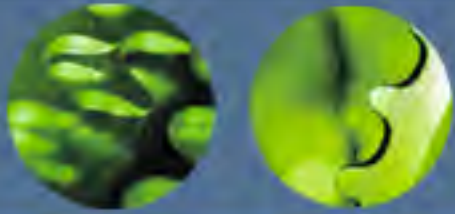




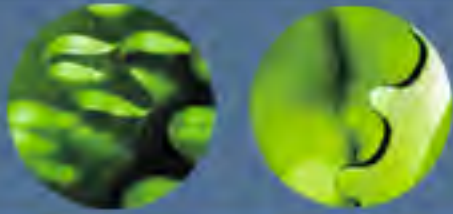
Product Design: Bridging the Gap between Management and Development

Sean Van Tyne
STC San Diego Chapter
January 10, 2007



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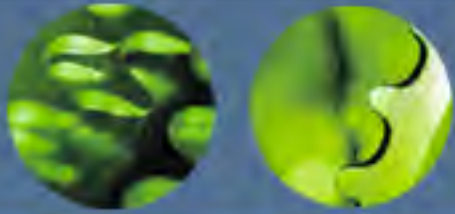


About the Speaker

Sean Van Tyne is CEO and Principal Consultant of Van Tyne Consulting, Inc.

For five years prior to founding **Van Tyne Consulting**, Sean was the Director of Product Design, Product Management at **Mitchell International, Inc.**, a data, software and eBusiness solutions provider for the automotive insurance, collision repair, medical claims and glass replacement industries. At Mitchell, Sean oversaw the User Experience and Technical Communication departments. Prior to Mitchell, Sean was the Director of Product Design at **Medibuy**, a global B2B marketplace provider for healthcare buyers and sellers.

Sean is the current President of the **UX SIG** (www.uxsig.org); The Founder and Chairman of the **UX BIG** and on the board of the **Software Management BIG** and **Product Management BIG** for **SDSIC** (www.sdsic.org); on the executive board of the Local Ambassador Committee for **UXnet** (www.uxnet.org); and Past President and advisor to the San Diego Chapters of **Computer-Human Interaction** and of **Usability Professional Association**.

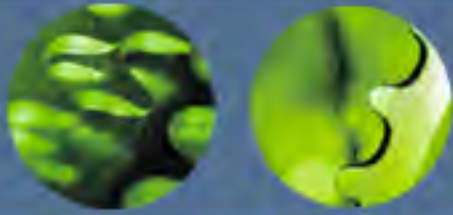


The Article

Product Design: Bridging the Gap between Product Management & Development

By Sean Van Tyne, **The Pragmatic Marketer**,
Volume 5, Issue 1, 2007

Pragmatic Marketing provides a market-driven
framework for technology product management



Introduction

Product Management

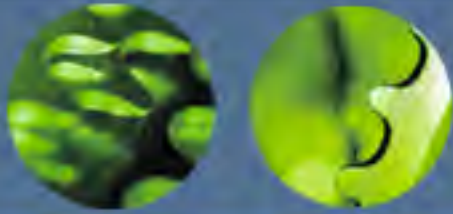
- quantifies the problems, writes requirements, and validates the solution
- focused on the market and the customers' business needs

Product Design

- analyzes the requirements, designs the solution, and writes specifications
- focused on the customers' end-user needs and their interaction with the technology

Product Development

- builds the solution, tests and fixes bugs, and writes documentation
- focused on the customers' technology needs



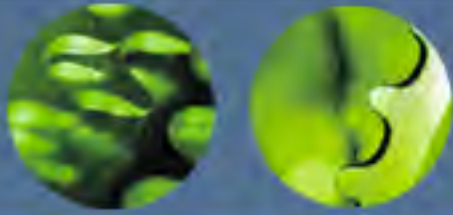
Introduction

Customer

- Decides whether or not to purchase the solution
- Upper or executive management interested in finding the best way to bring efficiency to their operation
- Looking at the overall workflow of their organization and how specific software solutions might improve it

End-User

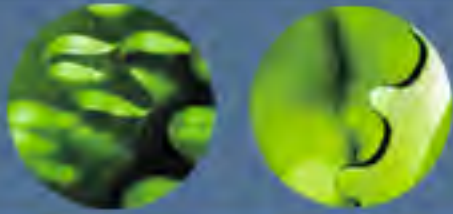
- Uses the solution
- A company employee more interested in completing their daily assignments
- Emphasize the software's ease-of-use



Identify problems & quantify opportunities

Develop an understanding of the market, customers, and the customers' end-users

- Review target market segmentation and demographic data necessary to establish the design direction
- Interview stakeholders and customers in order to gain insight into the product domain
- Survey, interview, and observe the customers' end-users to understand workflow and tasks



Identify problems & quantify opportunities

Personas

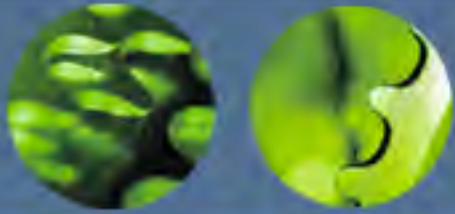
- Stand-in for a unique group of people who share common goals
- Fictional representatives—archetypes based on the users' behaviors, attitudes, and goals

Scenarios

- Short stories that describe a user's interaction with the solution
- Elaborate the business cases
- Inform the user interface design

Use Cases

- A single case of use—user interaction with the solution—that is well-defined, and meaningful from the user's perspective
- More detailed than scenarios—more systematic and structured—and define the tasks and expected outcomes
- Understanding user needs and guiding user interface design
- Satisfy functional requirements for Development



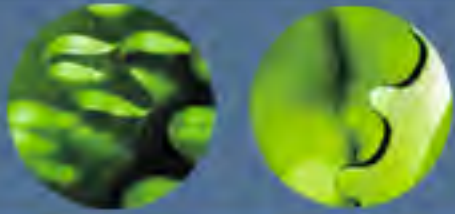
Writing requirements & validating solutions

Product Management writes requirements that identify the problems in the marketplace and quantifies opportunities for their solutions

Product Design develops prototypes that Product Management use to elicit feedback from customers to validate the solutions

Wireframes

- Elicit feedback on conceptual user interface designs
- Visual guide to the layout and placement of design elements in the interface design
- Define the information grouping and hierarchy
- Ensure design consistency throughout the application



Writing requirements & validating solutions

Writing the requirements and validating the solutions is an iterative process

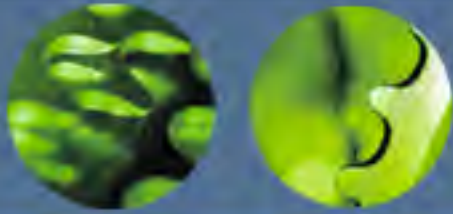
- New insights in validating the solutions requires the requirements to be updated
- Updated requirements require more validation
- This process continues until the requirements are adequately validated



Analyze the requirements & design the solution

Product Design conceptualizes a solution to the problems identified in the requirements

- UI design prototypes are reviewed with customers to validate that the workflow meets their business needs and with customers' end-users to ensure that the tasks are easy to complete
- Insight from the analysis and design can cause some revisions and/or refinement to the initial requirements
- Design and develop some or all of the presentation layer components for Development



Write the specification & build the solution

The UI specification along with Product Management's requirements should communicate to Development **who we are building our solution for** and **what problems we are solving** for our market, customers, and end-users

- **Product Management** writes requirements that identify the problems in **the marketplace** and quantifies opportunities for their solutions
- **Product Design** write specification of **the user experience** - specifying the user behavior, branding, and common look-and-feel
- **Development** writes specifications for **the system**



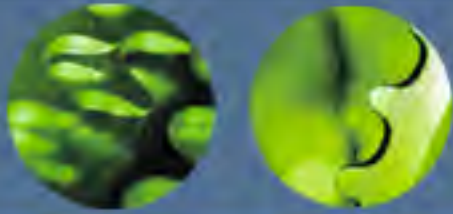
Write the specification & build the solution

Usability Evaluation with Customers' end-users

- A prototype should be evaluated with the customers' end-users for usability issues—effectiveness, efficiency, and satisfaction—prior to final specification
- Usability evaluation and UI specification should be completed in the first phase of development

Product Design partners with Development in the construction of the UI and presentation layer

- Technology issues may require revisions to the presentation layer's user interface
- Product Design and Development partner to determine the best approach on a case-by-case basis



Write the specification & build the solution

Development tests and fixes bugs in the final phases of construction

- **Product Design** reviews the UI design in the development testing environment to ensure that the design follows the UI specification and may request changes
- These UI change requests could be informal or formal depending on the size of the team and the company's software development process
- Depending on the relationship of the UI Designers and UI Developers, **Product Design** works with **Development** to find the best solutions to the fixes concerning the user experience and interface design

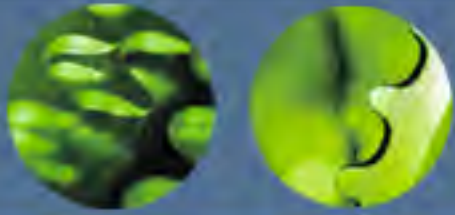


Conclusion

Product Design works with Product Management and Development throughout the product lifecycle

Product Design elaborates on the solution that Product Management provides for Development to build

Product Design partners with Product Management early in the product lifecycle to quantify, analyze, and validate solutions, and partners with Development to design, build, and test the solution



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