

March Event with Darlene Mann of Siperian Integrated Product Management

by Greg Cohen

Darlene Mann, CEO of Siperian, presented to a crowded room at the March 5th meeting of the SVPMA. Darlene spoke about Integrated Product Management and how product management links to the executive business plan. She enriched her presentation with many stories from her own experience that includes twelve years in sales and marketing and six years in venture capital.

The executive team sets corporate direction in a business plan that is then approved by the Board of Directors. Product management is key to delivering on this plan, but the product manager must understand the assumptions driving it. Otherwise the plan will not be achieved. The board of directors cares about two questions:

- 1) Is the company doing well today, which is defined by revenue, cost structure, and profitability?

- 2) Will the company continue to do well in the future, which is guided by its ability to find new market opportunities to drive growth and retain a competitive advantage?

The first problem that attracts the board's attention is when the company misses its revenue or profit target. This indicates an execution problem. This can occur when the revenue model cannot support the necessary cost structure. For example, the customer acquisition cost is too high, the cost to service the customer is greater than expected, operating or cost of goods sold increases substantially, or there is poor expense control. The last of which is inexcusable.

A second cause of missing a revenue or profit figure is a product misalignment with the problem or the market achieving saturation. This may be the result

Continued on page three

Sponsors

truereq

Inside this issue

Building Products
Customers Want
page 2

April Event with David
Hickman of Tibco Software
page 5

Debugging the User Code
Part II
page 8

Book Review
page 10

and More

Who Develops Your Market?

by Alex Gordy

You know who is responsible for developing your product. But who has the responsibility for developing your MARKET?

Product-Oriented Roles

Over the past 10 years, the roles of product management and product marketing have received an increasing greater visibility and clarity. Thanks to a number of formal training programs, books and publications, there is a greater understanding of these functions and their importance to product success. While there are some differences in interpretation of these two roles and where the dividing line might be, one theme seems to be consistently present PRODUCT. Both roles prominently feature 'product' in their titles. Generally, product management is described as having inward-oriented product responsibilities, while product marketing is charged with outbound product activities. This article describes a distinct new role of a Market Development Manager and proposes some pragmatic ways to implement this role with today's increasingly tight budgets.

Continued on page three

Building Products Customers Want

by Jonathan C. Miller

I was recently asked to write an article on improving product successes. My original instinct was to illuminate a few key tactics product managers could employ to improve their product's successes. Upon reflection, I realized that it all boils down to giving customers what they want. Although this concept rings true for all businesses, it lacks actionable steps to take towards actual product development. So I turned my focus toward presenting what product managers can do to develop products their customers want.

At a basic level, delivering products that customers want means understanding customer needs and translating those needs into product requirements. Essentially the charge of the product manager is to define requirements for products that meet customers' needs.

Requirements definition cannot take place in a vacuum. Even the most skilled product manager with the highest level of domain expertise in his or her

industry cannot single-handedly go about the task of defining product requirements. To develop products customers want, companies must actively engage a broad sample of constituencies in the requirements definition process.

Good requirements are the key to developing good products. Product managers must actively engage a cross-functional team in the process of defining requirements for their products. By focusing on the requirements and through the solicitation of input from a variety of parties, a product manager will be properly equipped to make good product requirement decisions.

'Our customers have been a constant source of inspiration and learning; they have provided us with the ideas and feedback that are the basis of our success.' **Michael Dell, Direct from Dell**

Understand Customer Needs

Product development starts with an understanding of a product's usefulness in the customer's mind. In the case of a new product the 'customer's mind' is represented by the need that the product seeks to fill. Find out what need your product meets for your customers. The next step is to gain an understanding of how your product fits with the customers entire use scenario.

For example, a CD Walkman is only a part of a customer's entire experience of going to the music store, purchasing compact discs and supplying the batteries necessary to power the unit. Once you understand the entire use scenario it is now possible to begin to define how your product or company can add value for the customer or the scope of the products requirements.

A company or product's scope depends on its ability to identify and execute on competitive advantages within a given market or use scenario. Sony has identified and capitalized on the Walkman experience by providing accessories, music and even batteries to customers of its product. Sony's scope is consumer electronics where the Walkman's scope is providing a complete personal music experience.

Begin to develop a complete use scenario for your customers and try to identify areas where your product can add value and can leverage your company's competitive advantage. This will become the scope of your product requirements.

Continued on page six

SVPMA is an association for Product Managers in Silicon Valley and around the San Francisco Bay area.

Our mission is

- To provide a forum to share day-to-day experiences and insights in Product Management
- To create a safe network of peers
- To promote research and education in Product Management

Board

Jasmine de Gaia President
Ivan Chalif Website Site Content
Ray Stendall Finance
Mark Harnett. Marketing
Simon Peel Membership
Gautam Patil Events
Gregory Cohen Communications

Managing Editor

Gregory Cohen

Contributing Editors

Alex Gordy, Tornado Marketing
Jonathan C. Miller, trureq
Steve August, KDA Research
Rich Mironov, Mironov Consulting

To learn more about the SVPMA go to
<http://www.svpma.org>

March Event with Darlene Mann from page one

of the market being too small, the product not adequately solving the problem due to poor execution or poor vision, or competitive price pressures undermining the value being delivered.

A third cause is that a market disruption creates a strategic issue for the company. This may be the result of a new technology or an industry consolidation. The consolidation might occur in the sales channel or a company with a broad product portfolio, such as SAP, offers a similar product to ones own best of breed solution. Boards do not generally recognize strategic issues, and it is management's responsibility to inform them.

When any of the above occurs, Product Management needs to take action. It should immediately inspect the channel, reviewing goals for direct and indirect sales, and also the contribution of each channel. Then re-examine the market opportunity, perform a feature, function, and fit analysis and evaluate the cost structure for delivering the product. Product Management should analyze customer adoption trends and determine if the company is being outsold, such as Oracle did to Sybase, if the competition actually has a better product, or if the company is being undercut. In the case of price pressure, does the competing company have a true cost advantage,

maybe due to offshore development, is the company buying share, or is there a lousy competitor implementing an impractical pricing strategy? If the market has been disrupted, is there a newer, cheaper, better, and faster technology or substitute? Did the industry structure change? Or are you just too early? In particular, what is the life cycle of the product you are replacing, what is the cost of switching, and does the user recognize their pain? Darlene commented that it is "bad to be late, but really painful to be early."

Because the job of Product Management is one of managing complexity, it is often difficult to address the board. Darlene offers a few recommendations. Frame all issues in terms of financial impact, quantifying issues whenever possible. Explain what you know and how you know it (*i.e.* sources of that information). Using language such as "I know" or "I can tell you" is preferable to "I feel" or "I think". Keep the discussion at a high level and relevant to big issues. Lastly, focus on place, process, and progress. Thus, where did you start, where do you want to go, and how are you going to get there.

In summary, everything for Board of Directors nets to financial performance and decisions must be tied back to these metrics. In tough times, understanding the expected business model is essential for financial success. If your product line does not conform to the model, work to understand why and how to fix it.

Who Develops Your Market
continued from page one

Product Development vs. Market Development

Ask any senior executive today about who is responsible for developing their product and you'll get a clear answer. Depending on perspective, they will usually point to the product manager or R&D manager in charge. Those two roles typically share the ultimate responsibility for developing the right product to meet customers' urgent and pervasive needs. But ask the question about who develops the market, and you are bound to get some odd answers. Some will point to the business development team, which usually plays a key role in priming the sales pipe and securing the market's key channel relationships. Others will point to product marketing, which typically deals with injecting market requirements into the organization and launching products into the market. Finally, some organizations (typically in larger companies) may have a distinct group of market managers who are usually responsible for penetrating a specific market segment.

Develop and Time Your Market

None of these answers are quite satisfactory,

particularly if you bring discontinuous innovations to new markets and subscribe to the "Crossing The Chasm" concepts. This powerful framework, recently refined in "The Chasm Companion", clearly identifies the need to perform specific marketing tasks that are absolutely critical to achieving success in developing markets. One of its most valuable concepts is identifying the specific stage of development the market has reached and translating that into positioning, product strategy, tactical alliances, and the entire market mix. Unfortunately, many companies do not explicitly identify the need to develop and time their markets. Instead, they simply apply standard marketing techniques without tailoring them to the market phase.

As a result, they neglect to ask key questions, such as "What specific stage will the market be in when we bring our product to it?" They confuse visionary customers with pragmatists and spend significant resources and capital in unqualified trials, resulting in a zero chance of actually winning the business. In short, they pass up a rather unique opportunity to systematically align their product initiatives with

Continued on next page

Who Develops Your Market

continued from previous page

market phases and fail to anticipate and plan for the customers' buying behavior exhibited in that particular phase.

That is exactly why there is an opportunity to define an explicit role of a Market Development Manager (MDM).

Market Development Manager: Role and Responsibilities

Here is a basic way to define the MDM role and its responsibilities:

Market Development Manager

Responsible for developing the target market and achieving category dominance by guiding product, marketing, sales and alliance functions to match the specifics of the development phase.

Specific duties include:

- Perform Technology Adoption Life Cycle placement for assigned market
- Complete discontinuity and value-chain analysis
- Identify market creation, market attractiveness and penetration variables
- Develop phase-specific market strategy and

- positioning
- Validate the market strategy with customers, prospects and thought leaders
- Work with product management to define and implement the whole product
- Work with marcom to tailor a communication plan to the market phase
- Develop field engagement strategy
- Maintain vigilance over competitors' activities and their phase effectiveness
- Monitor market development and phase transitions
- Lead regular strategy review sessions with key stakeholders and cross-functional teams to insure team synchronization and a focused execution

Minimum Requirements and Qualifications:

- 10+ years marketing experience, with 5+ years in target market
- Good understanding of market's value chain and key industry players
- Solid knowledge of TALC model and phase-specific strategy development
- Proven ability to work effectively with executives and cross-functional teams, including product management, product marketing, marcom, sales and R&D

Continued on next page



Product Managers

truereq provides Product Managers with a useful tool to manage product requirements

Employees, Partners and Customers
truereq actively engages a cross-functional team in the requirements definition process



Decision Makers

truereq delivers quantifiable knowledge and insight to be used when making product decisions



Take the complexity out of requirements management. Contact us today for a demonstration of the truereq software. www.truereq.com



Managing product requirements is becoming an increasingly complex task. Product Managers face a growing set of requirement inputs. Employees, Partners and Customers require greater access to product data while at the same time increasing competition and more informed consumers are demanding better products.

truereq provides a single point of access for all product requirements data. Requirements, Status, Open Issues, Projects, Documents and Collaborative Forums are all coupled within the truereq tool.

Active participation amongst a cross-functional team leads to better decision-making. Leading analysts, management consultants and business leaders agree that successful product management requires a keen focus on product requirements and the ability to solicit input from the entire extended enterprise. truereq is a straightforward way to organize product data, provide easy access to product information and a forum that inspires active participation in the requirements definition process.

April Event with David Hickman of TIBCO Software **Turbo Charging the Sales Team**

by Greg Cohen

David Hickman delivered an engaging presentation with broad audience participation on *Turbo Charging the Sales Team* at the April 2, 2003 SVPMA meeting. David manages the ActivePortal Product Line for TIBCO Software where he is responsible for both the product management and product marketing functions. He shared many of his methods for ensuring sales success at TIBCO, which has 1800 customers, over 100 sales people, and 30 offices worldwide.

David's first recommendation was to spend time in the field with the sales force. The purpose is two fold. First, you get to know your sales force and show your commitment to their success. Second, you get direct customer feedback for which there is no substitute. Further, customers will feel valued that the product manager visited them.

David emphasized that when the sales team needs assistance, they need it now! Since he cannot always be available to help, he formed a "SWAT" team. The

team consists of members from product management and marketing, engineering, support and QA. In addition, each region gets a Product Ambassador, from presales staff, who received in-depth training on the product and assists both their region as well as others. The team holds a weekly conference call to keep everyone informed, share new leads, discuss opportunities, and review outstanding issues. Further, David established an email alias for incoming sales support requests that any team member can access, avoiding any single point of failure. Emails sent to this alias then go into an archived discussion group to create a knowledge base.

Having an open communication channel open, keeps remote teams engaged. David achieved this through frequently soliciting needs and enhancement request and providing prompt feedback. Although answers

Continued on page seven

Who Develops Your Market

continued from previous page

Fulfilling The Role vs. Position

Let's clarify one final point. The role of the Market Development Manager we've defined may or may not be fulfilled through a separate marketing position with that specific job title. Indeed, many startups or even larger firms on tight budgets may need to fulfill this role through assigning the proper responsibilities to one of the existing marketing team members. An experienced product marketing or product management professional can use an existing market development framework and tools to achieve solid results. It's worth noting, however, that being a consistently effective Market Development Manager requires specialized skills, perspective and experience. And learning through making mistakes in this key role is unacceptable. Also, a carefully chosen market development consultant with deep domain expertise in your market can fulfill this role.

Market Development in A Start-Up Environment

Systemic market development proves to be a particular challenge in many start-ups. Their inside-out approach is typically heavily technology-centric, and bringing market focus to such organizations proves to be a key critical success factor. That makes the approach to market development both challenging and extremely valuable. The best way to implement market development in such an environment is by

having the VP of Marketing assume the market development responsibilities and work through the market development strategy with the close participation of the VP of R&D, VP of Business Development and other executives.

Conclusion

Making market development an explicitly assigned role in your marketing organization is the key to a disciplined strategy development and precision execution. By applying a systemic approach to developing and managing your market, you can turn it into your company's core competency and dramatically increase your chances of capturing a market leadership position.

Alex Gordy is the President of Tornado Marketing (www.tornadomarketing.com), a market development firm helping communications companies achieve market leadership through effective early market strategies and specialized tactical support. He has developed and launched 25+ products having held senior marketing and product development roles at U.S.Robotics, 3Com and Motorola as well as several communications and wireless startups.

References

- Geoffrey A. Moore, *Crossing The Chasm*, revised edition (Harper Business, 2002)
- Paul Wierwille, *The Chasm Companion*, 1st edition (Harper Business, 2001)

Building Products Customer Want

continued from page two

Once you understand how your customers use your product and have identified areas in which you can add value for your customers, it is time to go out and find your product champions. This does not mean go and talk to your 'best' customers. Find out which of your customers, partners and employees are passionate about your product. These are likely to be the people who use your product the most and are willing to share with you how your product can be more of what they want.

An electronics manufacturer decided to focus on its core competency of manufacturing and give up its direct sales channel in favor of a distributor. One day a person at the distributor mentions to the manufacturer that forty percent of the time its products are shipped along with a product from another company. The manufacturer quickly assembled a team of employees from both companies, including the person mentioned at the distributorship, and enthusiastic customers. The result of the team's collaboration was a set of requirements that brought the company to new heights of success.

As you have seen in the example above collaboration amongst a cross-functional team of employees, partners and customers is an effective way to define product requirements. In the next section I will discuss methods to drive active participation within your extended enterprise.

'The secret of successful retailing is to give your customers what they want.' **Sam Walton, Made in America**

Engage the Entire Extended Enterprise

Businesses today are becoming more focused on their core competencies while partnering in areas that are not central to their business. Dell computers has partnered with FedEx not only to provide distribution but also warehousing and to some extent order processing. This means that Dell's customers are sometimes one, possibly two steps removed from the core processes (imagine Dell's supply-side integration challenges). Hence, it is more important than ever for companies like Dell to implement tools that will allow employees, partners and customers to participate in the requirements definition process.

Michael Hammer, the author of 'Reengineering the Corporation,' in his recent book 'The Agenda' highlights the importance of engaging the entire extended enterprise (employees, partners and customers) in what he has termed a 'Collaborative

Hub.' Jack Welch in his book 'Straight for the Gut' credits a 'Boundaryless Organization' for part of GE's success during his tenure. Management consultants, analysts and business leaders agree that developing the right products requires collaboration between suppliers, producers, distributors and customers. It is the job of the product manager to provide a forum where this collaboration can take place and use the information gained through collaboration to make product requirement decisions.

A collaborative product team must begin with an understanding of how the product aligns with the company's goals. They come armed with an understanding of their individual needs, but need to align those needs with the strengths and goals of the company. With an understanding of the company's goals and competencies this team can contribute requirements that will maximize the company and product's market opportunity.

Get senior management buy-in. Robert R. Cooper, the founder of Stage-Gate, emphasizes the importance of setting quantifiable expectation before each stage of a process and getting management buy-in at each gate. By aligning the product goals with company goals, product managers should be able to present a case to senior management for developing the product. The management team needs to be prepared to support the product through leadership directives and by providing the necessary resources to develop the product.

'Radical departures from the old ways is often precisely what's needed if you are going to come up with solutions to customer problems.' **Walt Disney**

Focus on Requirements

Requirements definition is more art than science. Once management has allocated the budget for your product you can be sure that their expectations will result in many 'must have' requirements (ten, twenty or even fifty of them) all number one in priority.

Requirement inputs come in a variety of flavors; senior management, consultants, customer contracts, sales requests, defect tracking and enhancement requests to name a few. In the sections above I illustrated the importance of soliciting input from your extended enterprise. The challenge of product managers is to gather enough knowledge and insight into product requirement decisions to be able to present a case for a given stack of requirements ranked from one to X that will meet with the broadest approval.

Continued on next page

Building Products Customer Want

continued from page two

Without the constraints of time, resources and money, developing a product requirements priority stack may not seem like much of a challenge. But every organization is subject to similar constraints and must accordingly make choices regarding requirements priority. I suggest using the 80/20 rule - product managers should search for the 20% of the features and requirements that will satisfy 80% of their customers needs.

Each member of a cross-functional team will provide you with a sample of requirements 'ranked' by his or her priority. Look for the commonalities amongst the input samples. Then, identify the top set of common requirements that meet the broadest set of customers needs. Next, develop an aggregated 'stack' of requirements that will be used to gain consensus across your product team. The agreed requirements priority stack will be the basis for your product development.

Many processes and methodologies such as Stage-Gate, PACE, Six-Sigma, DOORS and Pragmatic Theory have been created to facilitate product

management. Most companies use some combination of these approaches, many not aware they are doing so. What these processes and methodologies have in common is a focus on requirements and a system for gathering inputs.

Through a systematic process of gathering requirements from the entire extended enterprise of employees, partners and customers product managers will gain the valuable knowledge and insight necessary to make informed requirements decisions resulting in product customers want.

'Businesses can go astray by being competitor-obsessed versus customer-obsessed. You have to find out what customers want and how to give it to them.' -

Jeff Bezos to Brandweek

Jonathan has been a key player in over ten technology start-up companies including The REALocator, Phuture Inc., Flycast Communications, The Fortunecity Network, PeopleLink and Open Wireless. Mr. Miller presently serves as CEO of Truereq, Inc. a leader in Product Lifecycle Management software (www.truereq.com). Jonathan attended The Ohio State University where he studied finance, actuarial science and computer science. Mr. Miller may be reached at jonathan@truereq.com

April Event with David Hickman

continued from page five

should not be sugarcoated, let the team know they are making a difference. All requests are stored in a Siebel CRM (customer relationship management) system, making it easy to track requests back to individuals or customers for follow-up. Lastly, give credit to contributors.

One timesaver is to help sales help themselves. Sales materials are maintained on the corporate portal. The portal contains a document repository, discussion groups, a "tips and tricks" section, an area to upload presentations and projects for re-use, demos, collateral, competitive information, and reference accounts. Getting this to work requires a change in behavior for sales, so you may have to direct them to the portal even when you know the answer to their question. A Master RFP (request for proposal) document is updated quarterly by Product Management and Engineering to provide answers to the most frequently asked RFP questions.

Another area of success has been priming the partnering pump. David organizes at a regional level "meet and greets" between the local sales force and a handful of select regional partner teams. The meeting focuses on opportunity recognition (e.g. Bring

TIBCO into the deal if the customer mentions "portal", bring partner X in if they mention "document management") and relationship building. Secondly the compensation plan must be win/win to motivate both parties. This might require paying a higher combined commission. Most importantly, the arrangement and compensation plan must be simple to articulate and administer.

Sales boot camp is a favorite for improving sales performance. These are two-day seminars to train the sales force and the solution consultants. To ensure high participation, conduct these early in the quarter and travel to each region. Sales receive a shorter course focused on messaging, customer targeting, and the competition. The training extends for the solution consultants to include a hands-on lab. Avoid PowerPoint overdose and repeat the boot camp as needed based on product introductions and the number of new hires.

Lastly, make demos easy and accessible. David now has a hosted demo that may be accessed by any sales member from anywhere in the world. There is also a library of recorded demos that can be reused. By creating more robust demos, Tibco has reduced the

Continued on page eleven

Debugging the User Code

Part II: Integrating Users into Product Development

by Steve August

This three part series explores the impact and process of incorporating users into the product design/development process. In the first article of this series, we examined the business case for user oriented product development. In Part II, we examine what user testing looks like during the different stages of development. Part III will offer advice and resources helpful to implementing user oriented design/development, including information about cost and budgeting.

A new product rises from the creative imagination and technical expertise of a person or a team. The product may arise from an observed need, a new technology, or a new application of an existing technology. Many times it will be created in some sort of isolation perhaps in the fabled garage or maybe in a team that has been given the independence to create something new.

More often than not, the product's intended users are conspicuously absent in the creation process. While leaving the user perspective out of the initial design process can allow for unfettered creativity, it can lead to disaster when it comes time to create a business around the product. From the earliest possible moment, it is necessary to understand if the product's intended users actually find the product useful enough to spend money on it.

This article will examine how and when to bring the user into the product development process. It will first discuss the kinds of information user testing needs to obtain and at what point user testing needs to be integrated into the development process. Finally, the article will examine what user testing looks like during different phases of product development.

Useful and usable

In the end, products and software that were faithful to meeting the needs of those that would use it will be useful. And in order to be useful, they will have to be usable so as not to impede their usefulness.

J.O. Wobbrock, Usable vs Useful

When talking about user testing or user experience, the most common assumption is that the product will be tested to make it more *usable* for its intended users. However, user testing also seeks to answer another important question, namely whether a product is actually *useful* to its intended market.

A product's usefulness determines its value to customers. A product's usability determines how easily customers can utilize the value of the product.

It is possible to create an eminently usable product that fails because it is of little use to its users, and conversely it is possible to create a very useful product that doesn't succeed because it is too hard to use. To succeed, user testing must test both the useful and the usable. Depending on the phase of development, the focus of user testing changes between useful and usable.

Building users into the process

Seeking customer input and feedback is a vital and ongoing activity throughout development, both to ensure that the product is right and also to speed development towards a correctly defined target.

Robert G. Cooper, *Winning at New Products*, Second Edition

Another important point is that building products around the user experience means that user testing must be built in as part of the product development process. In other words, it needs to consist of more than one or two quick hits of internal or external usability testing. User oriented development means that testing with users needs to be as much a part of the process as debugging code is in software development. Doing smaller, quicker and somewhat less formal testing consistently at all key points of the process will pay much greater dividends than a bigger, more formal one time effort.

The main benefit of properly integrating user testing into development is that it provides the project team with consistent feedback on whether the product is hitting the target. This allows the team to avoid unnecessary rework, and deliver the right product on time and on budget.

The product development process has been divided into many different phases and stages by many different authors. However, for the sake of this article, I am going to divide the process into to three main phases: Concept, Development and Release/lifecycle. The Concept phase contains the genesis of the product, when the idea for the product begins to take its initial shape. Development is the process of taking the initial concept from the whiteboard and building it out so that it is ready for release. Release and lifecycle pertains to the product's release to market and subsequent revisions and releases. The more the user experience is considered in each of these phases, the better chance the product will achieve success.

Continued on next page

Debugging User Code continued from previous page

Concept Divining user needs and wants

Whenever you gather requirements, the challenge is to gather the real requirements. Sometimes discovering the real requirements calls for digging beyond the surface requirements.

Steve McConnell, Rapid Development

During the concept phase, it is crucial that a product's usefulness be tested and understood. Without a fundamental understanding of the value of a product for its intended users, product development is built on assumptions that amount to educated guesses, at best. Very rarely do the assumptions of product developers match the actual needs of the intended users, and without a strong grasp of those needs the best efforts of the development team will most likely be spent on a product that users will not embrace.

So, how do you find out if something is useful to people? The most obvious and direct way is simply to ask them, and certainly this is an important first step in understanding user needs. There are several techniques to directly gather requirements from users: conducting focus groups, conducting surveys, and, of course, directly interviewing individuals.

Talking with people in order to understand their work and business problems can elicit good information, but it can also generate a puzzling list of requirements that can sometimes be contradictory and misleading. This is due to the fact that, by and large, people are consumed with their day-to-day tasks and cannot often verbalize or imagine a solution that would truly make their lives easier.

The most powerful technique for understanding user needs and desires is carefully observing them in their environment and participating in their world. This kind of user research is called ethnography, and it is especially adept at providing context and clarity to user requirements. By understanding business tasks from the user point of view, and looking for patterns and opportunities to significantly improve customers' lives, ethnography is very effective in providing developers the necessary information to create useful products.

Many useful and successful products had their genesis in ethnographic techniques: VisiCalc, the original spreadsheet, WordPerfect, one of the very first word processors, and the Zip drive were created by product developers observing people's work practices, and then using their creative and technical expertise to craft innovative solutions.

Development Keeping users in the loop

Maintain regular customer contact to keep yourselves moving forward.

Hugh Beyer & Karen Holtzblatt, Contextual Design

Taking a concept or initial design from the whiteboard to release is an iterative process the product evolves over successive rounds of development marked by specific milestones. As each iteration evolves, it is important to keep users in the loop to ensure the product is meeting or surpassing expectations. Successive rounds of testing will ferret out issues and problems as they arise and keep development surprises which generally lead to expensive rework - to a minimum.

User testing during development evolves as the product moves from concept to release. As development progresses, user testing begins to focus on making the product usable as well as useful.

In the early stages, as the team is assimilating the information from the concept phase testing, a good approach is to conduct user testing with simple paper prototypes that convey the intended functionality and structure of the product. Paper prototypes allow users to impact a design at the most useful time the early stages of development before the design has been locked down. Testing with paper give both the users and the project team a sense of freedom to change and experiment that is not possible further down the road. Many times major design flaws and decisions can be addressed through initial rounds of testing with paper prototypes.

As development continues and successive iterations of the product become more sophisticated, consistent user testing will uncover performance issues and usability issues as they arise, as well as ensure that the design is providing the intended functionality.

Frequent usability testing with functional prototypes will provide a steady stream of feedback to the project team. This feedback acts as the final arbiter on the many design decisions that need to be made as the product progresses, and serves to keep the project team focused on the target. If all goes well, the end result is a product that customers find both highly useful and extremely usable.

Release and life cycle

Once a product is released, essentially the process starts all over again. The big difference is that user information will funnel back to the product team through avenues other than direct user testing. Support calls and logs, feature requests, and information gathered by the sales force provide a great deal of data to work with as the product team begins the task of creating the next release. If this data is properly harnessed, it can provide a road

Continued on page eleven

BOOK REVIEW

***Open Innovation* by Henry Chesbrough**

by Rich Mironov

I've had the chance to read Henry Chesbrough's new book, "*Open Innovation: the New Imperative for Creating and Profiting from Technology*." It's an insightful mix of practice and theory about how big technology companies are shifting their thinking about R&D -- and the opportunities this creates for little companies.

Following are a synopsis, a brief author bio, and two lessons I found especially important for start-ups.

A Strategic Problem

"Open Innovation" starts by posing a question that many Valley veterans have idly pondered, but few have answered: how come the scientists at Xerox PARC invented so many groundbreaking technologies that Xerox never made money on?

For those who weren't here yet, Xerox PARC was the source of many seminal technology inventions including the graphical user interface, Ethernet, bit-mapped screens, font rendering, document management, web searching and online conferencing. It was also the starting point for companies that really mattered: 3COM, VLSI, GRiD, Metaphor, Komag, SynOptics, Documentum, ParcPlace, PlaceWare, and more. Yet Xerox hardly profited from this burst of innovation. Rather than writing PARC off as a badly managed incubator, we can guess that something really important -- and systematic -- was happening.

With Xerox's cooperation and several years of research interviews, Chesbrough has identified the traditional R&D model that drove this result. Xerox was coming out of an era when world-class research was limited to a few very large companies, each exploring their own narrow area of expertise. Bell Labs, GE, DuPont, and IBM were the models for their day. Each pioneered a "closed innovation" model where focused R&D was a way to dominate a technical niche. In a world with few outside experts, corporate giants invented and integrated the new technologies they needed for captive product lines.

Old World, New World

Chesbrough has mapped the shift to an "open innovation" world, where technical expertise exists in many places and technologists race to get to market first. In this world of Apache, MySQL and RFCs, big companies can't warehouse their ideas and hope to unshelve them years later. VC-backed start-ups will eat their lunch.

The rest of the book explores various R&D strategies in an "open innovation" world. In this new world, companies need to license **in** IP to keep pace with their competition. Likewise, they need to license **out** strategic IP before alternative technologies make theirs worthless. Separate chapters are devoted to how IBM, Intel and Lucent are approaching this new reality. (*Hint: this book grows out of a decade of Chesbrough's real-world consulting to large technology players. It presents real strategic options as well as framework/theory.*)

First-Hand Experience

In "*The Innovator's Dilemma*," Clayton Christensen identified the disk drive industry as one that academics study because it has undergone such rapid, dynamic, destructive change. (*The analogy is with fruit flies: geneticists study flies rather than humans because they can see whole generations live and die in a single day.*) Christensen tallied only three firms that were able to survive a crossover to disruptive new disk technologies from 1965 to 1995, while 80 other died. Not coincidentally, Chesbrough was the VP Marketing & Business Development at one of those three firms (Quantum's Plus Development spin-out) that survived the periodic bloodletting to become the worldwide volume producer of its time.

Said another way, Hank Chesbrough is a Silicon Valley veteran. Before dropping out to get a Ph.D. at Berkeley and teach at Harvard Business School, he spent ten years on the front lines of innovation and R&D. Thus, he's able to answer the fundamental objection of self-important MBA students: that their professor "doesn't know how things work in the real world." Everything about this book is a careful marriage of practical observation and theoretical framework.

Why Do I Care?

While the book is framed from a big company's point of view, it highlights the opportunities and risks for start-ups as well. In the "open innovation" world, small companies have a real chance to create value. Two things that struck me:

Technologies have no defined value outside a business model. R&D efforts to assign *a priori* value

Continued on next page

Book Review continued from previous page

to inventions (without a customer use case) are bound to fail. And, since most inventions fail to fit the business model of the funding organization, a true market exploration must be done to find out if each new technology is valuable.

Start-ups are an ideal vehicle for this discovery process. They are small, hungry, quick to learn and not limited to the parent company's customers. Chesbrough shows repeatedly how start-ups and spin-outs struggled to locate new and surprising markets for their technology. Our early guesses for applying technologies are usually wrong, and forcing a small team to locate real customers is the only test of value.

Big companies want to avoid "false positives" while start-ups search for "false negatives." LargeCorp managers never want to be associated with a flop, so set up elaborate gating processes to avoid "false positives" -- those projects that fail after a sizeable investment. Many start-ups are built around dreams of the "false negative" -- a niche or technology that big companies have rejected too soon or failed to nurture. Among the many bets on "false negatives," a few tiny companies create huge successes and grow into LargeCorps.

Knowing how the big boys think -- and what motivates them -- helps us Lilliputians plan for the future.

ON THE MOVE

John Harrison has recently moved to Symantec, where he is Group Product Manager, Intrusion Detection. Most recently, John was a product line manager at Imperito (a VPN firm), and earlier at 3COM, National Semiconductor and Apple. Separately, John is a new a dad.

If you or a product manager you know has recently been promoted or started a new job, please email the SVPMA at OnTheMove@svpma.org.

As we expand the newsletter, the SVPMA is looking for contributing authors. If you have an idea for an article or would like to be part of the editorial staff, please email newsletter@svpma.org

Debugging User Code continued from page nine

map for the project team developing the next release.

While the user data may have different sources, the process of building the next revision of a product takes the same course as building the first version. The process starts by focusing on user needs and desires, understanding user workflow and obstacles to develop a set of requirements. Again it may be necessary and desirable to spend time observing users with the product to place feature requests in context.

As the release moves through successive iterations from initial design to release, usability testing with increasingly sophisticated prototypes will again allow the project team to ensure that the delivered product will hit the target.

By integrating user-testing into each phase of the product development process, companies can better ensure that they create a product that customers find both useful and usable. In the end, that is the only sure way to deliver a product that people will want and, more importantly, a product that people will buy.

Steve August is the Director of Business Development for KDA Research (www.kdaresearch.com), a San Francisco based consulting company that specializes in integrating consumer and user experience into products and communications. He can be reached at steve@kdaresearch.com.

April Event with David Hickman

continued from page seven

number of Proof of Concepts by 40%, reducing sales cycle time and cost.

The product manager is ultimately responsible for the business success of his or her product. By implementing the techniques above, you can make a positive impact on sales output and create your own turbo charged sales team.

LETTER TO THE EDITOR

Do you have a issue you would like to share with the membership, feedback on a presentation or article, or suggestions for the newsletter? Let us know. Please email all comments to letters@svpma.org.