

# An Introduction to Web Metrics.

Paul G. Strupp, Ph.D.

Senior Web Analyst

Sun Microsystems



## **Agenda**

- 1. What are Web Metrics?
- 2. Business Aspects: How to Build a Metrics Strategy.
- 3. Technical Aspects: Web Analytics Tools.
- 4. A Few Examples of Web Metrics.
- 5. Challenges of what to do with the data.



## **Sun Microsystems**



## opensolaris





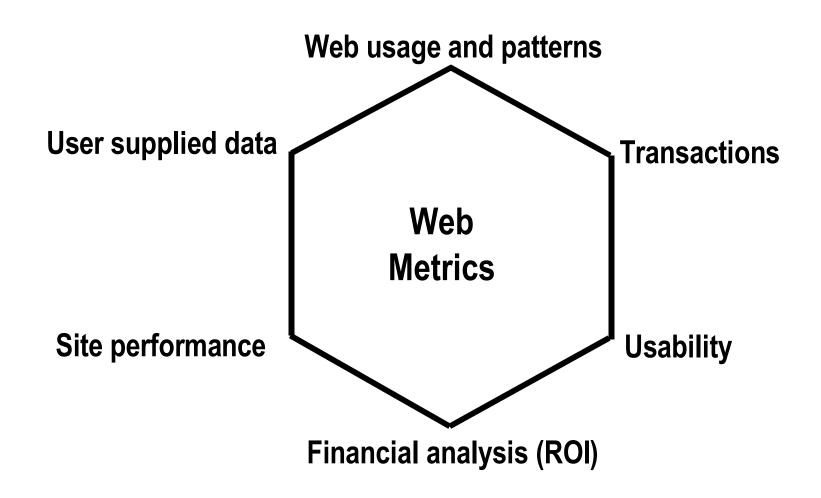




All logos are Sun Trademarks



### What are Web Metrics?





### **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?



### **A Metrics Framework**

#### **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

**Measure to Analyze** 

Referring Web Sites
Number of Prior Visits
Exit Pages

**MTC Metrics (KPIs)** 

Used to monitor business or customer value.

Quantitative ("Goodness" direction & Trend charts.)

Answers "How much?", "How Many?", "How Often"

#### **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.

### **Comprehensive Metrics Plan**

**Measure to Control Metrics** 

**Measure to Analyze Metrics** 

Business Focused Metrics Customer Focused Metrics



### **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"

Identify business goals.

Identify specific web activity that demonstrates this.

Create summary or detailed metrics around this activity.

Make access to learning materials more efficient than the current model.

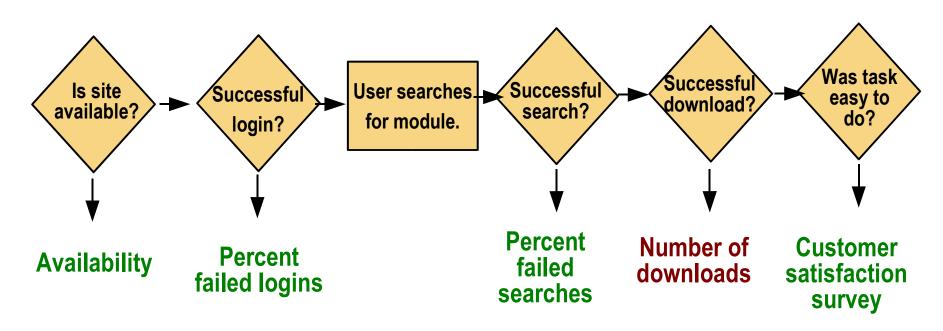
Educator successfully downloads a learning module.

- •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)





## **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.

Comprehensive Metrics Plan			
Measure to Control Metrics		Measure to Analyze Metrics	
Business Focused Metrics	Customer Focused Metrics	How do you create this part?	
Trend charts	Trend charts	Analysis explains trends and guides improvement.	



## 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**

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

Comprehensive Metrics Plan			
Measure to Control Metrics		Measure to Analyze Metrics	
Business Focused Metrics	Customer Focused Metrics	Click paths Surveys Search term analysis User segmentation A/B studies & experiments	
Trend charts	Trend charts	Analysis explains trends, guides improvement, shows opportunities.	



### **Tool Considerations**

**Technology:** 

**Business Models:** 

Page tags

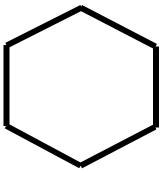
•ASP

Server Log Files

•In House

Hybrid Solutions

Web Usage & Patterns

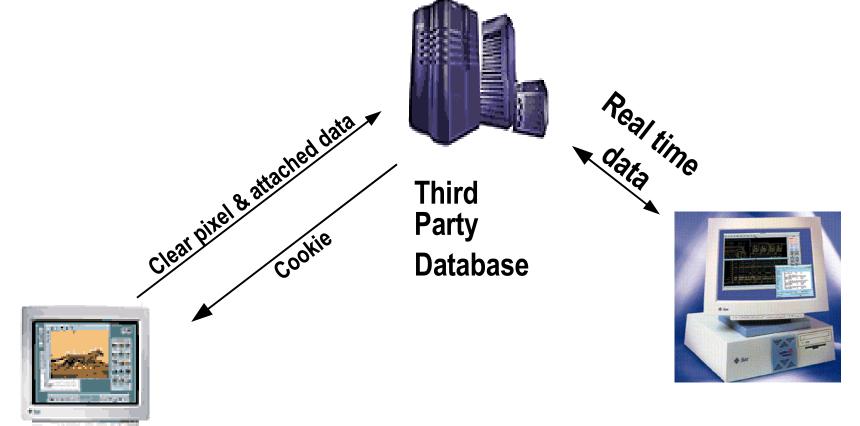


Mix and match technology and business models.

Need to pick right solution for your business!



## Page Tags

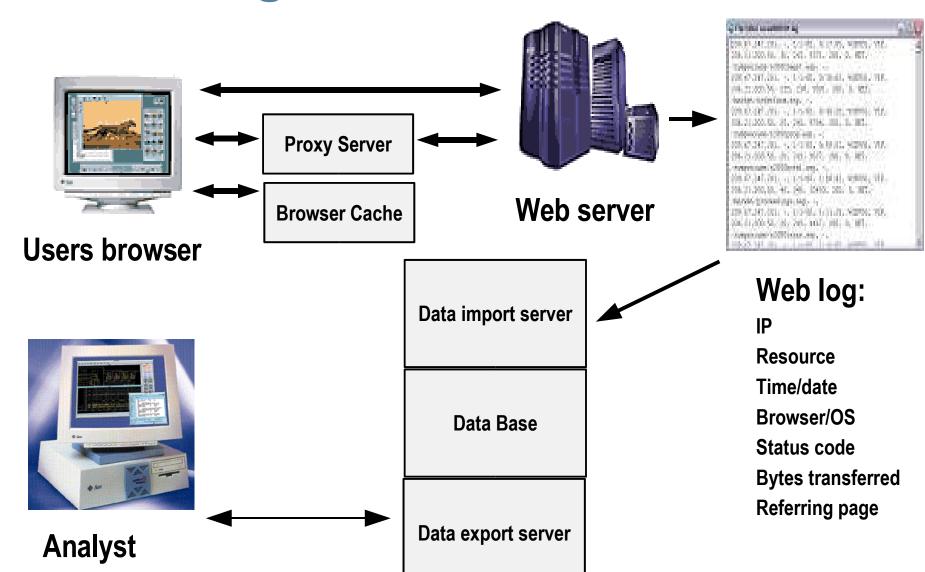


Embedded JavaScript executes on page load. Usually tag all pages.

Analyst logs in and views reports via browser



## **Server Logs**





## 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

Business model is typically self-managed.

Less common.

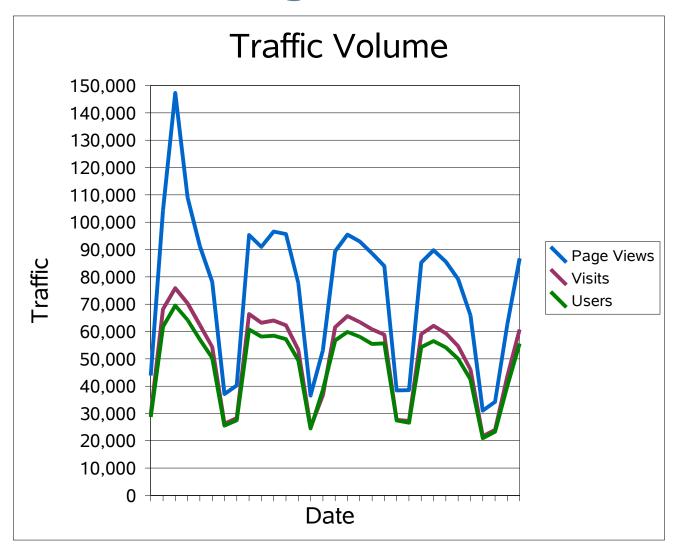
Fewer privacy concerns.

Trouble with dynamic content.

Pay for infrastructure (fixed cost).



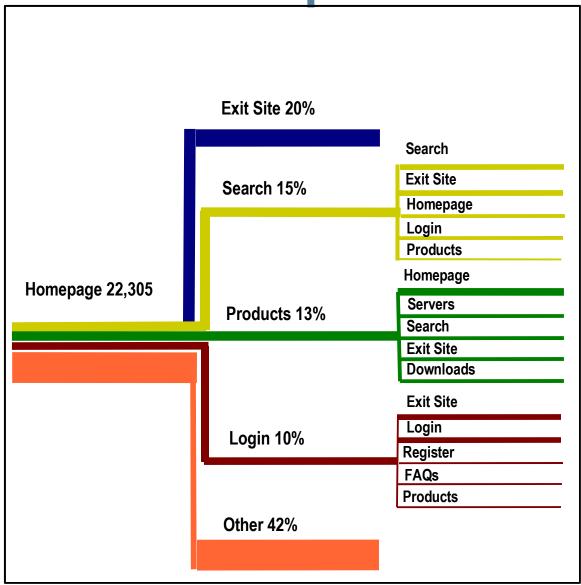
## **Basic Usage Levels**



- •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.



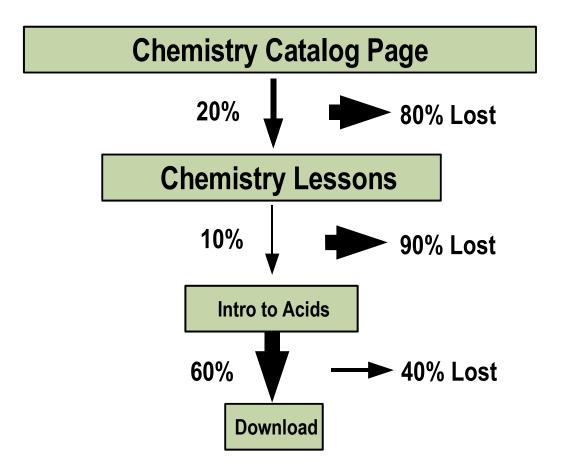
**Click Path Report** 



- •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.

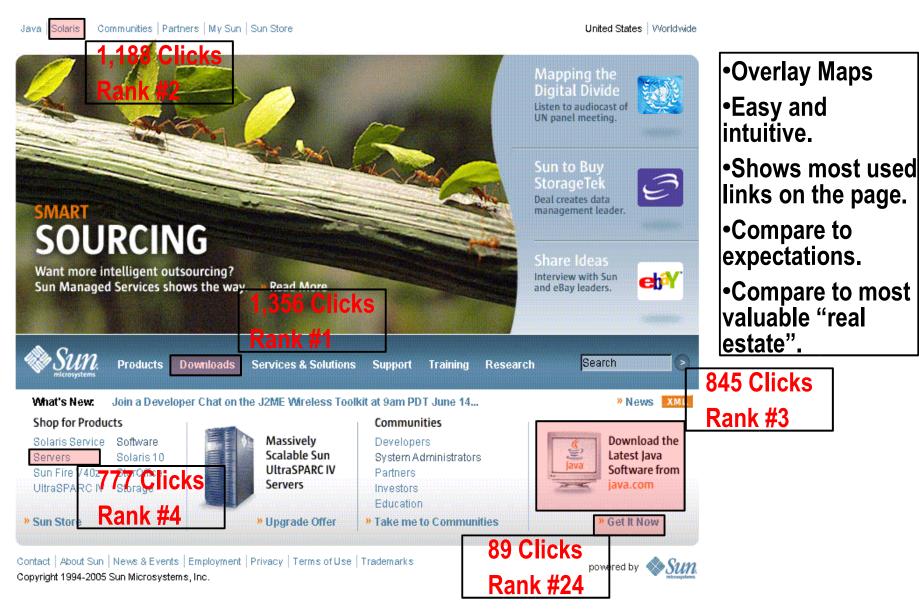


### **Conversion Measurement**



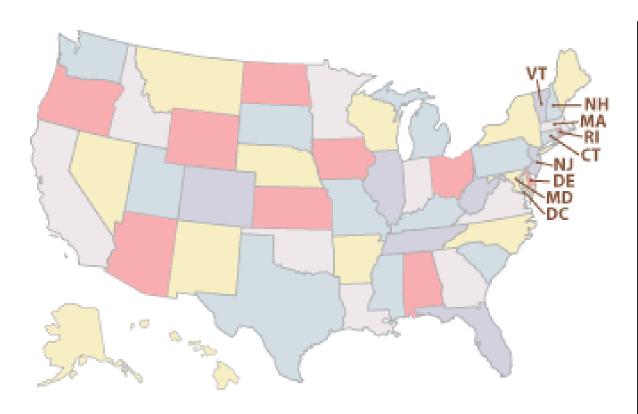
- •Define checkpoints to analyze conversion of key processes on your web site.
- •Important analytical tool for optimization.
- •Compare to expectations.
- •Use in conjunction with click pathing report.







## Geosegmentation



Reports color code regions with most users for your site.

- •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.



Typical pitfalls and solutions.



- •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...

ZAAZ

Building Web Experiences

www.zaaz.com



- 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...

ZAAZ

Building Web Experiences
That Perform

www.zaaz.com



- 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...

ZAAZ

Building Web Experiences

www.zaaz.com



Paul G. Strupp

paul.strupp@sun.com