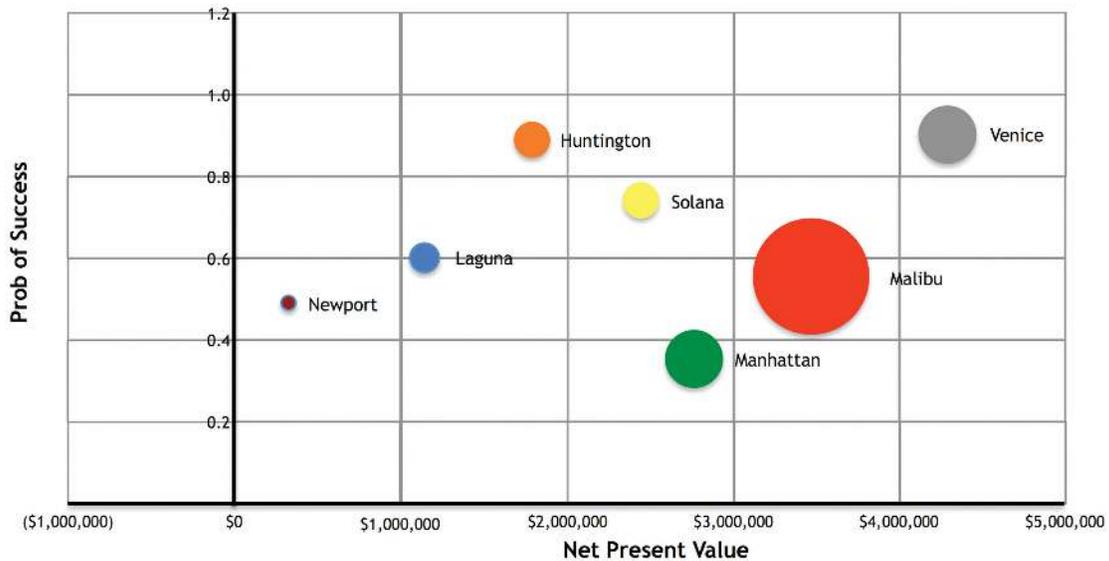

CHART 2. PORTFOLIO BUBBLE CHART

2. Efficient Resource Allocation – This is perhaps the greatest product management challenge for technology products. Most companies have too many projects and not enough resources. Understanding variability in activity durations and resource constraints, modeling the project interdependencies can help anticipate resource bottlenecks before they occur. Project management and process management models are ideal tools to aid in resource allocation.

3. Alignment With Strategic Direction – In technology companies, bottom-up, grass-roots projects can get knowledge workers just as excited as the top-down, strategic projects from senior management. Regardless of top-down or bottom-up, each project needs to pass the strategic alignment test to receive continued funding and support.

4. Strategic Balance - Typically high risk projects have high return potential whereas lower risk projects have lower return potential. Or, short-term projects inevitably get higher priority over longer term projects. Striking and maintaining a healthy balance between these trade-offs is important.

Roadmapping

Roadmaps are the means to define and communicate where the company is going, where the technology, platform, and product-line are going.

Executives need roadmaps to raise money with investors and to set expectations with analysts. Salespeople need roadmaps to win large deals or keep customers from switching to competitors. Technology partners need roadmaps to plan their integration projects. Resellers need roadmaps to plan their marketing programs. Product development and project managers need roadmaps to plan and execute at the operational level.

Product management is the unenviable owner of the roadmapping process. It is product management's responsibility to determine the target audience, appropriate information, level of detail, and time horizon for each purpose, and to update the roadmaps on a regular basis.

There are different types of roadmaps depending on the purpose and target audience.

- Visionary Roadmaps

- Market/Strategy Roadmaps

- Platform/Product Roadmaps

- Technology Roadmaps

- Product Line Roadmaps

Visionary Roadmaps

Visionary Roadmaps are created and updated on an as-needed basis for strategic purposes such as investor presentations, industry analyst briefings, or key customer presentations. Usually, the time horizon is 2-3 years and the intent is to illustrate the alignment between industry trends and the company's strategic vision. Typical triggers for visionary roadmaps are announcements of new standards or government regulations, and news about important acquisitions/mergers in the industry.

Company Vision

Virtualization - Android apps run on other phones such as Blackberry & Nokia

NEC and mobile payments pervasive

Mobile apps that leverage LBS to shine

2011

2013

2012

Market Trends

Devices - Smartphones & media tablet PCs growing, mini notebooks maintaining

Mobile OS - Android & Win 7 growing, iOS maintaining, Symbian & Blackberry declining

Mobile Browsers - Android & iPhone growing, Opera, Nokia & Blackberry declining

Market/Strategy Roadmaps

Market/Strategy Roadmaps are created and distributed on a semi-annual or annual basis for planned activities such as board meetings, annual reports, and financial analyst meetings. These roadmaps communicate the target market segments (by industry or geography), key competitors for target segments, and high level strategies. One type of market/strategy roadmap may be created to communicate grow, maintain market share, or exit strategies. Another may be created for presenting build, buy, or partner strategies.

	FY 2011	FY 2012
Industry	Automotive Healthcare Telecom	Aerospace Financial Transportation Logistics
Regional Focus	US, China, India, Germany	Brazil, Argentina France, Turkey
Business Size	Large	SMB
Distribution	Direct, Resellers	Self Service

Platform/Product Roadmaps

Platform/Product Roadmaps – created and shared within the company as well as with technology/ solution partners. These roadmaps provide one to two-year timeline of platforms and products that are built on top of them. These roadmaps are especially useful for development partners, systems integrators, and customers. Annual user conferences are ideal events to unveil platform/ product roadmaps.
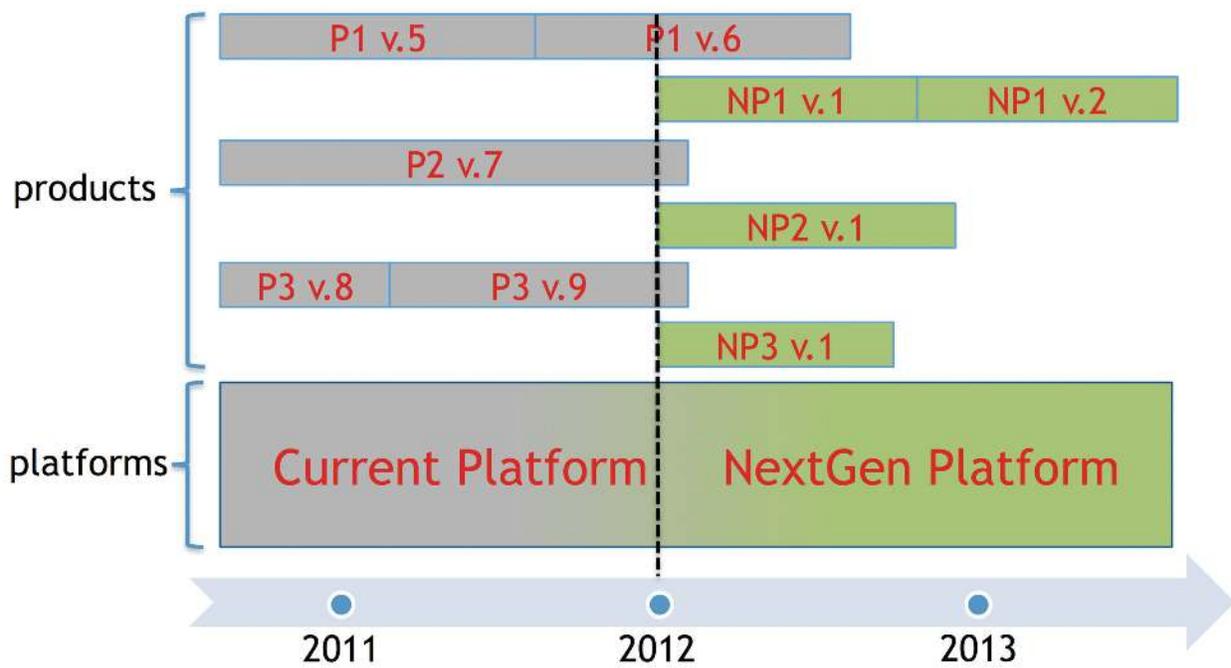
Technology and Product Line Roadmaps

Technology Roadmaps are created for external and internal users on an ad hoc basis. Typically, the trigger for technology roadmaps are events such as the announcement of a new technology, end-of-life news about an existing technology, or external technology announcements from competitors or partners. These roadmaps have 2-3 year time horizon that align with the technology adoption curves of external, related technologies.

Product Line Roadmaps are created and shared with internal stakeholders and technology/solution partners. Typically there are two versions: One is for internal use. The other is for partners/resellers and is more relevant to their purposes. Time horizon is usually four quarters with higher granularity for the first two quarters and lesser granularity for last two quarters. Therefore, product roadmaps need to be updated on a quarterly basis to reflect changes that take place over the span of a quarter. Webcasts are the most cost-effective means to communicating product roadmaps.
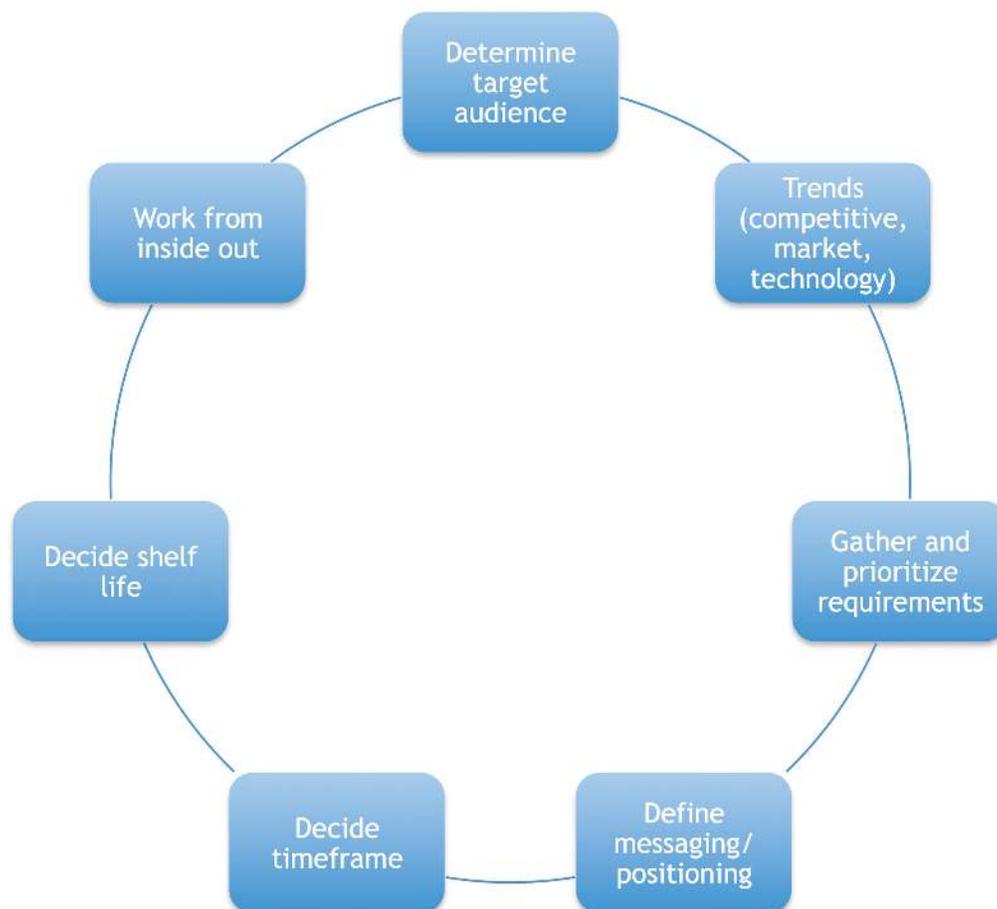

CHART 3. ROADMAP OVERVIEW

Requirements Management

Growing small to medium size technology companies are constantly overwhelmed by product requirements. An organized product manager, a well-defined requirements management process, and proper software tools can help turn this challenge into a critical success factor for innovative new products. Requirements management requires interactions with external entities like customers, partners, and industry analysts as well as internal entities such as engineering management, quality management, and the chief architect. The process has four major sub-processes:

- Requirements Gathering

- Requirement Analysis

- Requirements Definition

- Requirements Validation
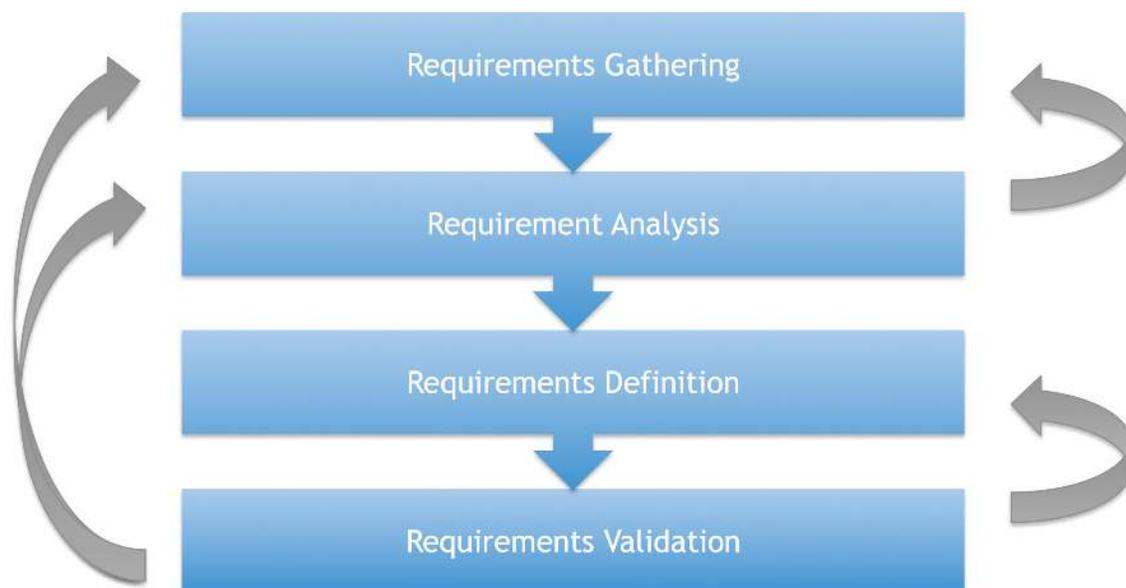
Gathering customer requirements starts with identifying different types of users, selecting target users for elicitation, and defining use cases. Gathering market requirements involves tracking technology trends and competition, reviewing analyst reports and surveys, and leveraging the internet to capture relevant inputs. Analysis process involves triangulating what the customer or the analyst said, what we heard, and what they really mean. This requires clarification with users and re-assessment of requirements that fail validation. The output of the analysis process is prioritized requirements. Definition process includes use cases, quality attributes, models, and a requirements traceability matrix. Finally, requirements need to be validated.

The requirements management process is iterative and non-linear making it a challenge to manage with proper tools. Most product managers start with word processors or spreadsheets and graduate to proper requirements management software tools. The best of class product life cycle management platforms come with a robust requirements management module.
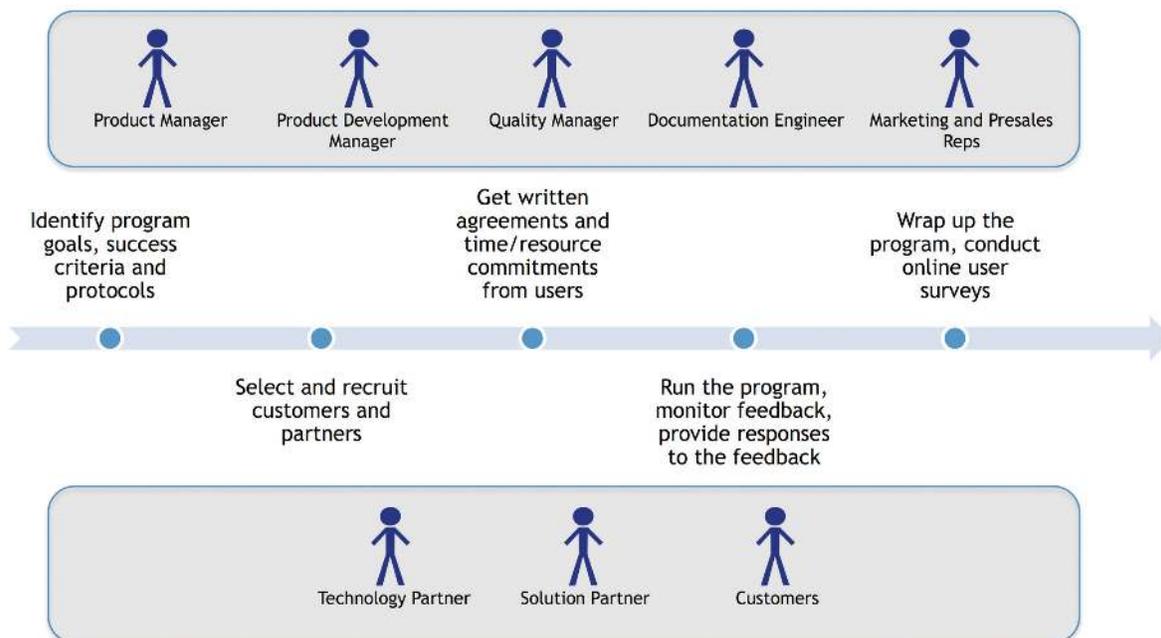
Early Adopter and Beta Programs

Early adopter programs and beta programs are designed to provide strategic customers and partners to get direct hands-on access to the new platform or product before general availability to all customers. The purposes of these programs are twofold:

1. Inbound focused – to capture feedback from early adopters for fixing issues, making last minute improvements to the product, completing the documentation, and verifying that the product is ready to ship.

2. Outbound focused – to capture testimonials from early adopters for launch promotion programs, creating a buzz in social media, and verifying that the product is ready to sell.

Typical timeframe for an early adopter or beta program is between 8-12 weeks. The process involves:

- identifying specific goals, success criteria and protocols,

- selecting and recruiting customers and partners,

- getting written agreements and time/resource commitments from users,

- running the program, monitoring feedback, providing responses to the feedback

- wrapping up the program, conducting online user surveys, capturing outbound focused information.

CHART 4. EARLY ADOPTER AND BETA PROGRAMS

Successful early adopter and beta programs require a team effort. The team should include the product manager, product development manager, quality manager, documentation engineer and representatives from product marketing and presales engineering.

Product Launch

All product management responsibilities are important but product launch is arguably the most critical success factor for a technology product.

Product launch is similar to scoring a touchdown in the red-zone in American football. A drive is considered unsuccessful if the team does not score a touchdown while in the red zone (within 20 yards of the end zone).

A successful product manager must plan, coordinate, and manage the product launch like a seasoned professional quarterback in the red zone.

Planning for a full-scale launch starts with a detailed checklist, clearly defined accountability and responsibility for each checklist item, a timeline of launch activities, and a contingency plan.

At a high level, a typical launch checklist has the following categories of programs and corresponding ownership of accountability.

- Customer and partner testimonials and references – product marketing

- Industry analyst relations – product marketing

- Media relations (traditional media and social media) – marketing communications

- Events - marketing communications

- Sales tools and collateral – product marketing

- Sales readiness – product marketing

- Sales training – product marketing, presales engineering

- Lead generation – product marketing
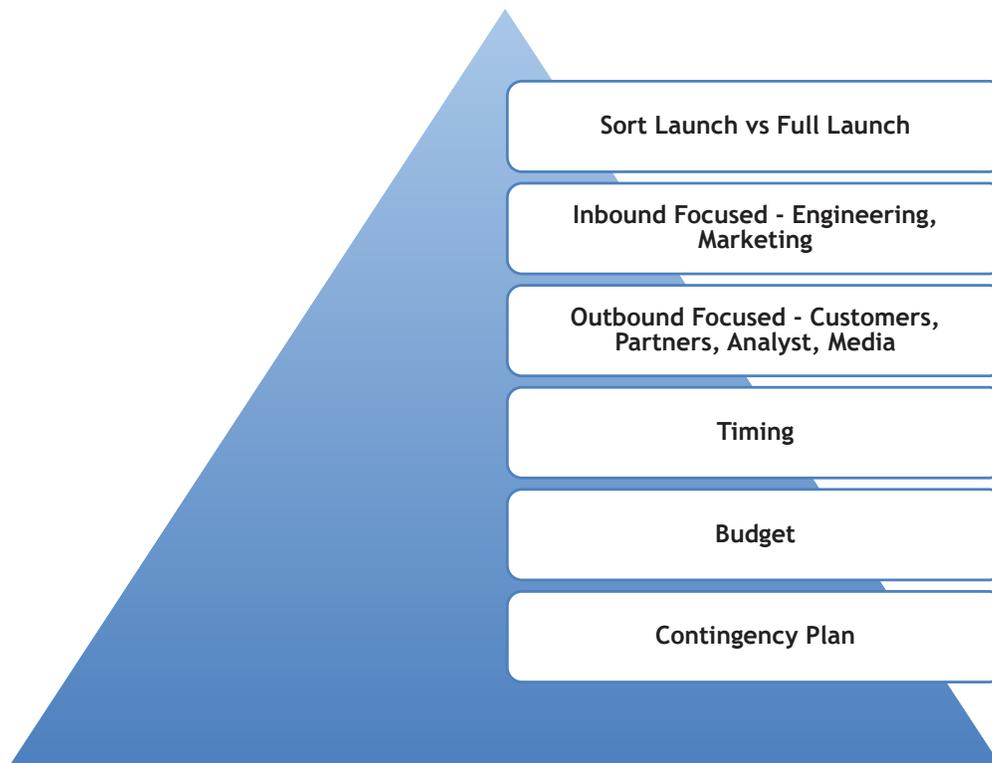
CHART 5. PRODUCT LAUNCH CONSIDERATIONS

For small to medium size technology companies, an important consideration is the launch budget. A properly planned and executed launch may cost anywhere from $100K to $500K or more.

There are times when it is more appropriate to do a soft launch instead of a full-scale launch because financial resources are limited or the company wants to be first to market but the product is not quite ready. In such cases, the soft launch checklist may include a subset of the activities within each launch programs. A properly executed soft launch can be a useful precursor for a full-scale launch helping product management exercise all the planning, coordination and management aspects of a product launch with reduced cost and risk.

Timing of a product launch is another important consideration for product management. Aligning product launches with key events such as a major trade show or user conference pay significant dividends in terms of public relations and social media buzz. It is recommended to schedule a full-scale launch at least 6-8 months in advance and a soft launch at least 3-4 months ahead of time.

Software

For startups and small companies, the most cost-effective product management software suite is offered by 280Group. The toolkit is a collection of toolkits and templates that include product launch, roadmapping, running beta programs, conducting product reviews, and competitive analysis.

For mid-size and large enterprises, Accept 360 offers an integrated suite of Voice of the Customer (VOC), strategy, roadmaps, and requirements. Another company that offers a complete suite of product management software is Sophion.

Portfolio management tools enable assessment of current project mix and simulation of possible future project mix scenarios. They provide scoring models useful for measuring the portfolio value. They also provide visual charts such as portfolio bubble diagrams to visualize strategic balance or lack thereof.

RM software aid in documenting, analyzing, tracing, prioritizing and agreeing on requirements and then controlling change and communicating to relevant stakeholders. Popular requirements management software products by target company size include:

- Accompa - http://www.accompa.com (small to mid)

- Contour – http://www.jamasoftware.com (small to mid)

- Ryma - http://www.featureplan.com (mid-to-large)

- Rational Doors - http://www-01.ibm.com/software/awdtools/doors/features/requirements.html (mid to large)

In the past few years, Product Life Cycle Management (PLM) software vendors have integrated portfolio management and requirements management modules into their enterprise software offerings. Another interesting development is the integration of ideation and requirements capture functionality into enterprise CRM products a la Salesforce Chatter.

Keys to Success

- Product management responsibilities should be focused on product strategy and new product development processes.

- Recruit and empower product management and professionals who can concurrently execute at strategic and tactical levels.

- Apply portfolio management to innovation management and NPD for timely product launches and creating profitable growth and extended lifecycle.

- Develop different types of roadmaps to communicate where the business, technology and platform/product are going.

- Implement and iterate a formal requirements management process with proper software.

- Do not launch new product without early adopter and beta programs.

- Product management's most critical role is to plan, coordinate, and manage successful product launches.

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For further reading on product strategy, please visit our <u>recommended reading list</u>.

Guide to **Product Strategy**	Guide to **New Product Development**	Guide to **Product Management**
Technology Multipliers	Technology Multipliers	Technology Multipliers
Guide to **Internet Marketing**	Guide to **Product Lifecycle Management**	Guide to **Product Marketing**
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