

# Good to Great: Achieving Product Excellence in Web 2.0

Dan Olsen  
CEO & Founder, YourVersion

Web 2.0 Expo New York  
Sep 18, 2008

# Overview

---

- Achieving Product Excellence
  - Creating Customer Value
  - Product Management
  - Maximizing ROI on Development Resources
- User Interface (UI) Design
- Optimizing the Equation of Your Business

# My Background

- Education
  - BS, Electrical Engineering, Northwestern
  - MS, Industrial Engineering, Virginia Tech
  - MBA, Stanford
  - PHP, MySQL, JavaScript, XHTML, CSS, UI design
- 17 years of Product Management Experience
  - Managed submarine design for 5 years
  - 5 years at Intuit, led Quicken Product Management
  - Led Product Management at Friendster
  - Olsen Solutions LLC, PM consultant for start-ups
  - CEO & Founder of YourVersion, Social Discovery start-up

# Who Are You?

- By show of hands, how many of you are
  - Product Managers
  - Marketers
  - Other Business Roles
  - Designers
  - Developers
  - Other Technical Roles
- Company size
  - Early stage
  - Middle stage
  - Later stage / mature

# What makes a Product Great?

Great  
Product  
=  
Great  
Value to  
Customers!



# Creating Customer Value

# How do you Create Customer Value?

---

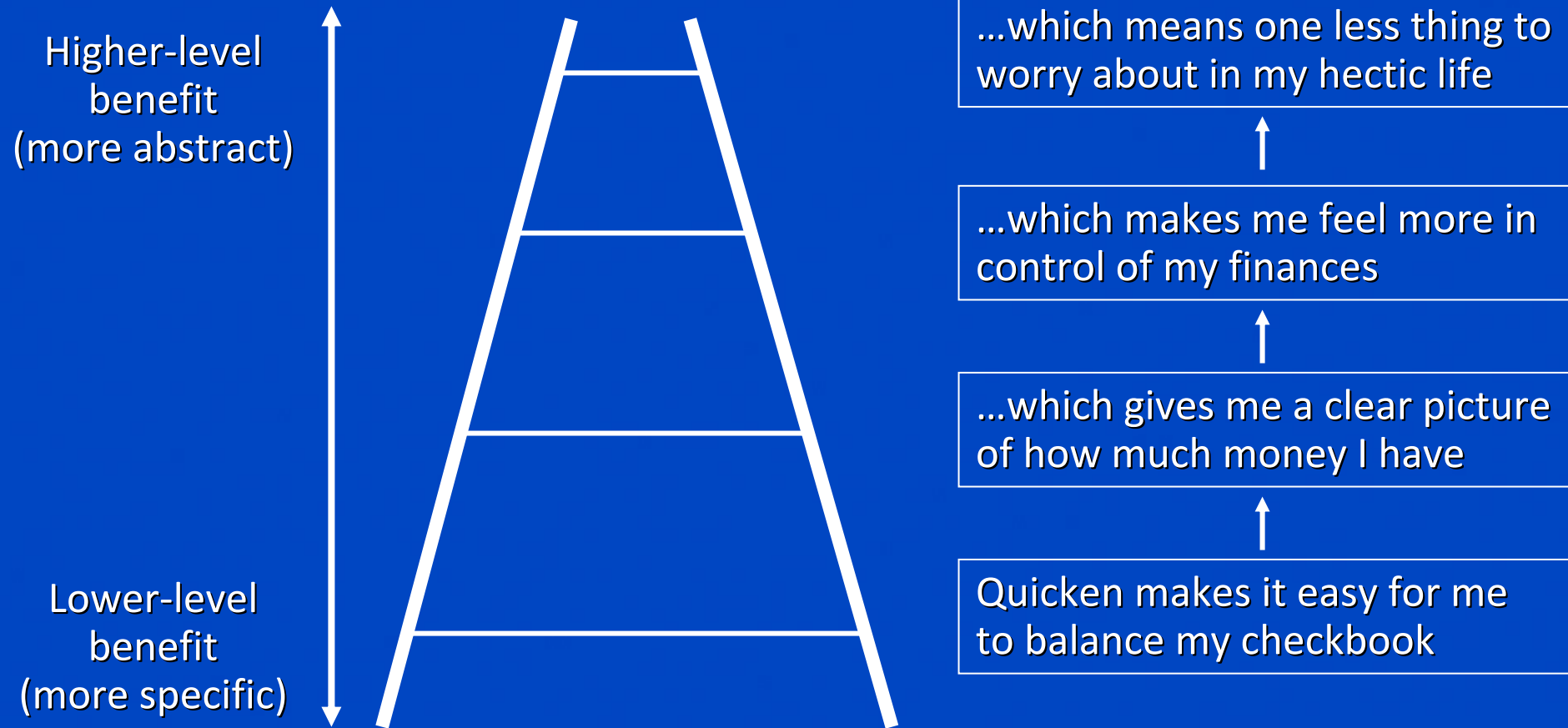
By offering a product that:

- Provides benefits to customers
  - Fulfills customers' needs
  - Solves customers' problem
- Is easy to use
- At a good price
  - Even “free” products have cost to user: time and attention, which is limited
- Is better than other alternatives

# Types of Customer Benefits

- Money
  - Save money (e.g., VOIP software)
  - Make more money (e.g., affiliate programs)
- Time savings / convenience
  - Finding desired information (e.g., search engines)
  - Booking travel (e.g., travel sites)
  - Communication (e.g., instant messaging)
- Emotional
  - Control (e.g., Quicken)
  - Feeling informed (e.g., news sites)
  - Confidence / security (e.g., anti-virus software)
  - Enjoyment / entertainment (e.g., YouTube)
  - Self-expression (e.g., Facebook)
  - Status

# The Customer Benefits “Ladder”



# Olsen's Hierarchy of Web User Needs (adapted from Maslow)

## Customer's Perspective

How compelling and easy to use is the functionality?

Does the functionality work?

Is the site fast enough?

Is the site up when I want to use it?

## What does it mean to us?

Usability & Design

Feature Set

Absence of Bugs

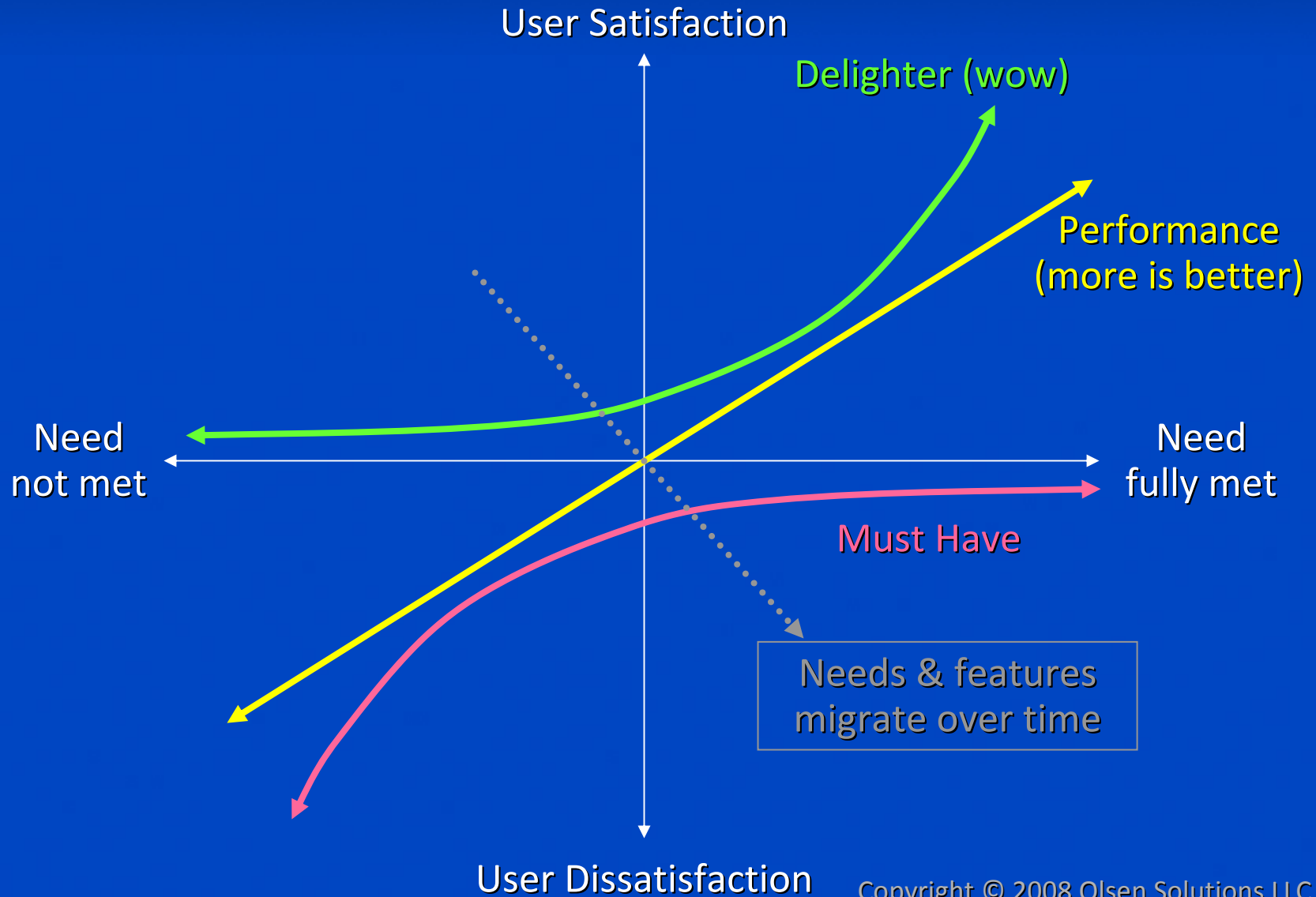
Page Load Time

Uptime

Increasing  
Satisfaction

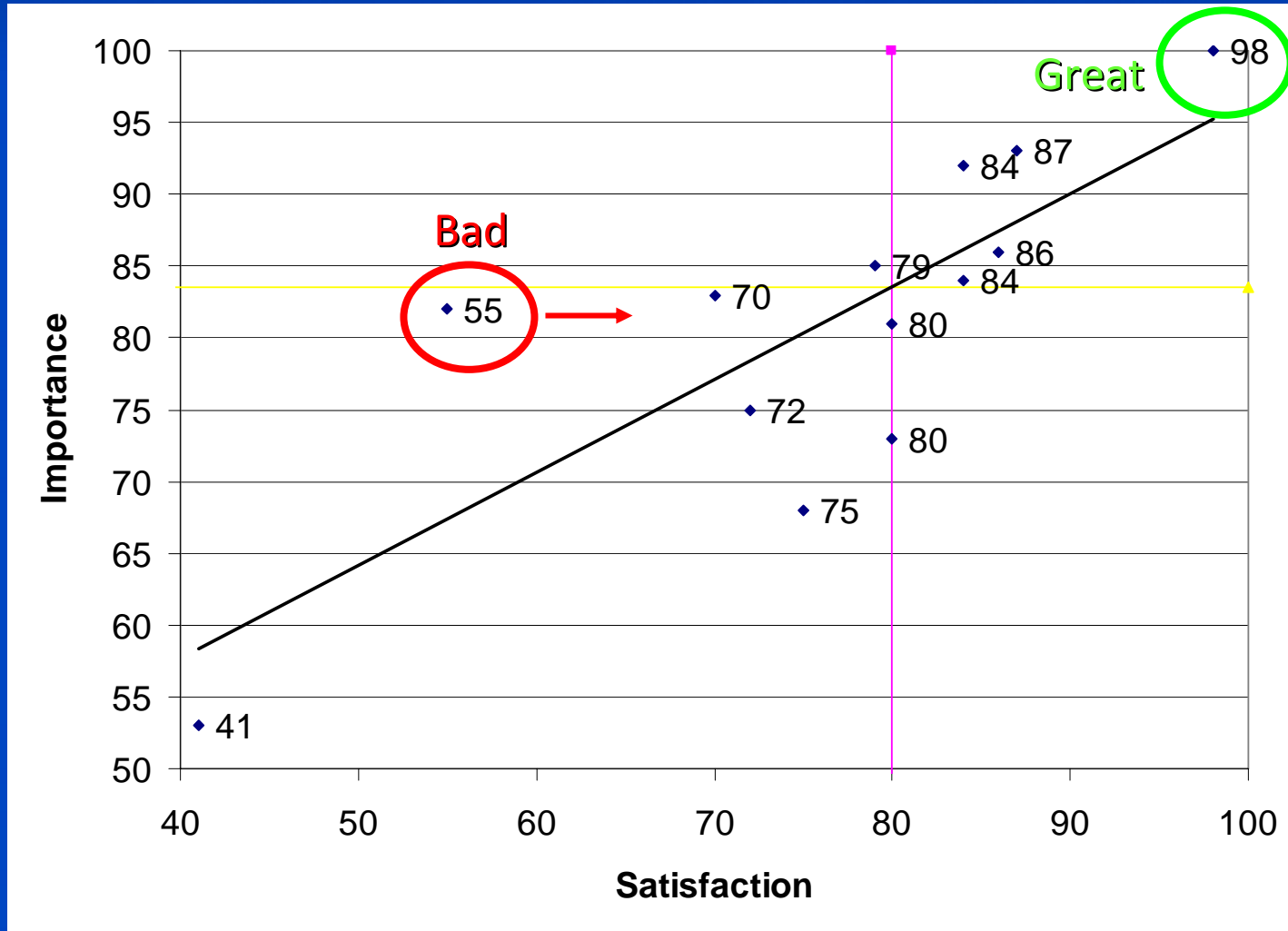
Decreasing  
Dissatisfaction

# Kano Model: User Needs & Satisfaction



# Importance vs. Satisfaction

## Ask Users to Rate for Each Feature



Recommended reading: "What Customers Want" by Anthony Ulwick

# How to Elicit User Needs & Problems

- Need to understand your customers
  - Talk to them
  - Ask them what they like and don't like
  - Observe their behavior
- How can you do this with millions of customers?
  - Quantitative research (i.e., surveys)
  - Site analytics and usage metrics
- Still need qualitative input to hone judgement
  - Customer suggestions, support emails/calls
  - Best tool: informal, 1-on-1 usability sessions

# Product Management

# A Product Manager by any Other Name Would Smell as Sweet

- Product managers are sometimes called
  - Product marketing manager
  - Program manager
  - Project manager
- Label and definition of role can vary
  - Based on industry or company
  - Based on B2C (consumer) vs. B2B (enterprise)
  - Based on stage of company
- Can be area of responsibility vs. actual position

# Product Management is Critical Link in Value Creation

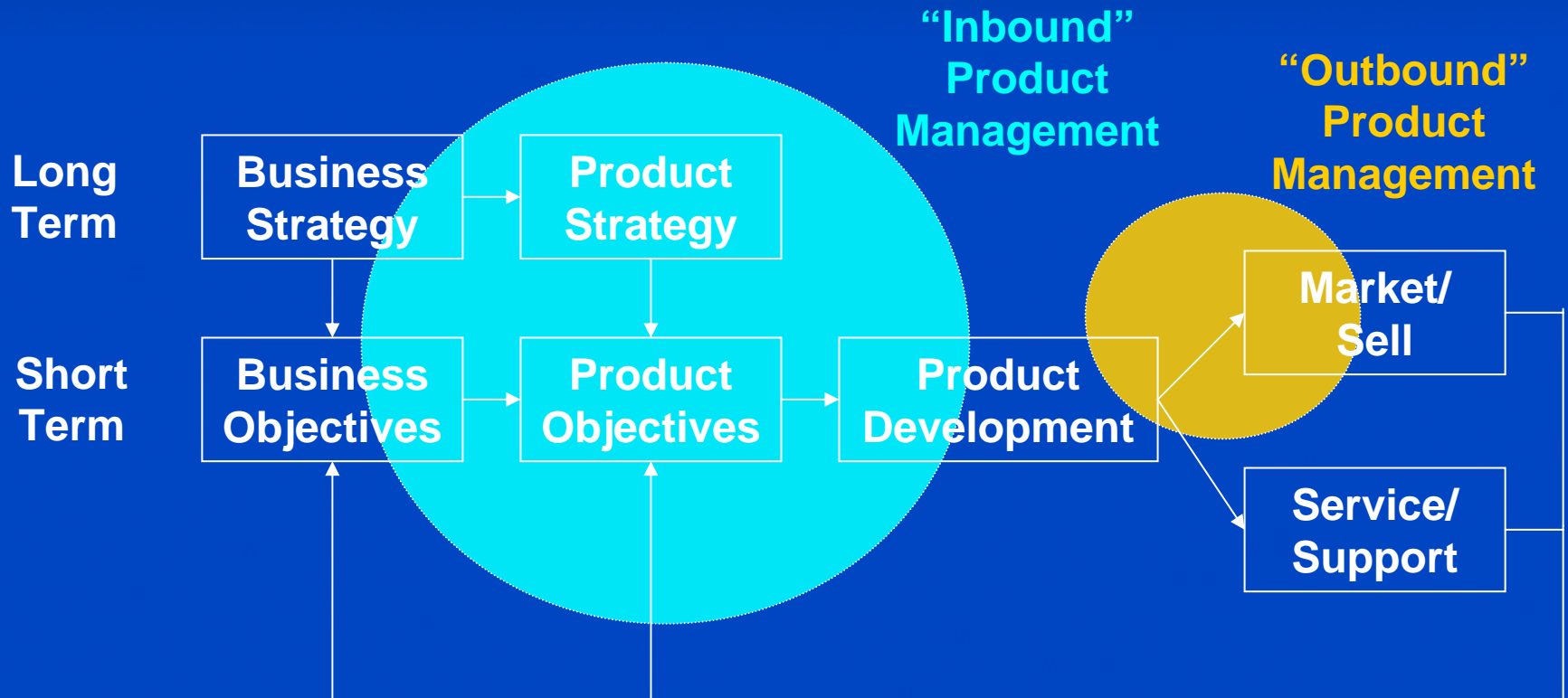
## Market

- Current customers
- Prospective customers
- Competitors

## Product Management

## Development Team

# A Process View of Product Management



# PM's Job: A Successful Product

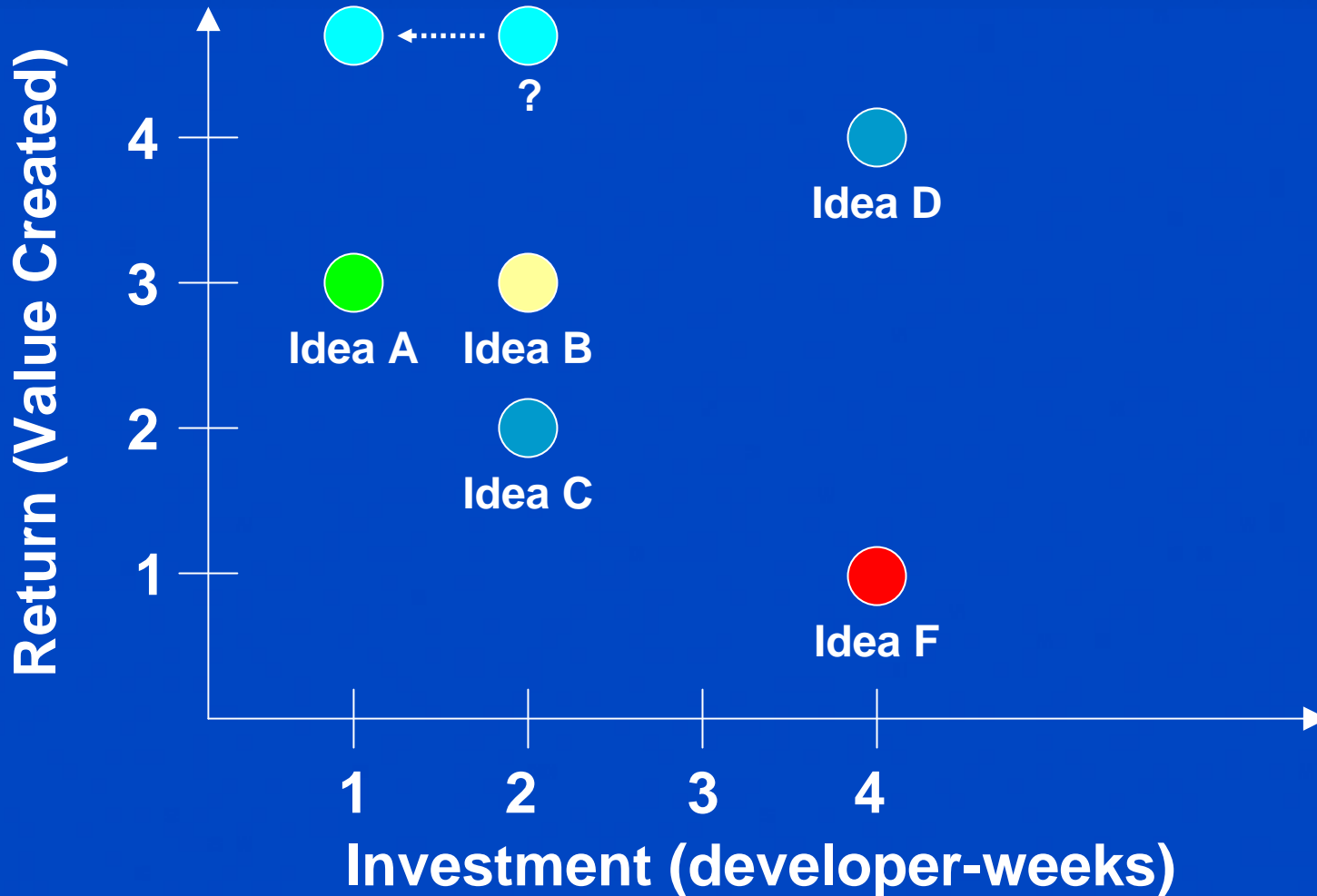
- Know market and customer better than anyone else
- Translate business objectives and customer needs into product requirements
- Be the clearinghouse for all product ideas
- Identify, plan & prioritize product ideas to maximize ROI on engineering resources
- Work with team to design and build a great product
- Evangelize product within and outside the company
- Keep the product team motivated

# Maximizing ROI on Development Resources

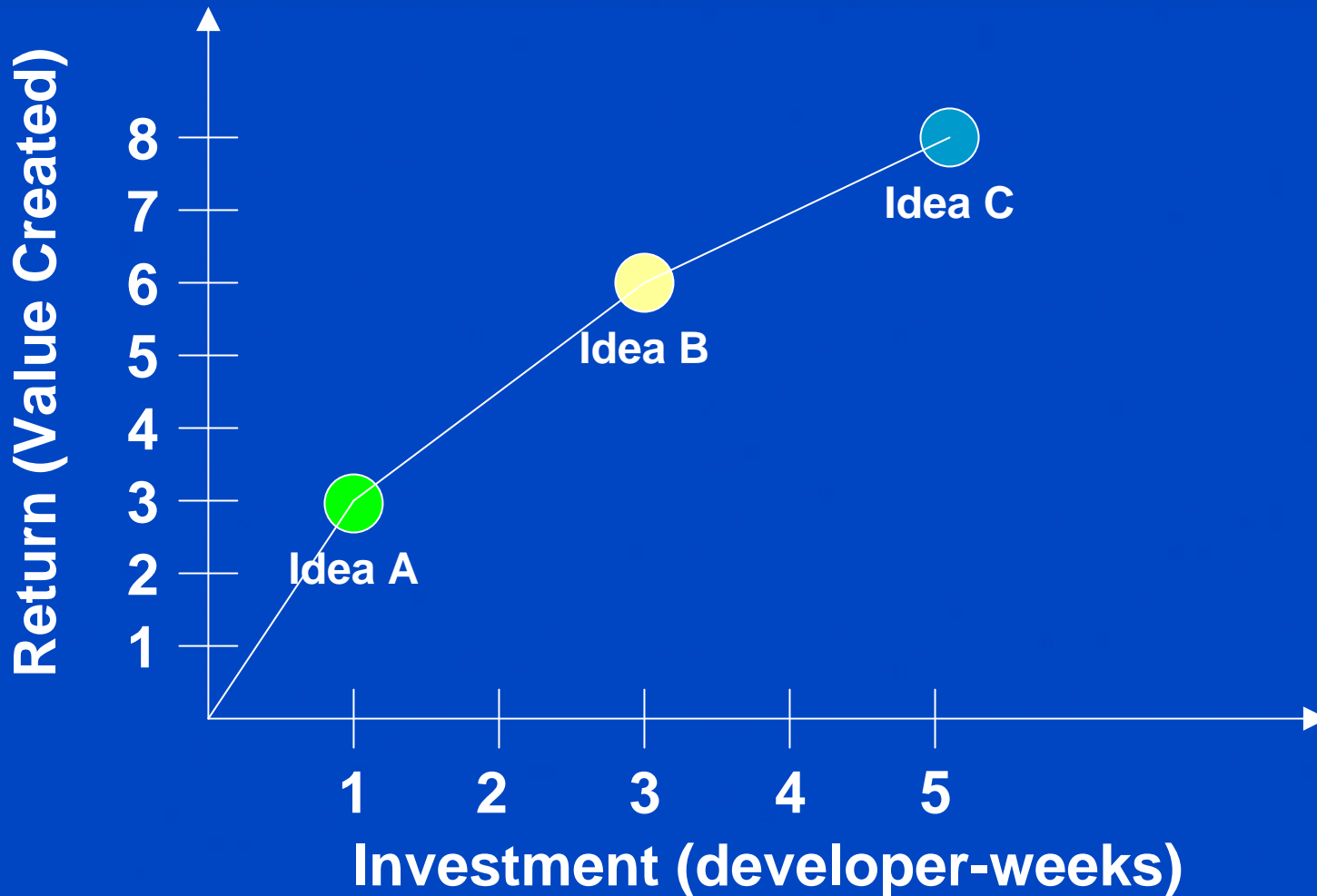
# What does ROI Mean in a Product Development Context?

- Return on Investment (ROI)
  - Investment = cost or resources required
  - Return = “profit” gained from investment
- What is the Return (R)?
  - Customer value created, which leads to:
  - Business value created (revenue)
- What is the Investment (I)?
  - Main investment = developers’ time
  - Measured in developer-days or developer-months

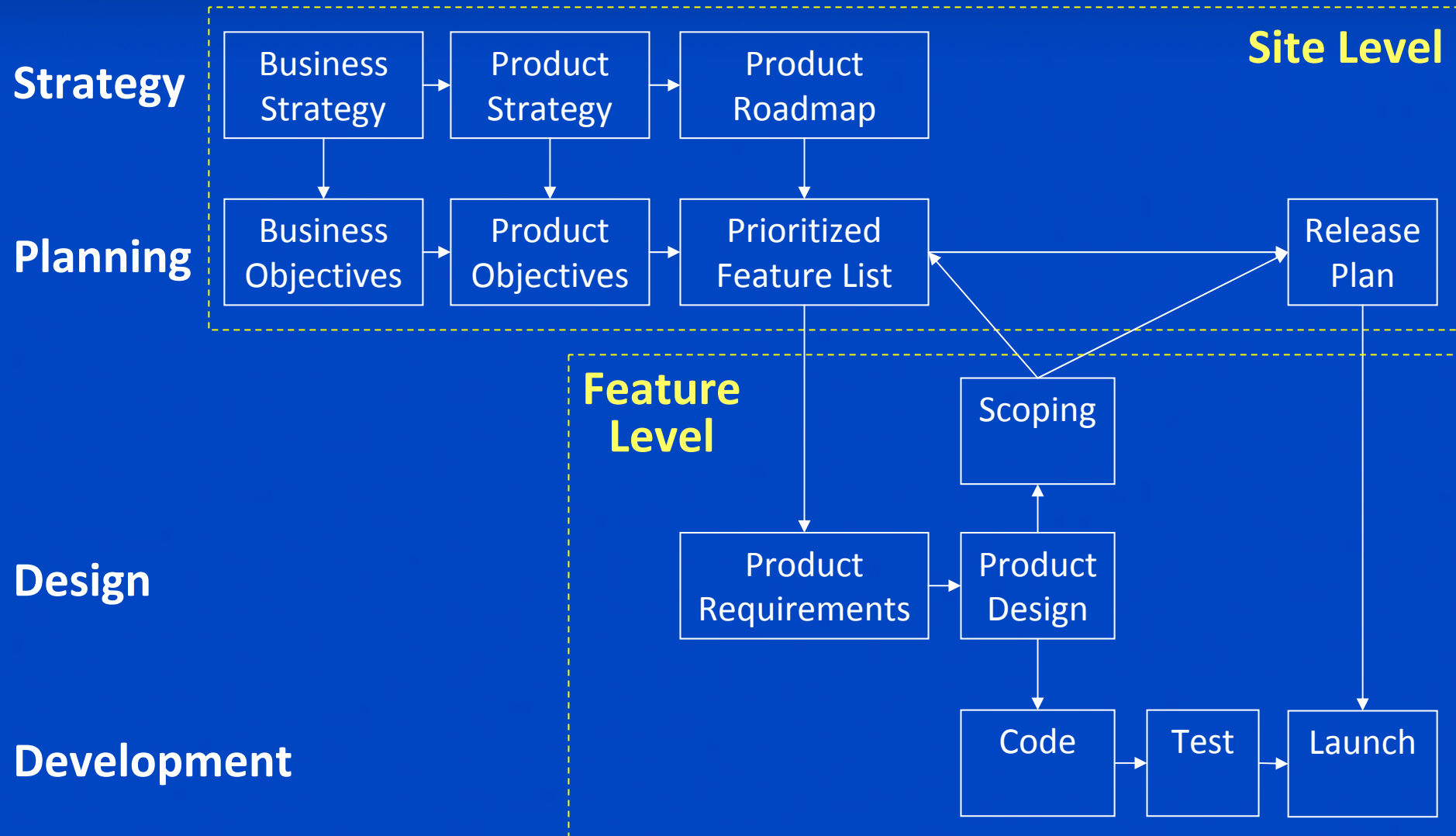
# Analyzing Product Ideas by ROI



# Prioritizing Order of Ideas by ROI



# Can Improve ROI by Covering Key “Product Thinking Steps” Efficiently

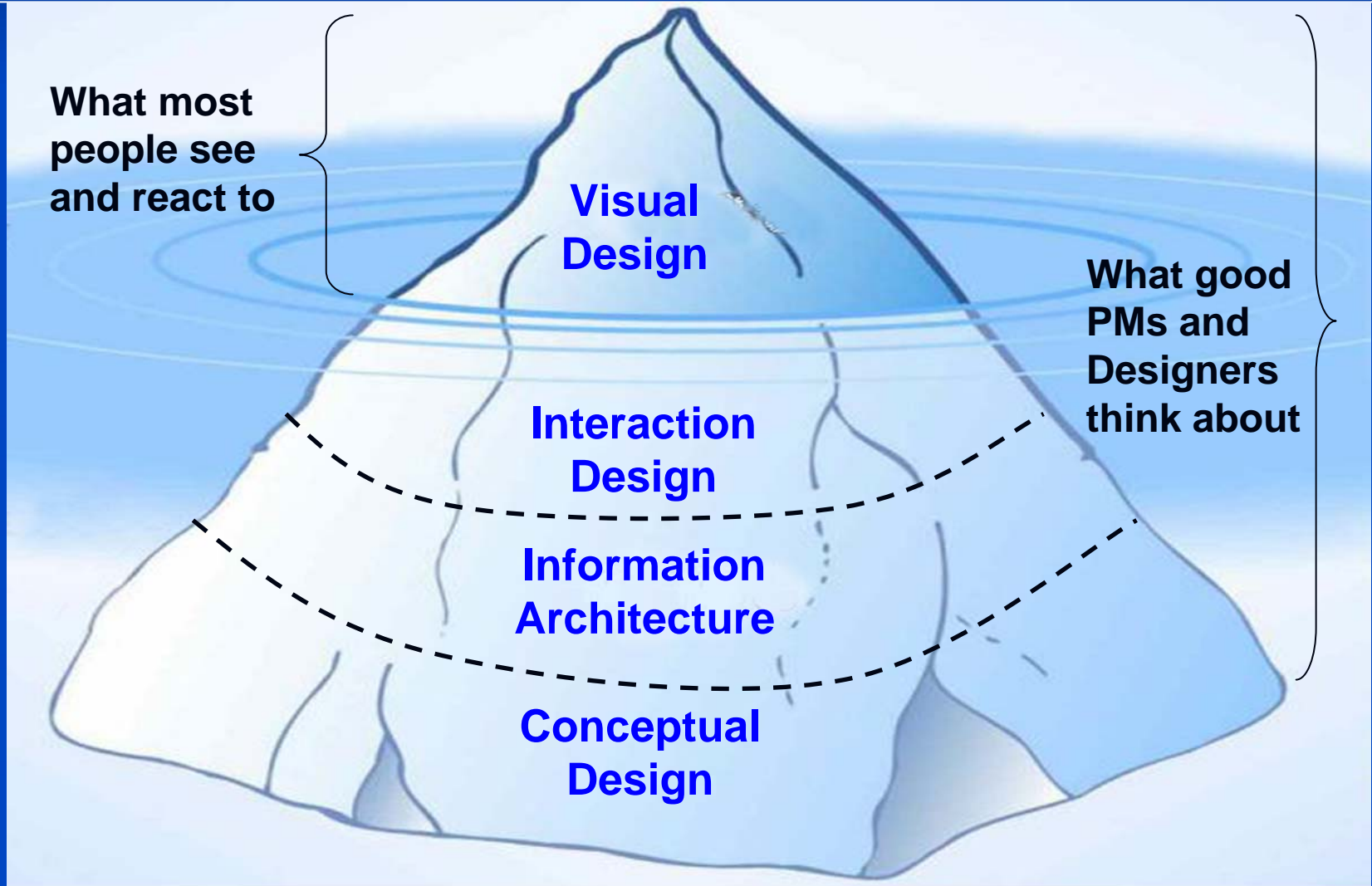


# UI Design

# Web 2.0 PMs Need UI Design Skills

- The Design Gap
  - Many start-ups don't have UI designers
  - Product managers often asked to fill the void
- Faster pace = less documentation
  - Long-winded MRDs and PRDs are dead
  - Now: short specs with wireframes, wikis, whiteboard
- UI changes can cause dramatic changes in key business metrics: good and bad

# The UI Design Iceberg



Recommend reading: Jesse James Garrett's "Elements of User Experience" chart, free at [www.jjg.net](http://www.jjg.net)

# Elements of UI Design

- User Interface (UI) Design
  - Conceptual Design: e.g. Quicken's checkbook metaphor
  - Interaction Design: flows and navigation
  - Information Architecture: structure and layout
  - Visual Design: graphical treatment, aka chrome
- Documents used
  - Flow charts
  - Wireframes (often black & white)
  - Mock-ups or comps (e.g., image created in Photoshop, etc.)
  - Prototypes (interactive, e.g. HTML or Flash)
- Usability Testing
  - Evaluating how easy your product is to use
  - Can solicit feedback on product or design documents

# Making UI Design Decisions

- Typical UI design question:  
“When using web pages, do users scroll down?”
  - Yes
  - No
- UI questions are never binary (yes/no)!
- Should be asking: What percentage of users...?
- UI changes impact your metrics
  - Impact can be positive, negative, small, large
  - Seek high-ROI UI changes

# Put Key Conversion Actions Above The Fold

## Landing Page A

Box.net - Free Online Backup and File Sharing - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

http://secure.box.net/landing1/

Facebook... Web 2... htt...533 Vysr R... Webmail Box... Netflix ...

**box** Over 1.5 Million Trust Box.net To Store & Share Online.  
...No software to download, just use your web browser!

Box.net is the web's simplest and most powerful online storage and file sharing service. With Box, you can access important documents from your desktop computer, laptop, or even mobile phone. Once you've uploaded your files to your online storage on Box, you can also share them with anyone, anytime.

**Start Now!**

Try it free for 14 days!

**The Fold**

Key conversion action is above the fold

Key conversion action is below the fold

## Landing Page B

Low Cost, Top Quality Digital Photo Printing - Print Photos Online - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

http://www.snapfish.com/gifts/product=prints...

online photos

Facebook... Web 2... htt...533 Vysr R... Webmail Box.net... Low... Ble...

sian up! | log in  
send us film | how snapfish works

**top-quality prints, just 9¢**

- Quality prints for 50% less than other photo sites
- Order prints online for home delivery or 1-hour pick-up
- New customers get 20 free prints

Print Size	Price
4 x 6"	9¢
5 x 7"	79¢
wallet (4)	99¢
8 x 10"	\$2.99

Pre-pay and Save	
4 x 6"	8¢
5 x 7"	29¢

[more pricing info](#)

**create prints**

*Professional Quality*  
We guarantee that if you don't love your prints, you'll receive a 110% refund.

**110% QUALITY GUARANTEE**

**it's easy to get prints!**  
receive 20 free prints when you register

- 1** upload your photos
- 2** customize your prints
- 3** order as many as you wish

register to get started

about us | free photo software | mobile | t&cs | privacy | our products | pricing | site map | help

the best value in photography just got better!

create prints

Professional Quality

We guarantee that if you don't love your prints, you'll receive a 110% refund.

110% QUALITY GUARANTEE

it's easy to get prints!

receive 20 free prints when you register

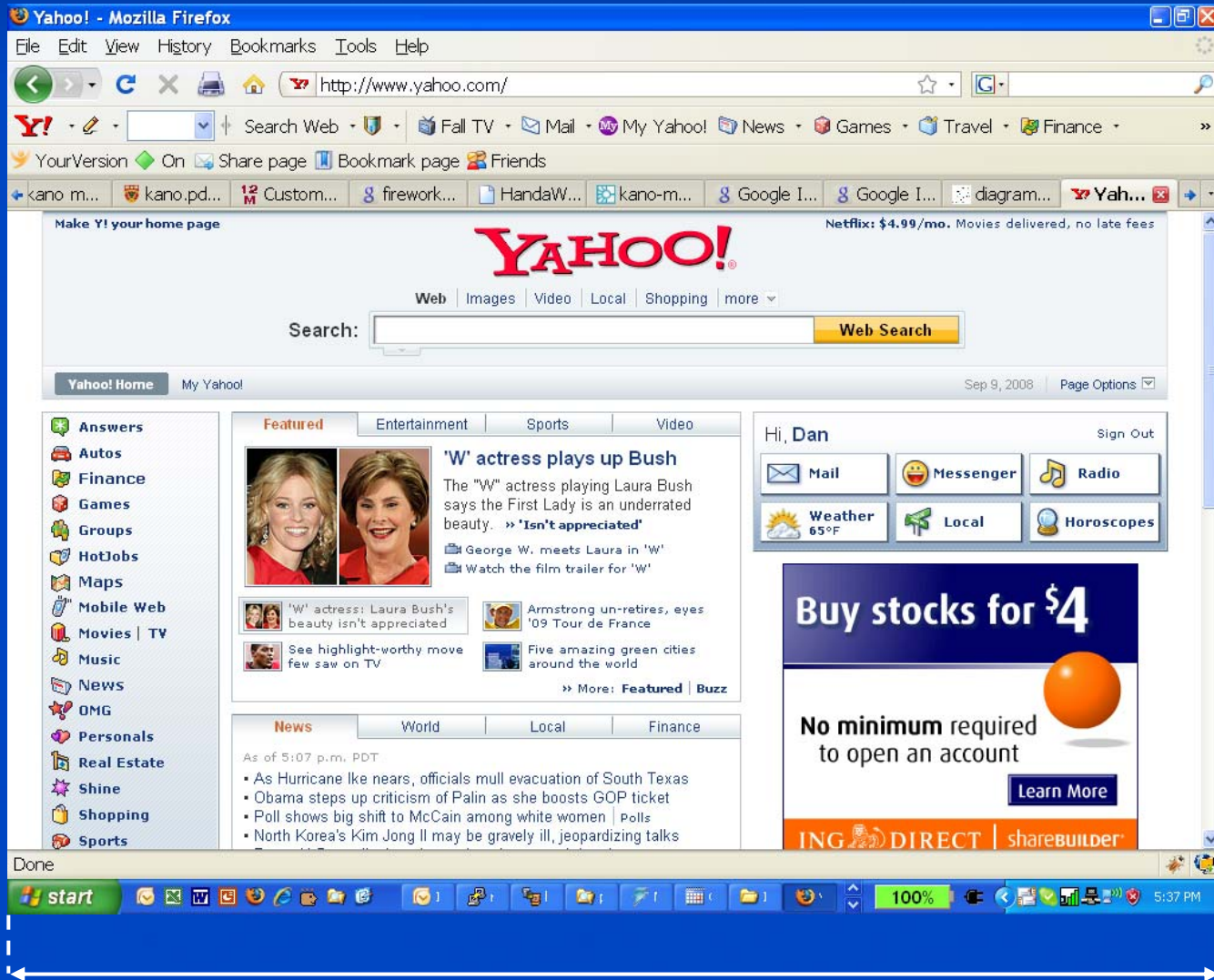
1 upload your photos

2 customize your prints

3 order as many as you wish

register to get started

# The Fold: "Chrome" Takes Away Pixels



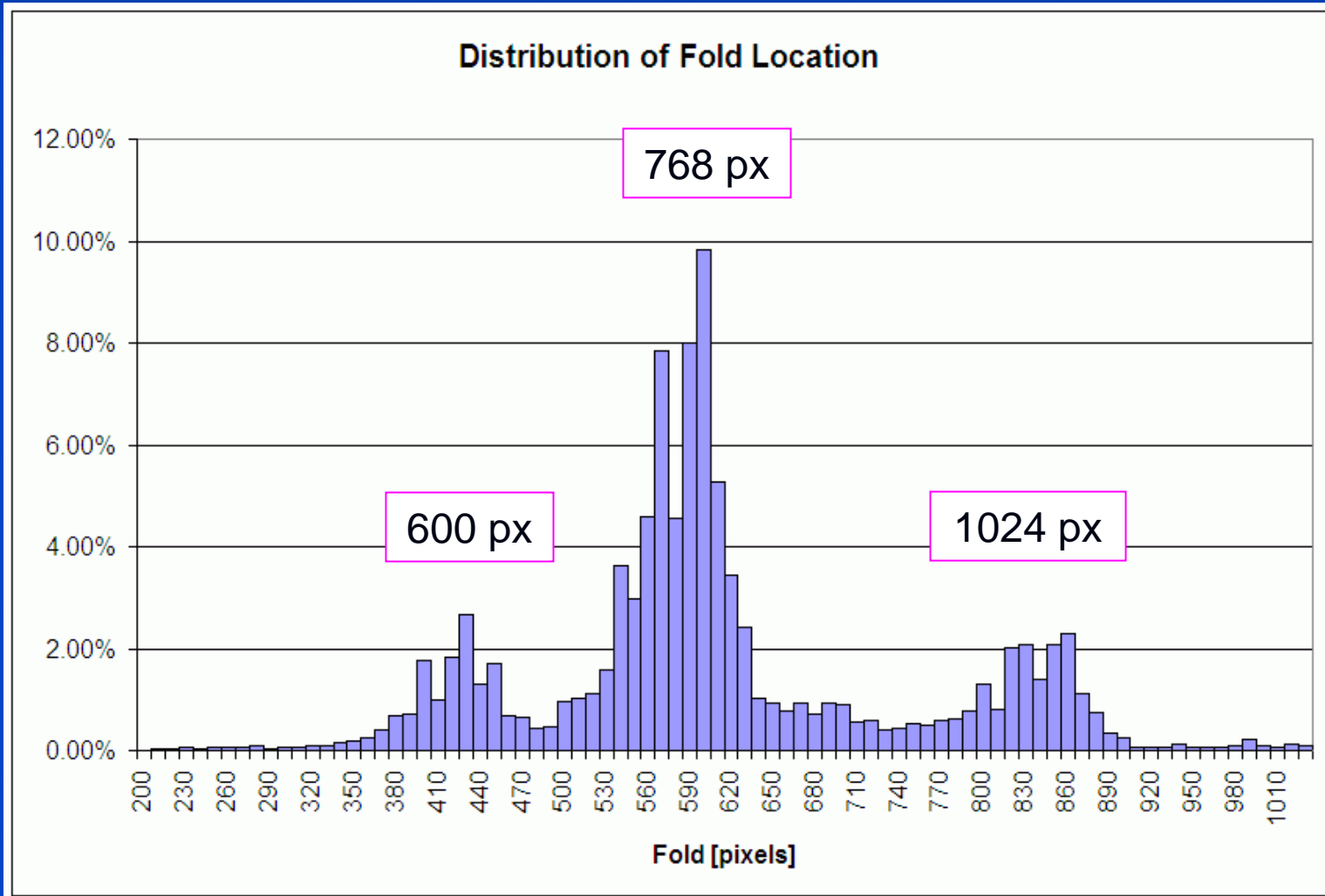
Only  
600  
pixels

768  
pixels

1024 pixels

# The Fold Isn't Binary Either

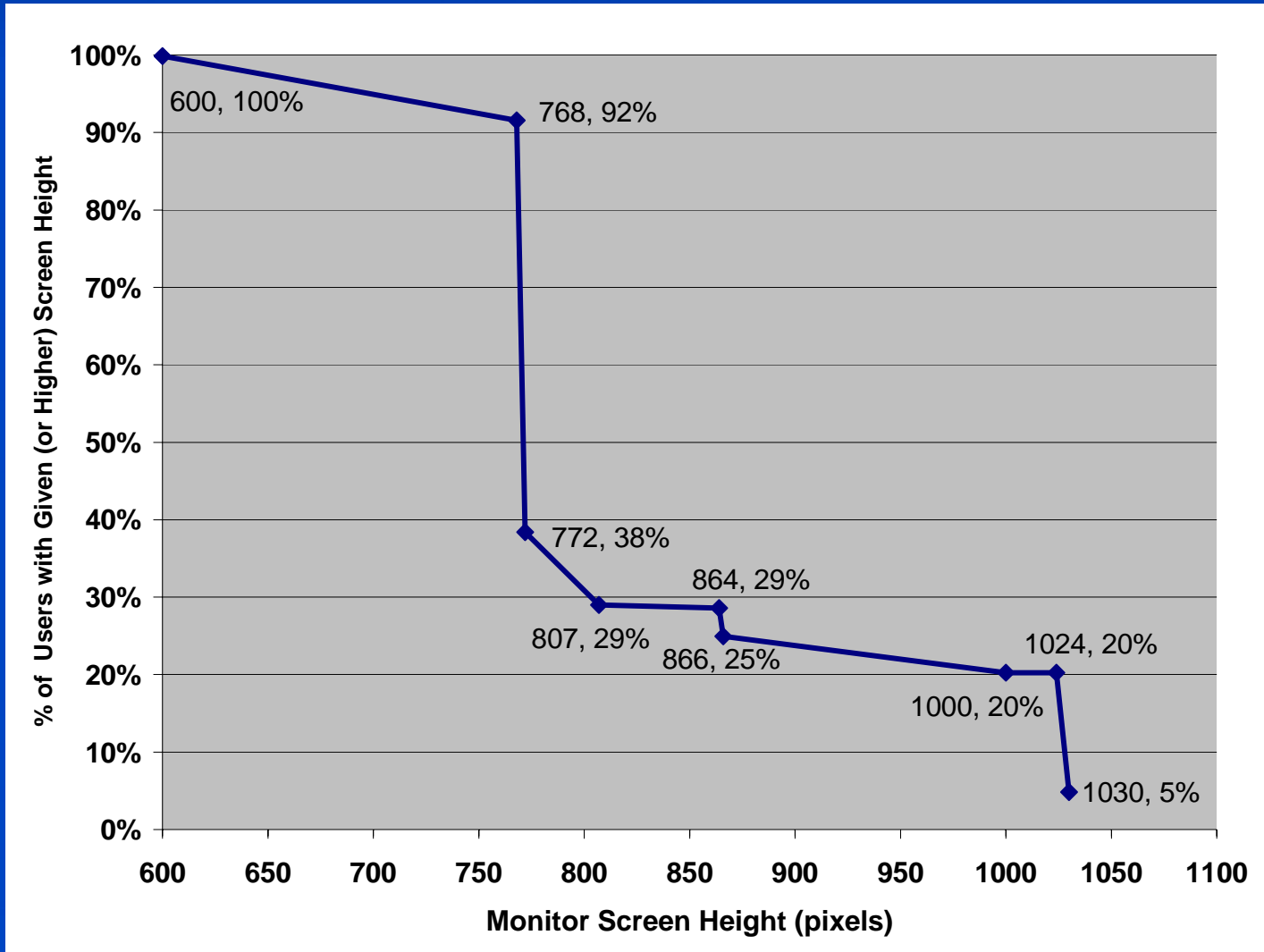
% of Users



Data courtesy of ClickTale  
Free trial at [www.clicktale.com](http://www.clicktale.com)

Copyright © 2008 Olsen Solutions LLC

# Analyze User Screen Height Distribution to Select Design Height for Key Pages



# Product Design vs. User Benefits

- Q: If two products equally deliver on the exact same user benefits, which product is better?
- A: The product that's easier to use
- 'Ease of use' provides benefits
  - Saves time
  - Reduces cognitive load
  - Reduces frustration
- Not many companies excel at UI design
- 'Ease of use' can be differentiator

# Optimizing The Equation of your Business

*“If you’re not clear on your objective,  
you will probably never achieve it.”*

# Setting Clear Business Objectives: What are We Trying to Accomplish?

- Setting Business Objectives
  - What is our business strategy? (long-term)
  - What are our business objectives? (short-term)
  - What business results do we want?
  - Profit, Leading market share, User base growth, Higher average CPM?
- Prioritization
  - Need to prioritize your business objectives
  - The buck stops with resource allocation
  - Priorities can (and should) change over time
- Execution: even with best strategy & objectives, execution matters

# Identify the Equation of your Business “Peeling the Onion”

Profit = Revenue - Cost

↓  
Unique Visitors x Ad Revenue per Visitor

↓  
Impressions/Visitor x Effective CPM / 1000

↓  
Visits/Visitor x Pageviews/Visit x Impressions/PV

↓  
New Visitors + Returning Visitors

↓  
Invited Visitors + Uninvited Visitors

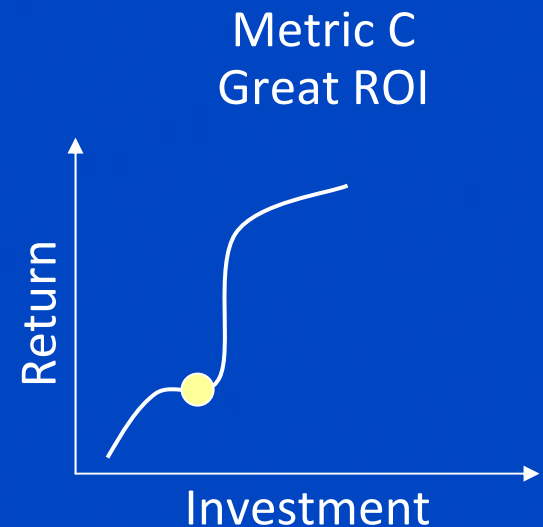
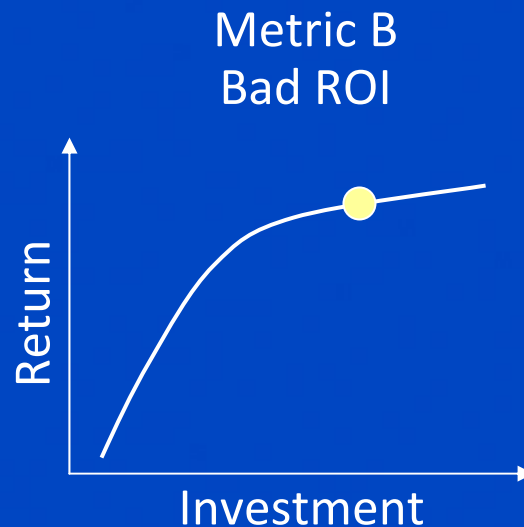
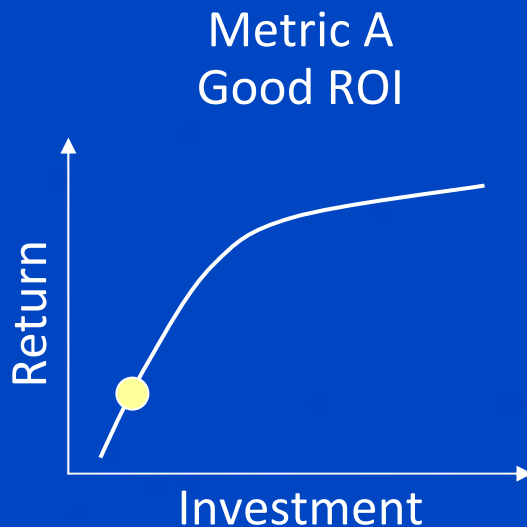
↓  
# of Users Sending Invites x Invites Sent/User x Invite Click-through Rate

# Why Are Metrics Important?

- Many choices and decisions to make each day
  - Product feature and design decisions
  - Prioritization and resource allocation decisions
  - Marketing and business decisions
- Having relevant data helps you make better decisions
- Let you know if your results are getting better or worse
- You can't manage what you're not measuring

# Using Metrics to Optimize the Equation of your Business

- What are the key metrics for your business?
- Where is the current value for each metric?
- How many resources does it take to “move” each metric a certain amount?
  - Developer-hours, Time, Money
- Which metrics have highest ROI opportunities?



# Track Metrics as Time Series

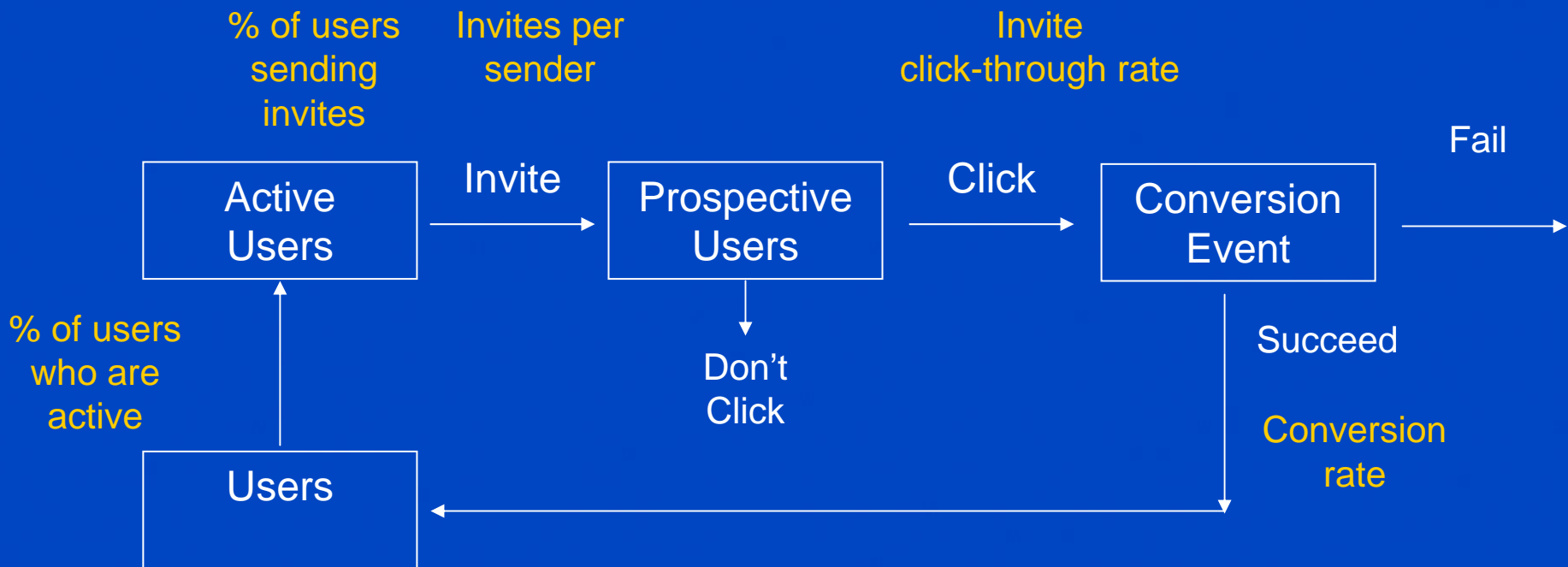
- Time series much better than ad hoc bulk analyses
- Track metrics daily
  - One row for each day's metrics
  - Each metric is a column

Date	Unique Visitors	Page views	Ad Revenue	New User Sign-ups	...
4/24/08	10,100	29,600	25	490	
4/25/08	11,200	31,300	27	460	
4/26/08	9,900	25,400	22	520	
4/27/08	10,500	27,100	24	480	
...					

# Making Metrics More Useful

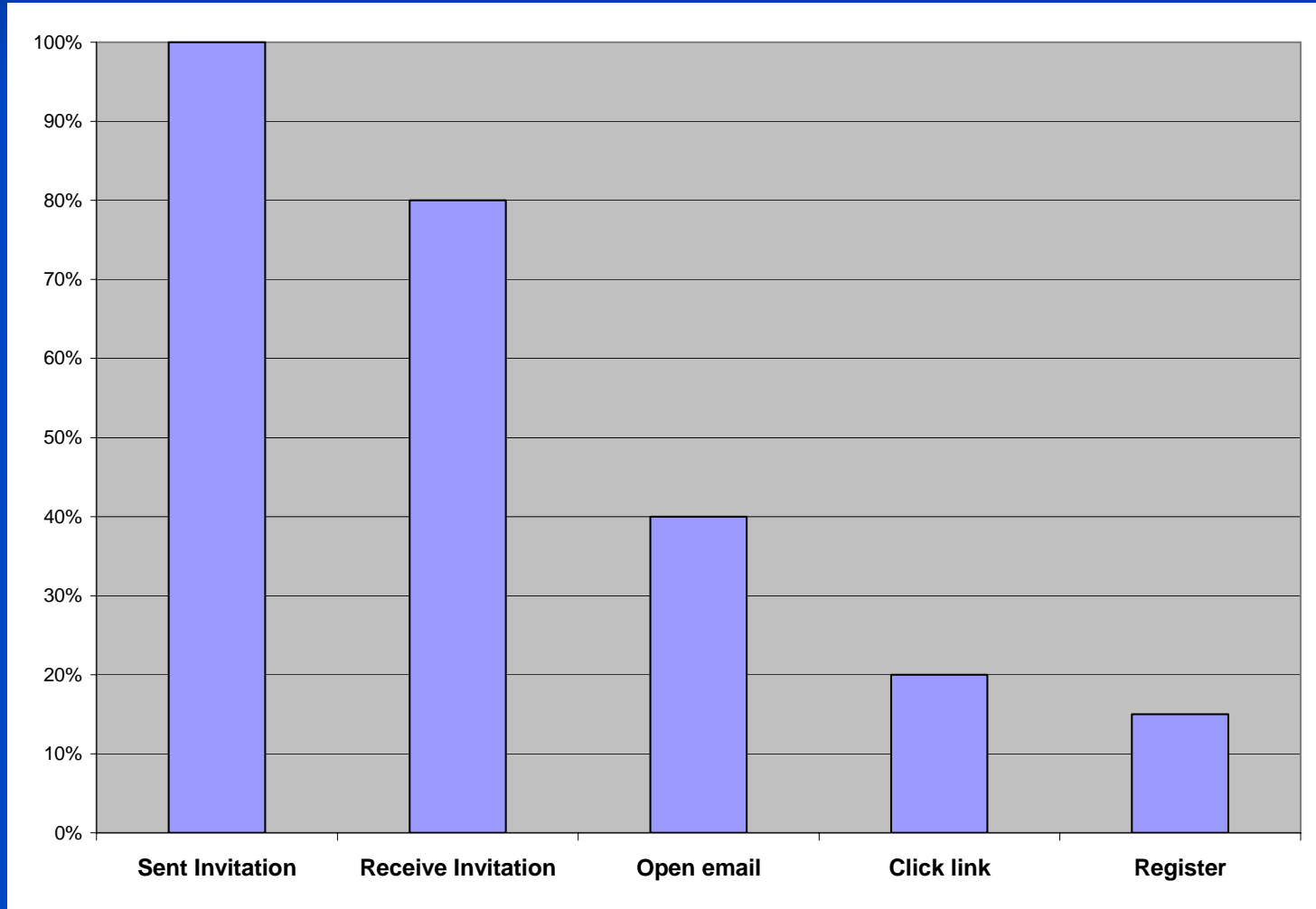
- To facilitate comparisons over time
  - Ex: Measuring how good your registration page is
    - Okay: # of registered users per day
    - Better: registration conversion rate=  
$$\frac{\text{\# registered users}}{\text{\# unique visitors to registration page}}$$
  - Create normalized ratios of primary metrics: A / B
  - Often still need to look at A and B independently
- To see trends more clearly
  - 7-day averages: daily noise, weekday vs. weekend
  - Monthly averages

# Viral Loop Steps and Metrics



- Multiplied together, these metrics determine your viral ratio
- Need to identify which metrics have biggest opportunity

# Define Your Funnel & Ratio Metrics



Delivery  
Success Rate

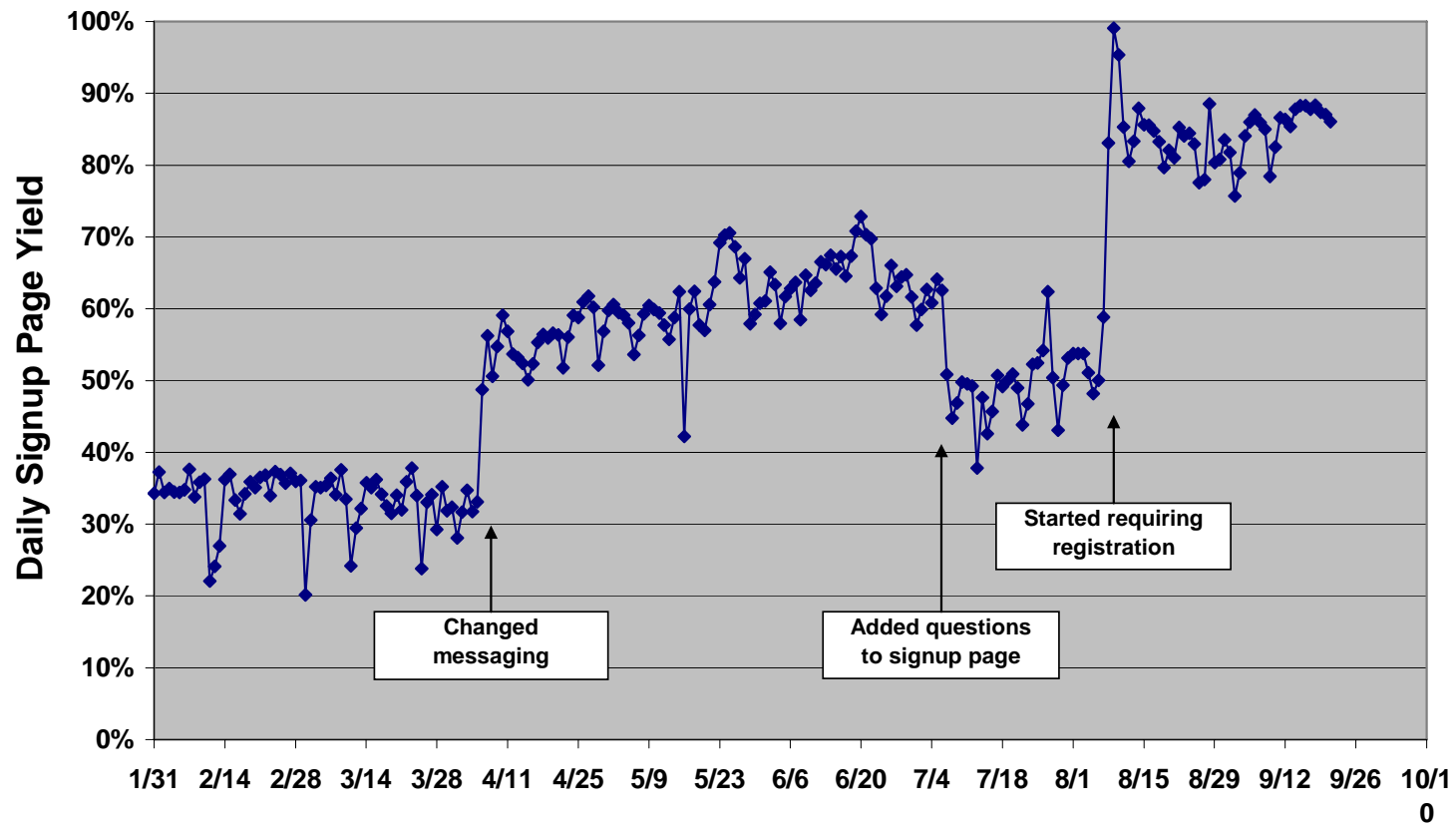
Open  
Rate

Click-through  
Rate

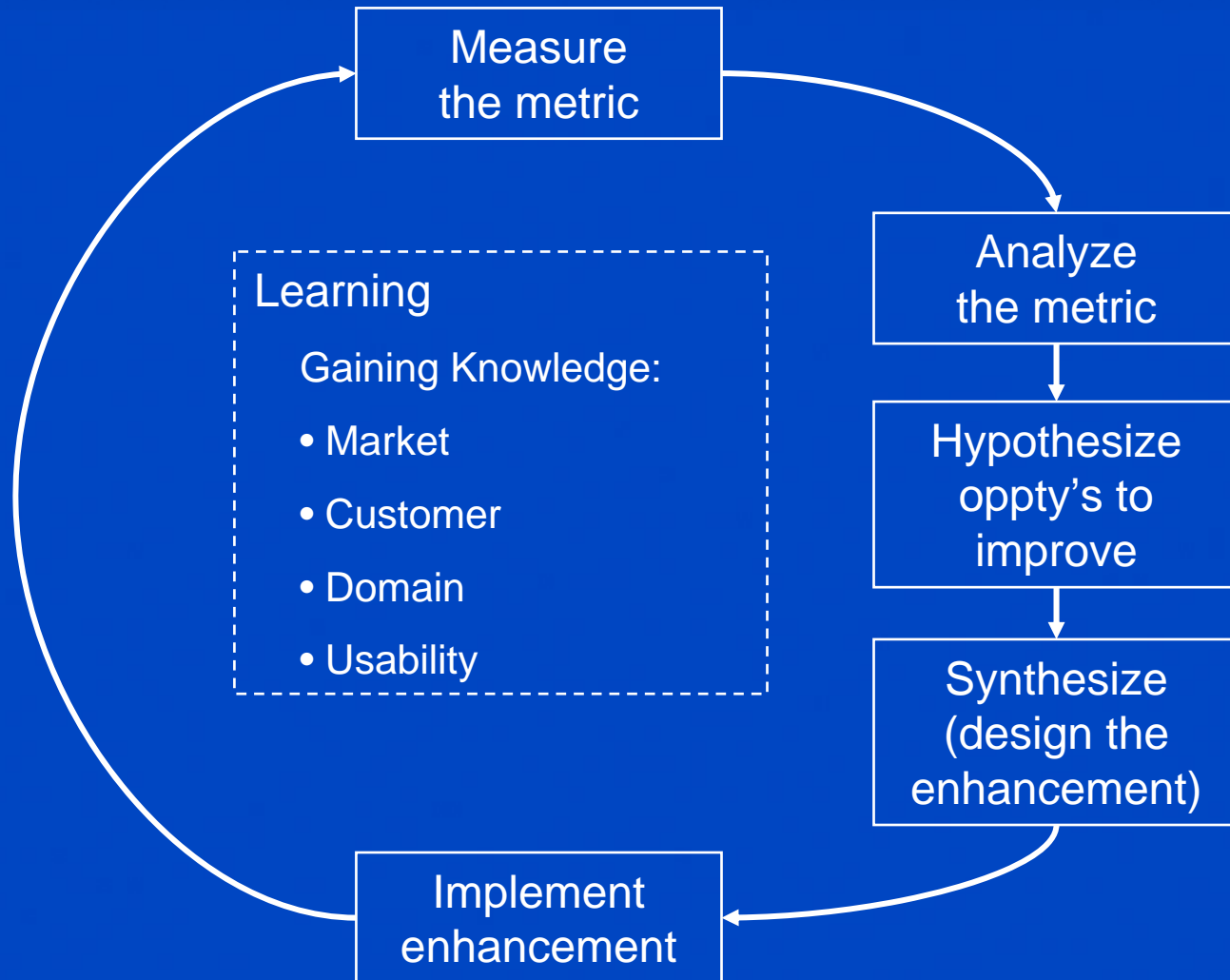
Registration  
Yield

# Sample Signup Page Yield Data

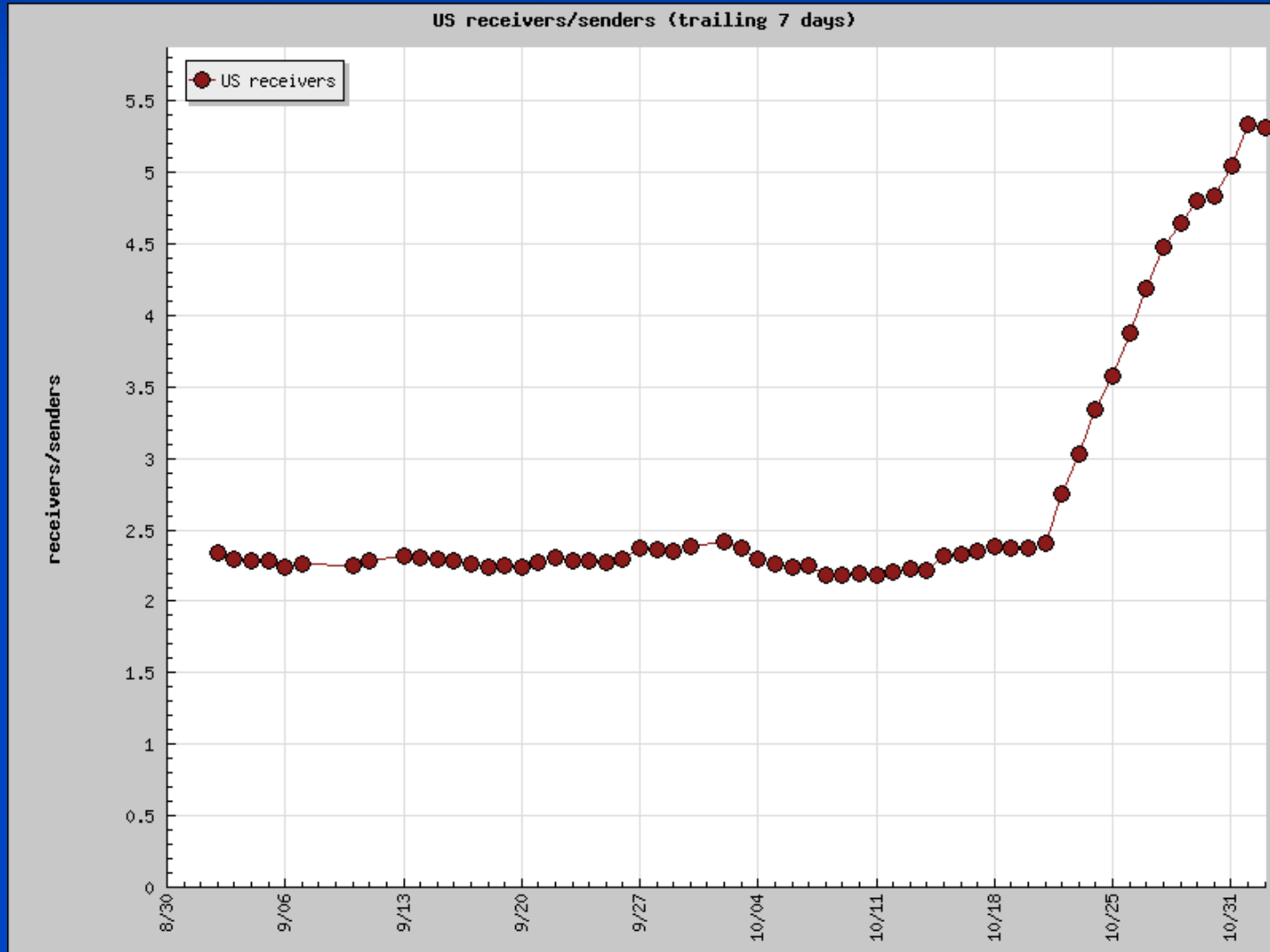
Daily Signup Page Yield vs. Time  
New Registered Users divided by Unique Visitors to Signup Page



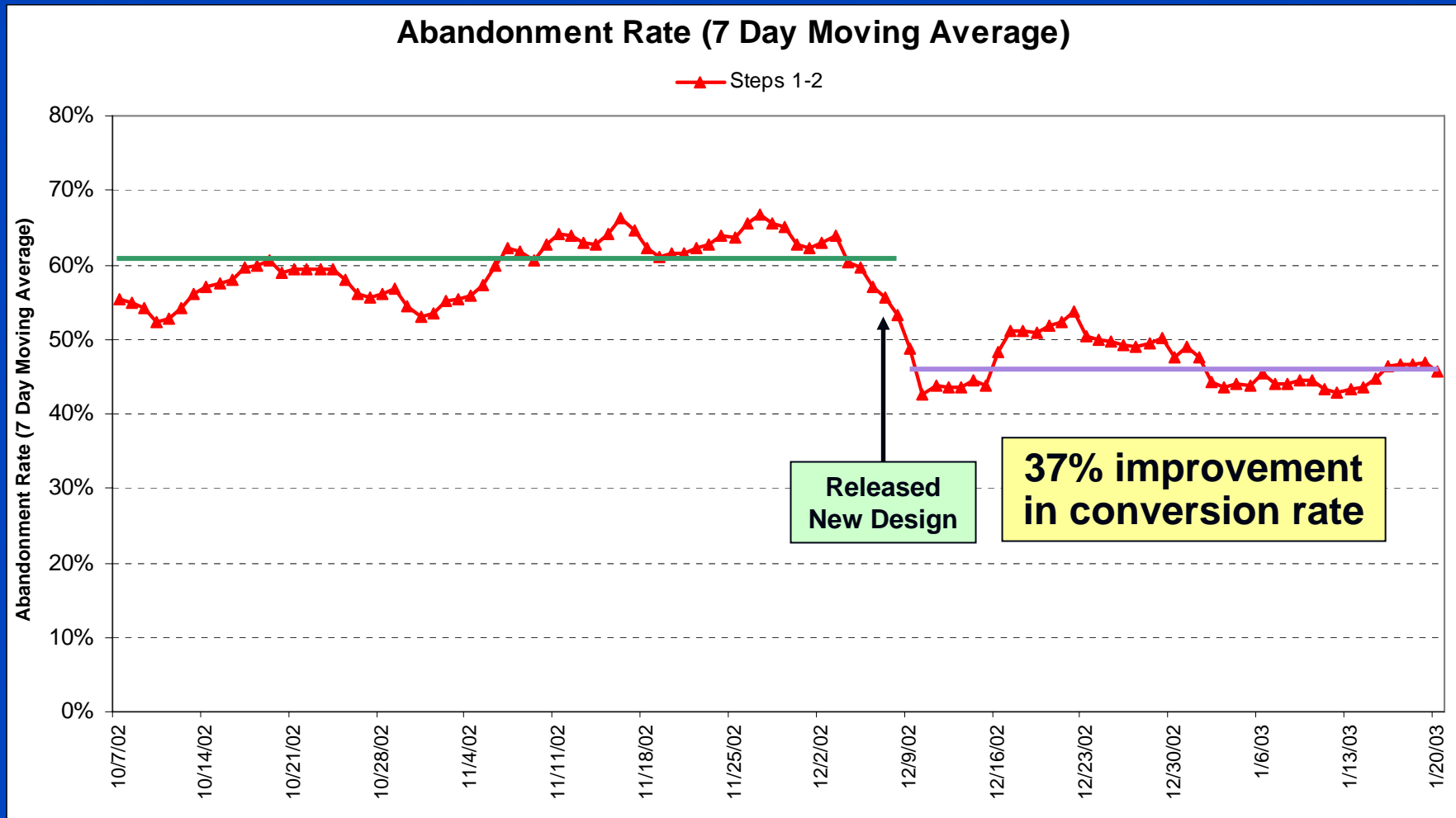
# Optimization Through Iteration



# Doubling Number of Invitations Sent per Sender by Adding Address Book Importer



# Reducing Registration Process Abandonment Rate



# Summary: Cheat Sheet for Building A Great Web 2.0 Product

---

- Know your customers and their needs
- Get clear on how you create customer value
- Ruthlessly prioritize product ideas by ROI
- Learn and apply UI design principles
- Define the Equation of your Business
- Instrument your site and track key metrics
- Iterate quickly and continuously improve

# Questions?

dan@yourversion.com



[www.yourversion.com](http://www.yourversion.com)