About Products and Product Development

UW CSE 403

Skip Walter
CEO
Attenex Corporation
November 22, 2002
Gaining Experience

Where’d you get your good judgement?
From my experience.

Where’d you get your experience from?
From my bad judgement.
• On Models:
  – All models are false.
  – However, some are useful.

• “Why should we look to the past in order to prepare for the future? Because there is nowhere else to look.” James Burke, Connections

• “A man is known by the company he organizes.” Ambrose Bierce
Outline

• Context of a Product
• Technology Adoption Lifecycle Curve
• Whole Product Thinking
• Reverse Product Design
• r2DNA – recombinant reflective Digital Network Assets
But First a Story

• First meeting after my promotion from product development manager for All-IN-1 to Director of Office Automation Products:
  – US Group Vice President:
    • What business are we in?
    • Who is our customer?
    • Why do our customers value what we do?
    • What products do we offer?
  • Huh?
The Simple Questions

• What is a product?
• What is a project?
• What is a prototype?
• What is a customer?
• Deming’s Five Whys?
A Product has a Context

- Economy – growing or shrinking?
- Industry – who are the leaders?
- Company – core or context?
- Department – revenue or expense?

And My Way!
The Mind of a Product Creator

• See a need in the world of real users.
• Capability. Ability to pull resources together.
• Viability. Ability to keep resources together.
• Desirability. Ability to find someone willing to pay for the product.
• Energy. Ability to keep going when no one “gets” your wonderful idea.
The Four Questions

• What are we trying to create?
• How will we know that we’ve created it?
• What resources do we have to get started now?
• What other opportunities does this lead to?
Influencers, Purchasers, Users

• Marketing of Colleges Story
• Customer Does Not Parse
• Walter’s Second Law:
  – Words mean something but rarely the same thing to different people.
• Distinctions of Customer
  – Influencer
  – Purchaser
  – User
Technology Adoption Life Cycle

- **Visionaries**
  - Get ahead of the herd!
- **Pragmatists**
  - Stick with the herd!
- **Techies**
  - Try it!
- **Innovators**
- **Early Adopters**
- **Early Majority**
- **Late Majority**
- **Laggards**
- **Conservatives**
  - Hold on!
- **Skeptics**
  - No way!

Pragmatists create the dynamics of high-tech market development.
Market Development Model

- **Early Market**
- **Chasm**
- **Bowling Alley**
- **Main Street**
- **Tornado**
- **Total Assimilation**
### Crossing the Chasm

- **The Problem**
  - 80% of many solutions—100% of none
  - Pragmatists won't buy 80% solutions

- **Conventional solution (leading to failure)**
  - Committing to the most common enhancement requests
  - Never *finishing* any one customer's wish-list

- **The Correct solution (leading to success)**
  - Focus on a single customer segment and build whole product for that segment
  - Use experience and product to move to similar segments
The Whole Product Model

- Potential Product
- Augmented Product
- Expected Product
- Generic Product
Whole Product Concept

- **Generic** - what a company actually delivers to a customer
- **Expected** - what activity the user hopes the product will benefit
- **Augmented** - who else complements the generic product
- **Potential** - what are ways and directions that the product can be further enhanced.
Amazon.Com Example

- **Generic** - Books search and database, CD search and database, Video search and database, Recommended Books, Book Reviews, Book ordering and delivery, Amazon Associates, Customer Database, etc.
- **Augmented** - Amazon Associates, Multi-media Computers, ISPs, Browsers, RealNetworks, Book Distributors
- **Potential** - Digital Book Ordering and Delivery, Meta Book Commentaries, “People like me” Communities
Innovation Strategies

User Activities, Needs & Desires

Generic

Expected

Augmented

Features & Functions

Potential

Where does technology and an expanded understanding of user needs lead us?
Reverse Product Design

• Traditional Process – Technology Centered Design
  – Innovation (R&D)
  – Story (Marketing)
  – Activity (Sales, Service and Support)

• Reverse Product Design – start with the human being
  – Activity
  – Story for Understanding
  – Innovation
  – Story for Persuasion
r2DNA

• Recombinant reflective Digital Network Assets
• r2DNA as a brainstorming tool
  – Identify the Digital Assets
  – In what ways can the Digital Assets be recombined
  – What other Digital Network Assets can I network my Digital Assets to
  – For a given user, reflect on the pattern of usage to determine higher order intents or goals on the part of the influencers, purchasers and users
• And a few simple rules
  – One rule generates
  – One rule reduces
  – Another maintains – tendency to persist
Digital Assets at Amazon.com

- Order History
- Book Rankings
- Book Info
- Book Reviews
- Customized Topics
- Cover Images
- Demographic Info
Reflection in Product Design

Reflection

*Model 1*

Values, Beliefs, Theories → Actions → Consequences

*Model 2*

Values, Beliefs, Theories → Actions → Consequences
And a few simple rules - BOIDS

- And a few simple rules
  - One rule generates
  - One rule reduces
  - Another maintains – tendency to persist
Objective Functions

• When we are evaluating product proposals there are really only three generic categories
  – how will your product:
    – Increase revenue
    – Decrease expenses
    – Decrease time

• For our company
• For our customers
The Slywotzky Imperatives

• **What matters is:**
  – Moving from burdening talent with low-value work to gaining high talent leverage;
  – Moving from getting information in lag time to getting it in real time;
  – Moving from guessing what customers want to knowing their needs.
About Products and Product Development

UW CSE 403

Skip Walter
CEO
Attenex Corporation
Mail: skip@attenex.com
Phone: 206-386-5844