Introduction to Web Metrics
Jim Sterne

eMetrics Marketing Optimization Summit

Web Analytics Association

Agenda

The Dawn of Web Data
Using Web Data for Business
Attitudinal Measurement
The eMetrics Maturity Model

Who Are You?

Agency/Consultancy/Client?
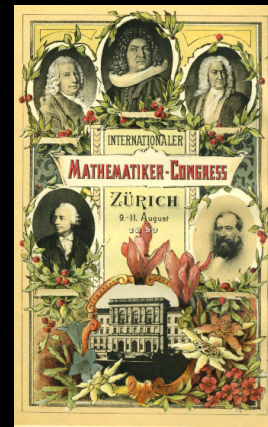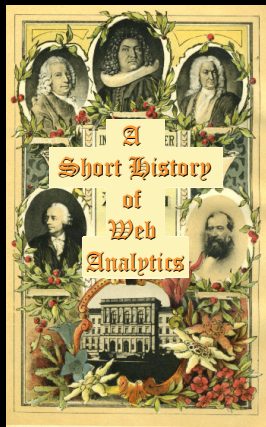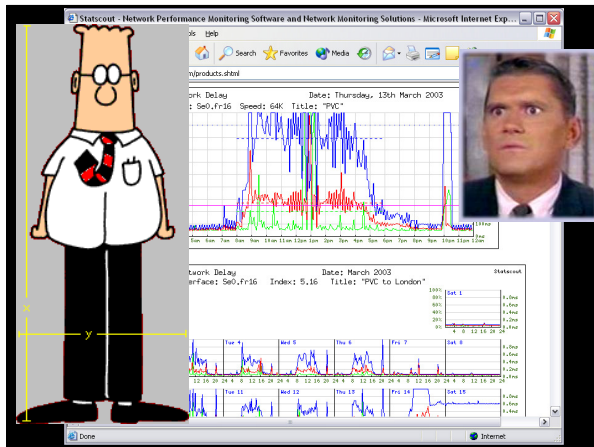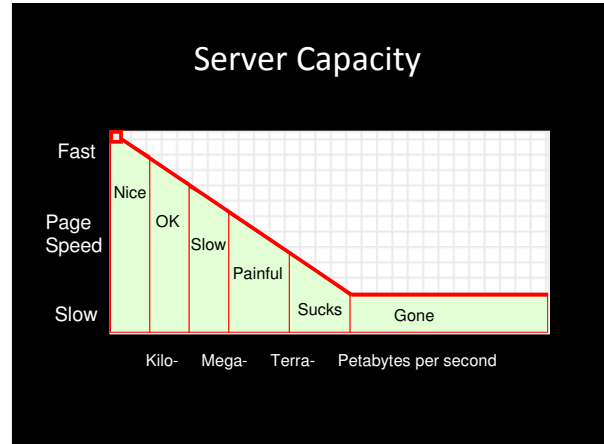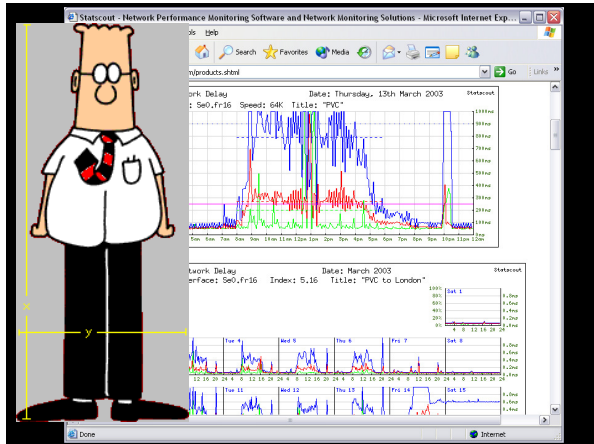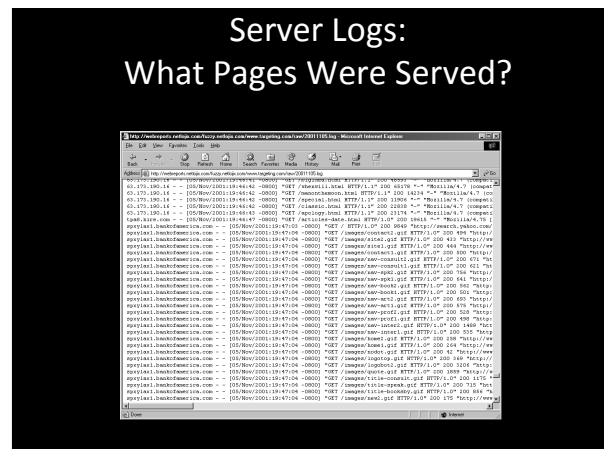B2B or B2C?
Beginning/Intermediate/Advanced?

Agenda

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A Short History of Web Analytics

INTERNATIONALER MATHEMATIKER-CONGRESS ZÜRICH
9-11. August

Server Capacity

The Short History of Web Metrics

What can you tell us?

Log files

Server Logs
Transaction Records for Recovery

http log - "server log"

What pages were served to which IP addresses & when

Server Logs:
What Pages Were Served?
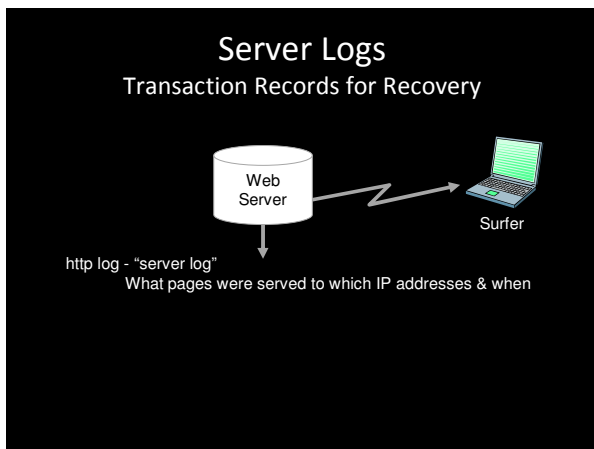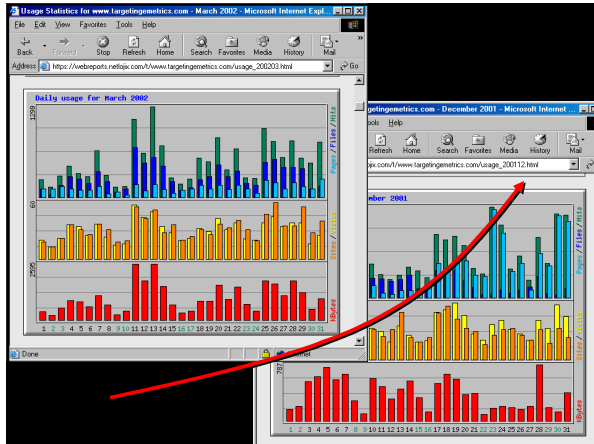
Server Logs

Visits (sort of)

Sessions (sort of)

Pageviews (sort of)

Entry & exit pages (sort of)

Errors

Hourly usage (sort of)

Browser & OS version (sort of)

Usage by country (sort of)

The Short History of Web Metrics

What can you tell us?

Log files

What about campaign management?

Referrer data

Referrer Logs: Where Did They Come From?

Referer (sic) log contains:

Which link

Which banner

Which press release

Which partner site

Which search engine

Which search terms

The Short History of Web Metrics

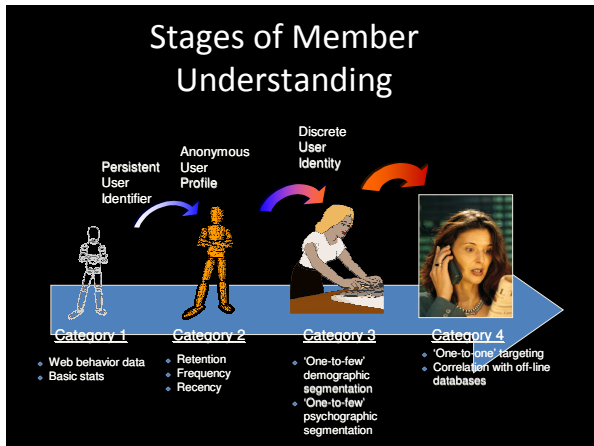What can you tell us?

Log files

What about campaign management?

Referrer logs

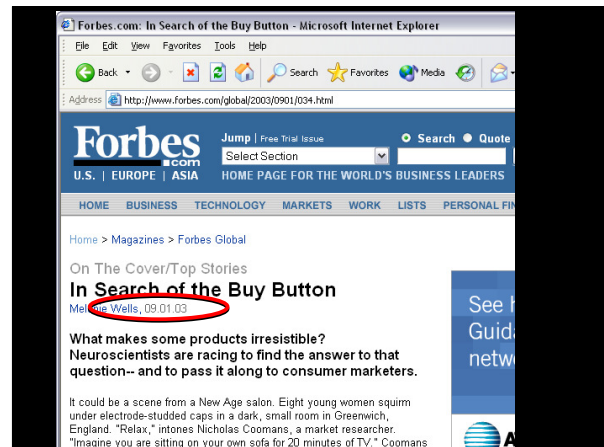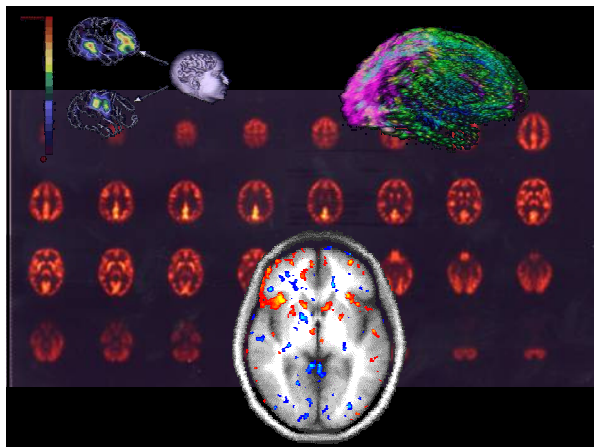What about clickstreams, sessions, segments, conversions, etc.?

VCI of VSS

Data, Data Everywhere

Performance Monitors	Application Servers
Server Log Files	Email Marketing
URL Tagging	Visitor Surveys
Cookies	Panel/ISP Research
Packet Sniffing	Usability Testing
Web Beacon	Eye Tracking
Page Tagging	Brand Impact Metrics
Client Side Surveillance	Cross Channel Metrics

Stages of Member Understanding

- Persistent User Identifier
- Anonymous User Profile
- Discrete User Identity

Category 1
- Web behavior data
- Basic stats

Category 2
- Retention
- Frequency
- Recency

Category 3
- 'One-to-few' demographic segmentation
- 'One-to-few' psychographic segmentation
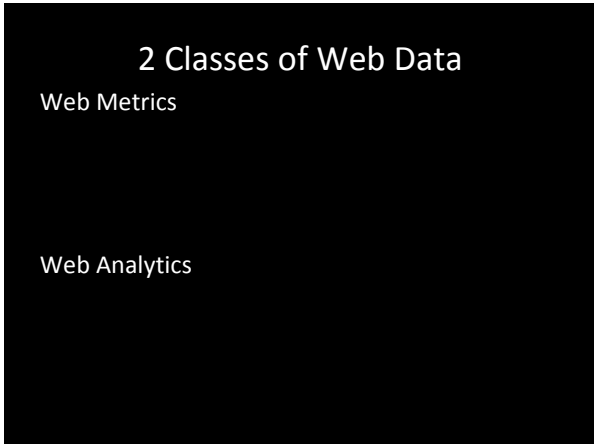
Category 4
- 'One-to-one' targeting
- Correlation with off-line databases

Data, Data Everywhere

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We Can Measure Everything

Data, Data Everywhere

Performa...	...n Servers
Server L...	...rketing
URL Tag...	...rveys
Cookies	...Research
Packet S...	...Testing
Web Bea...	...king
Page Tagging	Brand Impact Metrics
Client Side Surveillance	Cross Channel Metrics

2 Classes of Web Data

Web Metrics

Web Analytics

2 Classes of Web Data

Web Metrics

How many online?

Where are they going?

What are they doing?

Web Analytics

What are they doing on MY website?

Behavior

Where do they go?
What are they up to?
What are they trying to do?
Where do they get lost?

Company / Customer Communication

Get Attention	Advertising
Educate	Marketing
Sell	Sales
Help	Customer Service
Connect	Relationship Mgt

Company / Customer Communication

Clickthroughs	Advertising
Educate	Marketing
Sell	Sales
Help	Customer Service
Connect	Relationship Mgt

Company / Customer Communication

Clickthroughs	Advertising
Pageviews	Marketing
Sell	Sales
Help	Customer Service
Connect	Relationship Mgt

Company / Customer Communication

Clickthroughs	Advertising
Pageviews	Marketing
Revenues	Sales
Help	Customer Service
Connect	Relationship Mgt

Company / Customer Communication

Clickthroughs	Advertising
Pageviews	Marketing
Revenues	Sales
Attitudes	Customer Service
Connect	Relationship Mgt

Company / Customer Communication

Clickthroughs	Advertising
Pageviews	Marketing
Revenues	Sales
Attitudes	Customer Service
Public Views	Relationship Mgt

Company / Customer Communication

Clickthroughs	Acquisition
Pageviews	Marketing
Revenues	Sales
Attitudes	Customer Service
Public Views	Relationship Mgt

Company / Customer Communication

Clickthroughs	Acquisition
Pageviews	Content Consumption
Revenues	Sales
Attitudes	Customer Service
Public Views	Relationship Mgt

Company / Customer Communication

Clickthroughs	Acquisition
Pageviews	Content Consumption
Revenues	Outcomes
Attitudes	Customer Service
Public Views	Relationship Mgt

Outcomes

Subscriptions
Registrations
Survey Completions
Blog Comments
Blog Posts
Purchases
Leads

Company / Customer Communication

Clickthroughs	Acquisition
Pageviews	Content Consumption
Revenues	Outcomes
Attitudes	Customer Service
Public Views	Relationship Mgt

Company / Customer Communication

Clickthroughs	Acquisition
Pageviews	Content Consumption
Revenues	Outcomes
Attitudes	Satisfaction
Public Views	Relationship Mgt

Company / Customer Communication

Clickthroughs	Acquisition
Pageviews	Content Consumption
Revenues	Outcomes
Attitudes	Satisfaction
Public Views	Recommendations

Behavior in Context

10% increase in website visitors

20% increase in sector visitors

What are they searching for?
Which competitors have more traffic?

...and where do people go after my site?

Competitive

Web traffic	Customer experience
Traffic by search term	Customer satisfaction
Bounce rate	Net Promoter score
Registrations	Social media mentions
Search visibility	Virality
Link equity	Usability
Advertising spend	Downloads

Completive Analysis

Hitwise

comScore

Compete

Alexa

Quantcast

The Data Are Fuzzy

Different tools

Different databases

Different dates

Different cleansing

Different slicing

Different reporting

Different integration

The Data Are Fuzzy
Consider the Source

Traffic (non-human?)

IP Address (dynamic?)

Pageview (cached?)

Cookie (same person?)

Cookie (different machines?)

Cookie (deleted?)

Data, Data Everywhere

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Using Web Data for Business

What good is all this web data?

How can it make me more profitable?

How does it help my website?

Company / Customer Communication

Get Attention	Advertising
Educate	Marketing
Sell	Sales
Help	Customer Service
Connect	Relationship Mgt

What to Measure?

Goals

Sub Goals

Key Performance Indicators

Metrics

Measurements

Key Performance Indicators

Conversions	User experience/success
Cost per Acquisition	Customer satisfaction
Recency & Frequency	Problem resolution
Downloads	Reduce no-fault
Subscriptions	Stickiness - pageviews
RFPs	Increase unique visitors
Task completion	Global reach
Culture shift/compensation	Cost reduction
Culture shift/acquisition	Successful search
Store to Site to Sale	Increase loyalty
Average basket price	Referrer data
Visitor data capture	Referral data

Using Web Analytics to Measure

- Attention
- Navigation
- Content
- Conversion
- Customer Experience

Measuring Clicks Reveals:

How good is my advertising creative?
How good is my public relations?
How good is my partner program?
How good are my search engine listings?
How good is my blogging?
How good is my tweeting?
How good is my off-line marketing?

Attracting Attention

Organic Search

Keyword Pay Per Click

Banner

Email

Social media

Offline

Where do they come from?
What does it cost?
Is it worth the expense?

Where do They Come From?

↑ Search engines (SEM & SEO)
↓ Banner ads
↑ Newsletter ads
↑ Email marketing
↓ Directories
↑ Press releases
↓ Partner pages
↑ Tweets
↓ Blog posts

Using Web Analytics to Measure

- Attention
- Navigation
- Content
- Conversion
- Customer Experience

Web Analytics
To Improve Navigation

What was the entry page?

What was the bounce rate?

What did they look at?

How long did they stay?

How deep did they click?

Where/why did they leave?

What can we learn from
their behavior?

Search Term Analysis

What did they search for?

How does their language change?

What impact does advertising have?

What searches on the home page?
(What are they *not* finding?)

Using Web Analytics to Measure

- Attention
- Navigation
- Content
    Conversion
    Customer Experience

Content is Not Free

Write copy

Proof copy

Create graphics

Format layout

Maintain index/site map

Maintain navigation

Host & serve

Is it
worth it?

Content Value

Content must:

Lower costs

Delay costs

Raise revenue

Speed revenue

Increase customer satisfaction

Is it
worth it?

Using Web Analytics to Measure

- Attention
- Navigation
- Content
- Conversion
    Customer Experience

Did They Buy Anything?
(Conversion)

Clickthroughs & Referrals

Registration
Contest entry
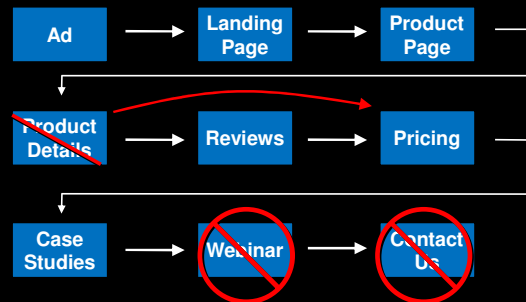Document download
Retail coupon print
Feedback

Conversion

What visitor action
is important to you?

Micro Conversions

Return once more
Click once more
Agree once more
Purchase once more
Mention once more

Micro Conversion Optimization

Ad → Landing Page → Product Page

Product Details → Reviews → Pricing

Case Studies → Webinar → Contact Us

A/B Split Testing

Multiple versions multiple pages
Served to every Nth visitor
Cookies for consistency
Automated results feedback

Multivariate Testing

Multiple variables on a single page
Multiple variables on a single process

A Better Page is Actually a Better "Offer"

Call to action, hero shot on existing page:

Change Offer Elements that matter

Headline

Copy

Hero Shot

Call to Action

How big is the Test?

64 Different Pages using traditional "split" testing
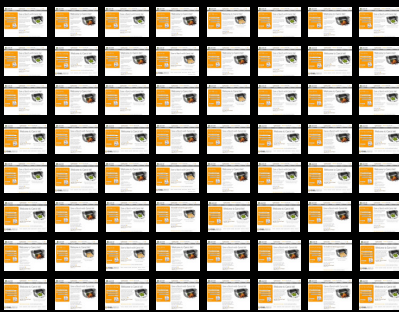
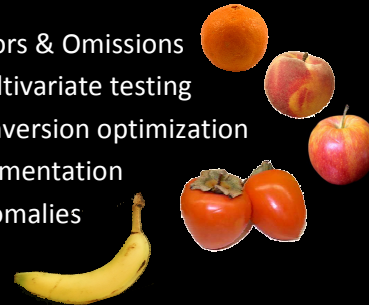## Actual Versions Tested

9 "Recipes" means almost 1/8th the time!

Shopping Cart Analysis

Likely to buy combinations
Likely to abandon combinations
Likely upsell
Likely cross-sell

Site Optimization: Low Hanging Fruit

Errors & Omissions
Multivariate testing
Conversion optimization
Segmentation
Anomalies

Segment

Everybody doesn't do the same thing
Similar people respond similarly
Segment as many ways as you can
Test which segments are useful

Using Web Analytics to Measure

- Attention
- Navigation
- Content
- Conversion
- Customer Experience

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Attitude

How do they feel?
What do they think?
What are they saying about you?
What is their customer experience?
Will they recommend you?

Capture the Customer Experience
Analyze the Customer Experience
Optimize the Customer Experience

Awareness
Attitude
Response
Comprehension
Navigation
Consumption
Conversion
Retention
Recommendation

World's Best Survey

Why did you come this time?

Did you achieve your objective?

If not, why not?

Attitude

How do they feel?

What do they think?

What are they saying about you?

Will they recommend you?

What is their customer experience?

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eMetrics Maturity Model

- Reporting
- Site Optimization
- Behavioral Analysis
- Dynamic Promotions
- Marketing Optimization
- Business Optimization

Reason Backwards

Identify the desired result

Identify those who have done it

Identify what they have in common

How are they different from the rest?

Analysis

Therefore...

97% who search for "cameras" want digital cameras

Those arriving from search are 4 times more likely to buy than from banner ads

95% who click on "Free Shipping" do not add additional items to cart

68% who went through steps 1 - 5 failed to get to step 6

Therefore...

Have an opinion

Make an assumption

Offer a hypothesis

Run a test

Therefore...

Have an opinion   _____ could be better

Make an assumption   Customers don't like _____

Offer a hypothesis   The problem might be _____

Run a test   Let's try _____

eMetrics Maturity Model

Reporting

Site Optimization

Behavioral Analysis

Dynamic Promotions

Marketing Optimization

Business Optimization

Multivariate Testing
Multiple permutations of a single page
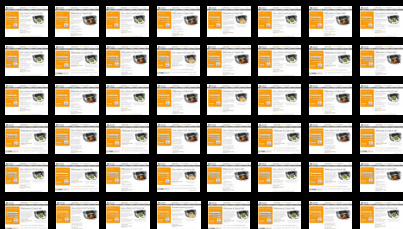
Automated Marketing

Re-marketing abandoned shopping carts

Behavioral targeting with dynamic content

Behavioral targeting with dynamic advertising

Email marketing scenario automation

Recency response triggers

eMetrics Maturity Model

- Reporting
- Site Optimization
- Behavioral Analysis
- Dynamic Promotions
- Marketing Optimization
- Business Optimization

Examples of Analysis

A good example
is the best sermon
~ Benjamin Franklin

Good artists imitate,
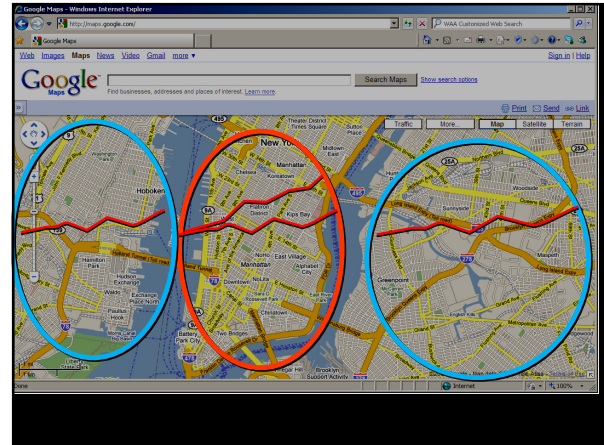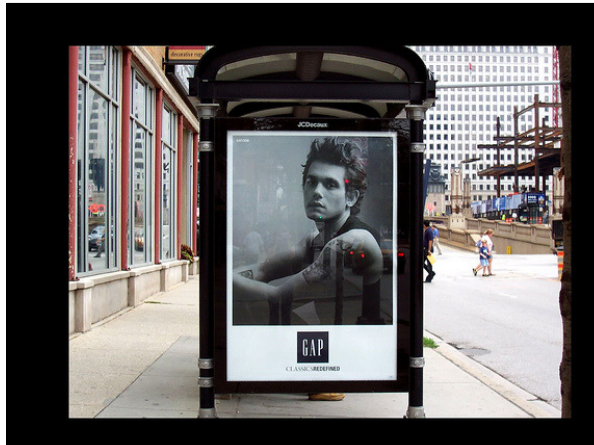Great artists steal
Pablo Picasso

Record Store Traffic

Store
Website
Snow

Craig Sullivan
LoveFilm

Craig Sullivan
LoveFilm

"Hey guys -
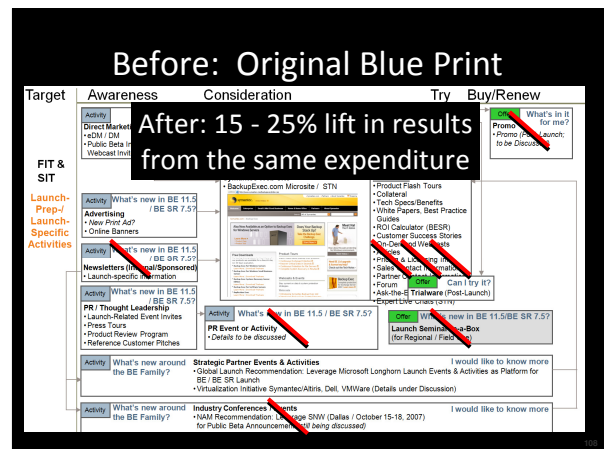Nice job on that brochure."
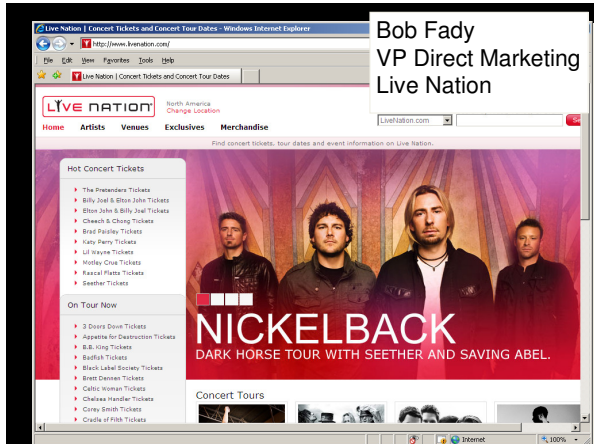

David Yoakum, Gap
Diplomat of Data

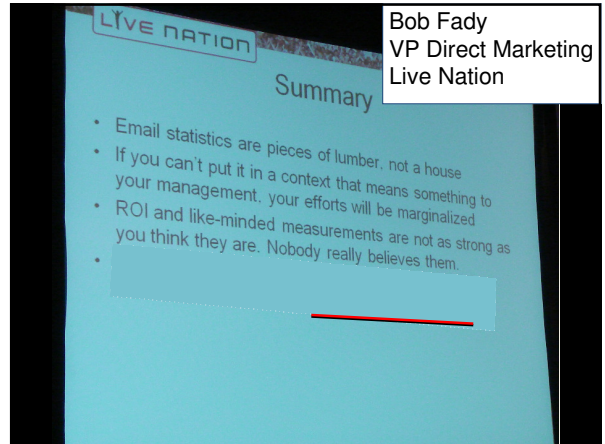Product Manager of Web Analytics and
Business Intelligence

The Big Picture :
Metrics as Business Fuel

Kim Johnston
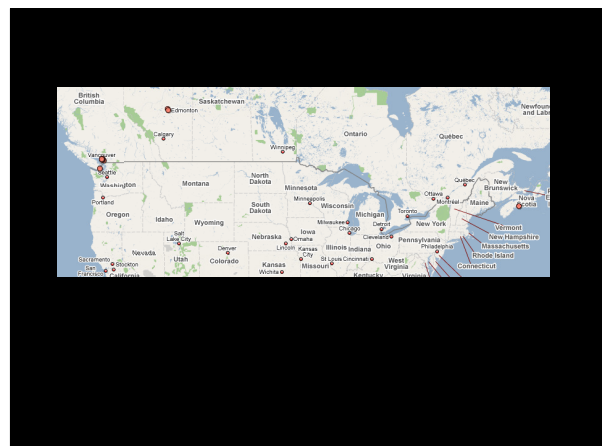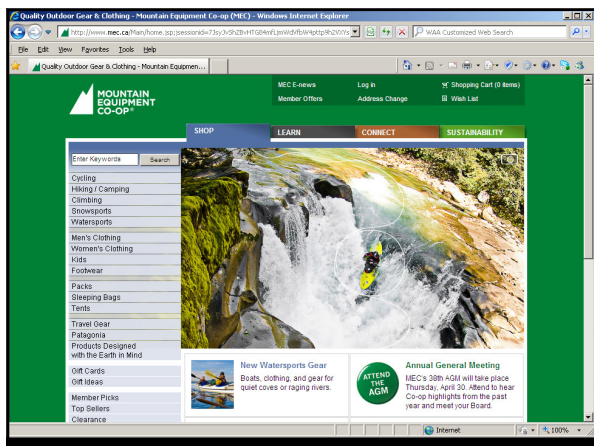Vice President of Global Sales &
Marketing Operations
Symantec

Before: Original Blue Print
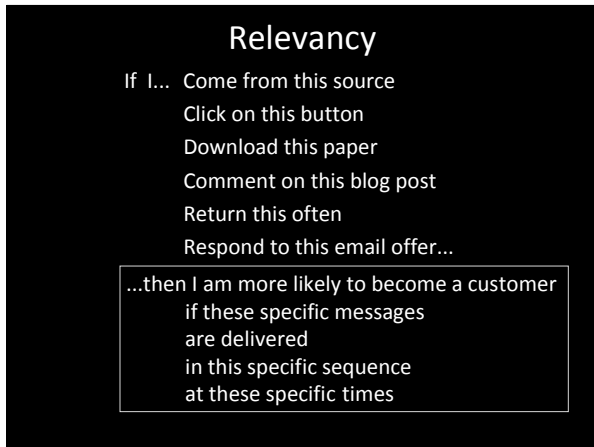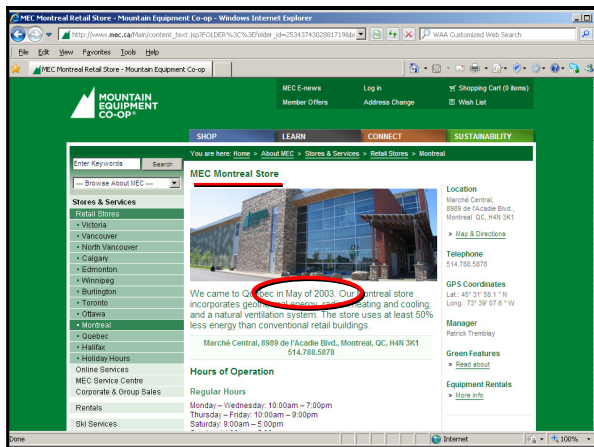
After: 15 - 25% lift in results
from the same expenditure

Bob Fady
VP Direct Marketing
Live Nation

Summary

- Email statistics are pieces of lumber, not a house
- If you can't put it in a context that means something to your management, your efforts will be marginalized
- ROI and like-minded measurements are not as strong as you think they are. Nobody really believes them.
-

Bob Fady
VP Direct Marketing
Live Nation

Relevancy

If I... Come from this source

Click on this button

Download this paper

Comment on this blog post

Return this often

Respond to this email offer...

...then I am more likely to become a customer
if these specific messages
are delivered
in this specific sequence
at these specific times

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eMetrics Maturity Model

- Reporting
- Site Optimization
- Behavioral Analysis
- Dynamic Promotions
- Marketing Optimization
- Business Optimization

Business Analytics

Brand awareness
Market share
Response rate
Lead quality
Sales
Customer profitability
Customer satisfaction
Customer retention
Recommendations

We can improve **this** number by **this** percent in **this** time frame with **these** resources

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CRM ASSOCIATION

eMetrics Marketing Optimization Summit

Marketing Optimization Summit

Web Analytics Association

WEB ANALYTICS ASSOCIATION

SOCIAL MEDIA METRICS

World Wide Web Marketing

Customer Service on the Internet

What makes people click Advertising on the Web

Email Marketing

E-Metrics

Web Metrics