An Introduction to Web Metrics.

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Agenda

1. What are Web Metrics?


4. A Few Examples of Web Metrics.

5. Challenges of what to do with the data.
Sun Microsystems
What are Web Metrics?

- Web usage and patterns
- Transactions
- Usability
- Site performance
- User supplied data
- Financial analysis (ROI)
The Problem

How many million dollars are you investing in your Web Project?

You better have a data based approach to prioritize and guide your effort, and to justify your results.
How to Use Metrics to Manage and Understand Your Web Site

• What should you measure?

• How do you measure it?

• What do you do with the data once you have it?
Example: Web Sales

Possible Metrics
• Units Sold
• Revenue
• % Completing Sale
• Referring Web Sites
• Number of Prior Visits
• Exit Pages

Sensible things to measure.

But why are you measuring them?
Possible Metrics

- Units Sold
- Revenue
- % Completing Sale
- Referring Web Sites
- Number of Prior Visits
- Exit Pages

Measure to Control
(Key Performance Indicators, KPIs)

- Units Sold
- Revenue
- % Completing Sale

Measure to Analyze

- Referring Web Sites
- Number of Prior Visits
- Exit Pages
A Metrics Framework

Measure to Control
- Units Sold
- Revenue
- % Completing Sale

MTC Metrics (KPIs)
Used to monitor business or customer value.
- Quantitative
  (“Goodness” direction & Trend charts.)
- Answers "How much?", "How Many?", "How Often"

Measure to Analyze
- Referring Web Sites
- Number of Prior Visits
- Exit Pages

MTA Metrics
Used to understand web use, and trends or changes in MTC metrics.
- Qualitative or quantitative.
- Answers "Why?", "Who?", "Where?", "How are users..?"
Creating a Metrics Plan

1. Use MTC and MTA metrics cooperatively.
2. Usually create list of MTC metrics first.
3. Use MTAs for insight into MTCs.
Business vs Customer Focus

Business Focus
- Revenue
- Cost Savings
- Efficiencies
- Call Avoidance
- Subscriptions
- Sales Leads

Customer Focus
- Time Savings
- Ease of Use
- Ability to do Task
- Enjoyment
- Satisfaction

Don't want to optimize one at the expense of the other!
How to Create Business Focussed MTC Metrics

“Business Goal Mapping”

1. Identify business goals.
2. Identify specific web activity that demonstrates this.
3. Create summary or detailed metrics around this activity.
4. Make access to learning materials more efficient than the current model.
5. Educator successfully downloads a learning module.
6. • Number of modules downloaded per month.
   • Savings per module vs. older model.
   • Number of downloaded modules not available by other means.
How to Create Customer Focussed MTC Metrics

“Task Flow Charting” (Moments of Truth)

- Is site available?
- Successful login?
- User searches for module.
- Successful search?
- Successful download?
- Was task easy to do?

Availability
Percent failed logins
Percent failed searches
Number of downloads
Customer satisfaction survey
Creating a Metrics Plan

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<td>How do you create this part?</td>
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<td>Analysis explains trends and guides improvement.</td>
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How to do analysis

Ask “Why?” and “Why not?”
Ask “How do users actually do X compared to how we think they do?”
Ask “Who are my users and are they all the same?”

Examples of Measure to Analyze Metrics:

• Clickpaths from a page.
• Most popular links on a page.
• User segmentation (profiles, needs, habits, valuation...)
• Search term analysis.
• A/B studies & controlled experiments.
• User surveys.
• Usability studies.
Putting it All Together

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Tool Considerations

Technology:
- Page tags
- Server Log Files
- Hybrid Solutions

Business Models:
- ASP
- In House

Web Usage & Patterns

Mix and match technology and business models.

Need to pick right solution for your business!
Page Tags

Embedded JavaScript executes on page load. Usually tag all pages.

Third Party Database

Real time data

 Analyst logs in and views reports via browser
Server Logs

Users browser

Proxy Server
Browser Cache
Web server

Web log:
- IP
- Resource
- Time/date
- Browser/OS
- Status code
- Bytes transferred
- Referring page

Data import server
Data Base
Data export server
Comparison: Tags, Logs

Data originates at user's browser.
Data collection is programmable.
Business model is typically an application service provider.
More common.
Some privacy concerns.
Trouble with non html pages.
Pay by page view.
~10-20 cents/1000 page views

Data originates at web server.
Data is (usually) limited to what is in log file.
Business model is typically self-managed.
Less common.
Fewer privacy concerns.
Trouble with dynamic content.
Pay for infrastructure (fixed cost).
Basic Usage Levels

- Page views, visits, users are the most basic metrics.
- Shows “Reach” of site.
- Doesn't necessarily show value.
- A starting point, not an ending point.
- Don't get stuck here.
Click Path Report

- Pick any starting page.
- Line thickness shows user flow.
- Can also show “previous page” flow.
- A great “Measure to Analyze” metric.
- Compare expected paths to actual paths.
Conversion Measurement

- Define checkpoints to analyze conversion of key processes on your web site.
- Important analytical tool for optimization.
- Compare to expectations.
- Use in conjunction with click pathing report.

Chemistry Catalog Page

- 20% -> 80% Lost

Chemistry Lessons

- 10% -> 90% Lost

Intro to Acids

- 60% -> 40% Lost

Download
1,356 Clicks
Rank #1

1,188 Clicks
Rank #2

845 Clicks
Rank #3

777 Clicks
Rank #4

89 Clicks
Rank #24

Overlay Maps
• Easy and intuitive.
• Shows most used links on the page.
• Compare to expectations.
• Compare to most valuable “real estate”.

Altered data.
Geosegmentation

- Uses IP locating.
- Some services as high as 99% accurate at the country level.
- Example: www.digitalenvoy.net
- Useful to show where customers come from.
- Influence your project funding agents.

Reports color code regions with most users for your site.
What do you do with the data once you have it?

Typical pitfalls and solutions.
What do you do with the data once you have it?

- Establish a process for utilizing data to identify problems and recommend solutions.
- Be sure Control Metrics are tied to organizational goals.
- Focus on actionable data. Avoid data overload.

Advice courtesy of...
What do you do with the data once you have it?

- Prioritize initiatives based on impact.
- “Monetize” impact of all changes.
- Get the data in the hands of the right people.
- Pursue data integration via cross functional teams.

Advice courtesy of...
What do you do with the data once you have it?

• Tie individual goals to improving metrics.
• Start small. Show success.
• Don't let data stifle creativity.
• Dedicate people to emetrics to keep it moving forward.

Advice courtesy of...