Chapter 1 : New product development - Wikipedia

Managing Risks in Product Development Staying competitive in the world of business is vital to every company, especially if it hopes to grow and expand, instead of just earning a decent profit from period to period.

Product managers are responsible for guiding the success of a product and leading the cross-functional team that is responsible for improving it. It is an important organizational role â€" especially in technology companies â€" that sets the strategy, roadmap, and feature definition for a product or product line. In many ways, the role of a product manager is similar in concept to a brand manager at a consumer packaged goods company. Product managers provide the deep product expertise needed to lead the organization and make strategic product decisions. They often analyze market and competitive conditions, laying out a product vision that is differentiated and delivers unique value based on customer demands. The role spans many activities from strategic to tactical and provides important cross-functional leadership â€" most notably between engineering, marketing, sales, and support teams. The product manager is the person responsible for defining the why, when, and what of the product that the engineering team builds. Here are the core aspects of product leadership that all product managers should feel accountable for: Strategy The product manager is responsible for setting a product vision and strategy. Their job is to clearly articulate the business value to the product team so they understand the intent behind the new product or product release. The product manager owns the roadmap and must prioritize building what matters most to achieve the strategic goals and initiatives behind the product. Releases Product managers must plan what their teams will deliver and the timeline for implementation. This holds true no matter which development methodology the engineering team uses. The product manager is responsible for defining the release process and coordinating all of the activities required to bring the product to market. This involves bridging gaps between different functions within the company and aligning all of the teams involved â€" namely marketing, sales, and customer support. Responsibilities also include managing dependencies in and across releases to complete release phases and milestones. Ideation Every organization wants better ideas â€" but it is tough to manage and prioritize them. Product managers own the creative process of generating, developing, and curating new ideas. They determine which ideas should be promoted into features to push the product strategy forward â€" namely those that will achieve key objectives for the product line and business. To this end, they also ensure that feedback and requests are seamlessly integrated into their product planning and development processes. Product managers then communicate the status of ideas back to the customers, partners, and internal team members who submitted them. Features The product manager prioritizes features by ranking them against the strategic goals and initiatives. This requires making difficult trade-off decisions based on the value that new features will deliver to customers and to the business. The product manager is also responsible for defining the requirements for each feature and the desired user experience. Product managers work closely with engineering on the technical specifications and ensure that teams have all of the information they need to deliver a complete product to market. Building great products is invigorating. Successful products are built and adopted by customers when a group of committed, focused, and passionate team members play their positions to the best of their abilities. This starts with a strong product manager who feels a deep sense of responsibility for their role and managing what is defined above. When done right, product managers have the best job on Earth.

Chapter 2 : Project Management in New Product Development

TL;DR version: Product Management is about the "what", Product Development is about the "how". Product Management is a multi-disciplinary role that guides the strategic and tactical efforts of a product to ensure that, in the end, a marketable product is delivered to the end user. Their primary.

Process structure[edit] The product development process typically consists of several activities that firms employ in the complex process of delivering new products to the market. A process management approach is used to provide a structure. In highly complex engineered products e. Such projects typically use an integrated product team approach. The process for managing large-scale complex engineering products is much slower often plus years than that deployed for many types of consumer goods. Fuzzy front-end FFE is the set of activities employed before the more formal and well defined requirements specification is completed. Requirements speak to what the product should do or have, at varying degrees of specificity, in order to meet the perceived market or business need. Product design is the development of both the high-level and detailed-level design of the product: This typically has the most overlap with the engineering design process, but can also include industrial design and even purely aesthetic aspects of design. On the marketing and planning side, this phase ends at pre-commercialization analysis[clarification needed] stage. Product implementation often refers to later stages of detailed engineering design e. Fuzzy back-end or commercialization phase represent the action steps where the production and market launch occur. The front-end marketing phases have been very well researched, with valuable models proposed. Peter Koen et al. He also includes an engine in the middle of the five front-end stages and the possible outside barriers that can influence the process outcome. The engine represents the management driving the activities described. The front end of the innovation is the greatest area of weakness in the NPD process. This is mainly because the FFE is often chaotic, unpredictable and unstructured. The output of the design engineering is a set of product and process specifications â€" mostly in the form of drawings, and the output of manufacturing is the product ready for sale. Idea Generation â€" Collective brainstorming through internal and external sources. Screening â€" Condense the number of brainstormed ideas. Concept Testing â€" Structure an idea into a detailed concept. Business Analysis â€" Understand the cost and profits of the new product and determining if they meet company objectives. Product Development â€" Developing the product. Market Testing â€" Marketing mix is tested through a trial run of the product. Commercialization â€" Introducing the product to the public. Models[edit] Conceptual models have been designed in order to facilitate a smooth process. The concept adopted by IDEO, a successful design and consulting firm, is one of the most researched processes in regard to new product development and is a five-step procedure. Understand and observe the market, the client, the technology, and the limitations of the problem; Synthesize the information collected at the first step; Visualise new customers using the product; Prototype, evaluate and improve the concept; Implementation of design changes which are associated with more technologically advanced procedures and therefore this step will require more time. Significant work has been conducted in order to propose better models, but in fact these models can be easily linked to BAH model. The seven steps of BAH model are: Over the last two decades he conducted significant work in the area of NPD. The Stage-Gate model developed in the s was proposed as a new tool for managing new products development processes. This was mainly applied to the consumers goods industry. Over the last few years, the Lean Startup movement has grown in popularity, challenging many of the assumptions inherent in the stage-gate model. Marketing considerations[edit] There have been a number of approaches proposed for analyzing and responding to the marketing challenges of new product development. Two of these are the eight stages process of Peter Koen of the Stevens Institute of Technology , and a process known as the fuzzy front end. The Fuzzy Front End phase ends when an organization approves and begins formal development of the concept. Consequently, this phase should be considered as an essential part of development rather than something that happens "before development," and its cycle time should be included in the total development cycle time.

Chapter 3 : Managing Queues in Product Development â€" Black Swan Farming

When implementing new product development (NPD) projects, organizations must perform a variety of tasks, some (technical and financial aspects) of which are easily managed using traditional project management practices and some (marketing and sales) of which are not so easily managed using these practices.

Product managers are typically found at companies that are building products or technology for customer or internal use. This role evolved from the brand manager position that is often found at consumer packaged goods companies. The product manager is responsible for the strategy, roadmap, and feature definition for that product or product line. Activities span from strategic to tactical and includes the following objectives: Set a product vision and strategy that is differentiated and delivers unique value based on customer demands. This includes defining personas and analyzing market and competitive conditions. Define what the product team will deliver and the timeline for implementation. This includes creating a release plan , capturing actionable feedback and ideas, and prioritizing features. Provide cross-functional leadership, most notably between engineering teams, sales and marketing, and support. A key aspect of this is communicating the product roadmap and keeping everyone informed of updates. History The product management role was originally created as a brand management position. It was first defined by a New York advertiser during the Great Depression. The young advertising executive proposed the idea of a "brand man" â€" a role with specific responsibilities to manage the complete product brand and be accountable for its success. This concept of product ownership is at the core of product management today. McElroy spoke about product ownership in a marketing context. He wanted "brand men" to "take full responsibility, not simply for criticizing individual pieces of printed word copy, but also for the general printed word plans for his brands. Over the next half century, many companies adopted a brand management approach. This practice came to be known as consumer product management, and many of the same principles were adopted by the software market as it grew during the s. Brand management knowledge became so coveted that many brand managers were recruited by technology firms for their deep product knowledge and sense of ownership. He applied his skills in a very different context at Intuit. But his end goal â€" to focus on understanding, delivering, and polishing user experience â€" remained paramount. Gaps between engineering and marketing widened in the s. Companies like Microsoft were rapidly expanding, but they faced challenges as they scaled software development. Engineers did not have processes to keep up with customer demand or speak directly with customers about their concerns. Nor did they have time to collaborate with sales and marketing teams responsible for revenue growth. The gap between them needed to be bridged and product managers became the ones to do it. Careers Product management continues to expand as a profession. Demand for qualified product managers is growing at every level. There are a variety of roles and responsibilities depending on experience level. Here is a list of the most common product management titles and a description of each role. They typically work on setting the overall product strategy, which is designed to achieve the corporate vision and goals set by the CEO and board members. In this case, they manage the marketing and development of the product. The SVP leads a large team of product managers. They also work closely with other key leaders in engineering, sales, support, and marketing to ensure that their company is building the right product to support the business goals. They are an executive influencer responsible for large initiatives and building what will create the most value to the business. They work daily to keep cross-functional teams aligned. The VP of Product often has influence in the organization well beyond the team they manage. Product management groups tend to be much smaller than other functions like engineering, sales, and support. This is a senior management role that requires management experience and the ability to collaborate with executives and other cross-functional leaders. The Director of Product Management should be able to articulate a clear vision for the future of the product, communicate with customers, and work to prioritize and define features that will achieve the most business value for their organization. It is the most important non-executive role that a product manager can have and often is responsible for managing other product managers. The daily responsibilities of a GPM include research, strategy, and product development. In most cases, strategy is

handed down from an executive member of the product team. The GPM is then responsible for implementation and execution. Product Manager The Product Manager PM is responsible for the strategy, roadmap, and feature definition of a product or product line. A PM analyzes the market and competitive environment to define a differentiated product vision that delivers unique value. This role spans many types of activities, from strategic to tactical. A Product Manager provides cross-functional leadership and bridges organizational gaps between different functional groups â€" most often between engineering, marketing, sales, and support. An Associate PM has the opportunity to learn from senior product leadership and form a strong foundation on product management. They will gain an understanding of design and development of new products. The responsibilities of an Associate Product Manager include UI designs, defining new ideas and features, analyzing data, and constantly looking for new ways to improve the product. Product owner Some agile teams have both a Product Manager and a product owner. Rather than task a single person with both external and internal responsibilities, the role is split into two parts. The Product Manager is charged with communicating the voice of the customer and is tasked with achieving customer and market success. As the customer representative, the product owner must define user stories and be ready to answer detailed product questions. Responsibilities There are certain core responsibilities that are common to most product management roles. Most often, a Product Manager is responsible for understanding customer requirements, defining and prioritizing features, and then working with the engineering team to build them. Setting strategy and defining the roadmap is often considered to be inbound work and bringing the product to market is often considered to be outbound. It is important to understand the differences between inbound and outbound product management because a great Product Manager has the diverse set of skills to do both well. Inbound product management involves gathering customer research, competitive intelligence, and industry trends â€" as well as setting strategy and managing the product roadmap. Outbound product management involves product marketing responsibilities, such as messaging and branding, customer communication, new product launches, advertising, PR, and events. Depending on the organization, these roles can be performed by the same person or by two different people or groups that work closely together. Product Strategy and Definition Inbound Strategy and vision.

Chapter 4 : Best Product Management Software | Reviews of the Most Popular Systems

Mind the Product is the world's largest product management conference with annual flagship conferences (#mtpcon) in San Francisco, Singapore, and London attracting thousands of attendees each from all over the world, and regional conferences (#mtpengage) in Hamburg, Manchester, and more Product Conferences #mtpEngage Manchester Feb 7.

Magazine Managing Risks in Product Development Staying competitive in the world of business is vital to every company, especially if it hopes to grow and expand, instead of just earning a decent profit from period to period. To achieve competitiveness, a business must always stay ahead of the game in various aspects, such as marketing, personnel management, and production management. Needless to say, product development is also an area where businesses, particularly those engaged in manufacturing, should focus on if they want to make sure that they stay ahead of the competition and will always have something new and fresh to offer to their market. However, that is not all there is to it. Product development is, simply put, the creation of new products, or products with new features or specifications that offer added or entirely new benefits to end users. Formulation of an entirely new product that will meet the demands of a new market niche, or satisfy newly defined wants or needs of the target market; or Modification of an already existing product. However, product development is not limited to the design and creation of the products alone; it also covers the marketing of the new products that have been developed. This means that product development is such a broad field, it covers the whole process, from coming up with an idea of a new product or product innovation, putting it through the production process, and getting the finished new product to the market. Unfortunately, it cannot be said that product development is simple or straightforward. It takes a lot of dedication and commitment, not to mention a lot of resources on the part of the business. The business should be willing to spend money and spend a lot of time on it. Aside from paying attention to the customers and their needs, there is also a need to keep an eye on your business rivals or competitors. The whole process of developing a new product must be carefully thought through, which means it entails a lot of planning. This has already been briefly touched on earlier: It is important to see to it that the business has a steady flow of new products, and that is where product development comes in. This is considered to be the main reason why product development is given a lot of attention by businesses. To maintain or increase the flow of income. This is just common sense: Product development starts with the customers. What do they want, and what do they need? From the answers gleaned in the first phase, you will be able to come up with product specifications, or the specific features that the product must have. This is where the product is designed, in accordance with the specifications listed earlier. This is also where costing takes place. This could be one of the several pre-launch stages. Create a prototype or a pilot version of the product for testing or trial runs. This is the phase that may be repeated over and over until they get the product right. This is where the new product is finally rolled out to the market. Depending on several variables â€" such as the nature of the business, the type of products, the current state of the market and the economy, to name a few â€" that will greatly affect how a project development project will go. What worked for one business does not necessarily make it effective in another, and vice versa. With that being said, it is safe to say that product development is not without its risks. Businesses that are engaged in product development processes are bound to be faced with these risks, and it will be up to them how to manage these risks so as not to hamper the future plans of the business for growth and development. The new product may not be what the customers want and need. This is considered to be the main risk faced by businesses when it comes to new product development. This risk is higher when you base your ideas for a new product merely on a whim, or without conducting enough market research. Businesses that are not in touch with their customers are also likely to suffer from this. For example, a business may decide to come up with a new product simply because they got hold of a new technology for it. Just because you can do it does not mean you should. One problem often encountered by product developers is deciding on what features must be included in the product. There is that fine line between a product having too little features and having too much. The first one may be deemed too simple by customers while the second one turns them off for their complexity. There is a need to pinpoint exactly what these relevant features are. How to manage it: Get to know your customers and

keep yourself updated on any changes in their needs and preferences. Conducting periodic market research will help minimize this risk. It would also be a good idea to involve a specific group of customers as your source of feedback. Produce a product prototype and perform a series of product testing. Start with testing the product within the company. Then test the product with a select group of customers. There are two main reasons why it would be a good idea to build a working prototype: To check if the product works, or does what it is designed to do. To assess customer reaction to the product, especially on how it looks, how it feels, and how it functions. The product development process may involve technical hurdles and operational risks that must be overcome. The business may be developing an entirely new product that will provide new and better benefits to customers. It may also decide to modify its existing product by adding new features that will make it more appealing to the market. In these cases, it is probable that there will be technical processes that will have to be performed. These include the need for new technology or even new tools, machinery or equipment. It is also inevitable, in most cases, that they have to deal with operational risks. For instance, there may be components that have to be supplied on a regular basis, and sourcing these materials can be a problem. There may also be problems regarding transporting these materials. Choose the right people to be in the product development team. The people tasked with developing the new product must have all the relevant skills and knowledge, especially regarding the technical aspects that will be required in developing the product. It is often advised that the team be composed of all areas or departments of the business, from production to marketing and finance. The objectives of the product development team must be clear to everyone involved. Be prepared for any glitches or setbacks. Draw up a timetable for the completion of the product development process , and schedule a regular or periodic review. Hire experts or get help from outside. Many companies avail of the services of technical personnel in order to facilitate the development of new products. Product development always comes with a financial risk. You can never do away with this risk when developing a new product. It is possible that the new product that you have developed will not be able to generate enough demand at a price that will bring profit for the business. The cost of production, as well as the costs of marketing the product, may not be covered by the selling price. The high utilization of resources during the product development stage is also a downfall for most companies. Under the assumption that they will get better results if they throw more resources into the project, they will end up spending more than they should have. Thus, costs become unreasonably high. Agree on an overall budget for the various parts of the project and make sure they stay within the limits. When preparing the budget, work with the core team responsible for developing the product, since they are the ones most knowledgeable about the costs that will be incurred. Employ strategies to reduce production costs for the new product, such as: Find ways to simplify the manufacturing process. If the assembly process is too complex, look for ways to work around it and make it simple, without sacrificing quality. One way to do this is to consider subcontracting part of the work, or buy parts that have already been partially assembled, cutting down a couple or more phases in the production process that you will have to perform. Look for alternative parts or components. Find components that are of the same quality, but with a cheaper purchase price. Look for other sources that offer these components at a lower price. Do not stick to just one potential supplier; shop around and compare prices. Sticking to only one development plan may lead to losing other, better, opportunities. Businesses tend to stay within their comfort zone. Why fix something that is not broken? Why step into unknown territory when we can stay in one place that has already worked out for us? As a result, they tend to have tunnel vision and put everything they have on that one, single, plan. Conduct in-depth study of features. Identify what features may be added, and proceed on evaluating them, to be left with a shortlist of the relevant features. Engage the participation of key customers in this study. Perform testing, even if it has to be repeatedly done, and proceed on reworking or tweaking the product design, until such time that it is found to be satisfactory. Conducting product development projects in an ill-timed manner. There is the risk of starting a product development too soon. It could be that the preliminaries have not been set up yet, or that market research has not been completed yet, and the company immediately proceeded towards developing a new product. It could also be that the company is still in the middle of pre-launching a new product, and it is already starting another one. Prematurely starting developing a product without getting all the bases covered is a sign of poor planning, and we all know

that poorly planned projects are doomed from the start. Another possible result of this is spreading the resources of the company too thinly, and the business will suffer if it will start pouring its resources on another project while the previous one has not yet provided any returns to recoup the amount of money spent on it.

Chapter 5 : New Product Development Process - calendrierdelascience.com

The Product Development and Management Association (PDMA) is a global community of professional members whose skills, expertise and experience power the most recognized and respected innovative companies in the world.

Notice all the waiting? No amount of increasing the budget or taking on venture capital can solve this. We have to choose. The most invisible queues are those upstream of development. Upstream is where it gets fuzzy How far upstream this visibility extends varies greatly, however. As you can see from the one above, 32 of the total 46 weeks were upstream of the development team. Indeed, some queues fulfil an economically useful function by acting as buffers, absorbing some of the variability in the system, improving the flow of work. As such, we cannot simply say that all queues are bad. The cost of a queue is the sum of the Cost of Delay of all the things that are waiting and how long each of those waits. Categorisation by Urgency is not enough. I guess this is because Urgency seems much easier to generalise and categorise. Considering Urgency alone only gets you half way there. Cost of Delay in Name Only. Arnold joshuajames May 21, Where this approach comes unstuck is the fact that there are lots of things for which Urgency is very high, but for which the Value is negligible. Responding to emails, and other messages. Buy in the next 30 minutes and get a free set of steak knives!!! Conversely, there are also lots of things where the value is very high, but the urgency is relatively low. You have to actually engage your brain. The good news is, this barrier to entry makes it easy to differentiate from your competitors! Queues in Product Development are not inherently evil. Demand for developing new and improved products will always outstrip capacity. Unfortunately, none of these have anything to say about the cost of queues. This requires a better attempt at understanding both value AND urgency. Give it a try. Without information about value and urgency, the system will of course optimise for other things. Arnold joshuajames January 27, Related.

Chapter 6 : Product Management Definition and Examples | Aha!

I've been asked to explain my approach to managing product development. This topic applies to individual designers and programmers as much as managers. The goal is not to take what we already do.

Chapter 7 : Managing Risks In Product Development

Product management is an important organizational role. Product managers are typically found at companies that are building products or technology for customer or internal use. This role evolved from the brand manager position that is often found at consumer packaged goods companies. The product.

Chapter 8 : Product Development Manager Salary | PayScale

He is a leading authority on the management of business experimentation and innovation and has worked with many global companies on product, process, and technology development.

Chapter 9 : Product management - Wikipedia

In business and engineering, new product development (NPD) covers the complete process of bringing a new product to market. A central aspect of NPD is product design, along with various business considerations.