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Eastman Kodak Company

November 2006

Mike Spang Eastman Kodak Company

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Globalization of a corporate site-

- In this session you will learn about issues involved, research conducted, and methods utilized for measuring visitor experience.
- The session will provide you with some potentially new ideas on how to incorporate global users' input into your web experience and measure your success.



- Introduction kodak.com background
- Market Research Principles User Center Design
- Research tool kit
  - Open ended site survey
  - Web site usability testing
  - Web visitor satisfaction
- Summary of key experiences findings
- Conclusion
- Questions





### **Guiding Principles**

- One global "kodak" web presence
- Vehicle to deliver the corporate brand message
- Portal for photography and imaging
- Interesting, fresh, easy to use
- Increase revenue decrease cost







## What is kodak.com today?

Kodak

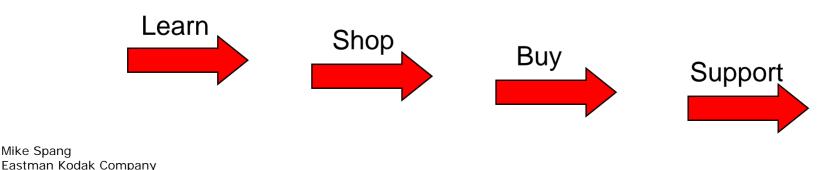
50+ country sites

United Kingdom [change]

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What's inside kodak.com

- Information, commerce and interaction
- Heavy interest in digital photography
- Serving both B2B and B2C oriented business groups + corporate functions
- Service & Support





Home | Privacy | Site Terms | Company Information | Site Map

- Digital Cameras
- Software
- Printers
- Online Printing Services
- Accessories
- Inkjet Paper
- KODAK Picture Kiosk
- Picture CD
- Film
- One-Time-Use Cameras
- Support Center
- Promotions

#### Kodak EasyShare system



Choose a camera & more
 Compare digital cameras
 Digital photo solutions
 Accessories



Free standard delivery

for all orders over £50

Start shopping >>

 FREE EASYSHARE Software Download for WINDOWS Download for Mac



Kodak Online Shop

Print your pictures
 At home
 Online
 At a Store



Buy a KODAK V610 Dual Lens

on one of two great value bundles

Camera and save up to £100

Prints delivered to your door Join the Gallery, get 30 FREE prints & share online

Find your nearest in store demo



Support Center



Downloads & Drivers FAQs Manuals ► KODAK Online Shop



Save 10% when you buy 2 accessory items or 15% when you buy 3 accessory items or more.See all accessories >> KODAK EXPRESS Stores



Your assurance of quality.

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#### 0

Buy now >>

See details >>



Startseite | Datenschutz | Copyright | Impressum | Sitemap



Découvrez le site kodak.com

#### Kodak

Rechercher



Accueil | Confidentialité | Copyright | Informations sur la société | Plan du site



大众影像	专业影像	娱乐影像	医疗影像	商业印刷	商业影像	有达公司
产品	产品支持	冲印与分享	拍佳照   耳	<b>飫系我们</b>		



搜索

## Market Research Principles

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• Visitor advocate

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- Use all tool available to understand visitor behaviour
- Moderate opposing forces:
  - Design versus Usability
  - Search engine optimization versus Usability
  - Marketing "push" versus visitor "pull"



## User Centered Design

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- In broad terms, **user-centered design (UCD)** is a design philosophy and a process in which the needs, wants, and limitations of the end user of an interface or document are given extensive attention at each stage of the design process.
- User-centered design can be characterized as a multi-stage problem solving process that not only requires designers to analyze and foresee how users are likely to use an interface, but to <u>test the validity</u> of their assumptions with regards to user behaviour in real world tests with actual users.
- Such testing is necessary as it is <u>often very difficult</u> for the designers of an interface to understand intuitively what a first-time user of their design experiences, and what each user's learning curve may look like.

Wikopedia - http://en.wikipedia.org/wiki/User-centered\_design

#### You must develop an intimate knowledge of the your user – your visitor

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Research "tool kit":

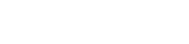
- Open ended site surveys
- Heuristic Evaluation
- Focus groups
- Cognitive walkthrough
- Card Sort
- Usability
  - In lab
  - Remote
  - Web based usability tools
- Visitor Satisfaction
- Multivariate Design Test
- Web Traffic

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Qualitative

Juantitative

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Search

- China
- South Korea

Germany

France

- United States
  - Plus country team interaction

Geographic Coverage:

United Kingdom

### User Centered Design Research

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Research "tool kit":

- Open ended site surveys
- Heuristic Evaluation
- Focus groups
- Cognitive walkthrough
- Card Sort
- Usability
  - In lab
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  - Web based usability tools
- Visitor Satisfaction
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Qualitative

Juantitative

Geographic Coverage:

- United Kingdom
- Germany
- France
- China
- South Korea
- United States
  - Plus country team interaction

### **Open-ended Site Survey**

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You have goals and objectives for your site...but are those the same goals that your visitors have in mind when they visit?

*How do you find out* – "Site Qualitative Probe"

- Three simple questions
  - Why did you come to your web site today?
  - Were you able to accomplish your visit objective?
  - Tell us about your experience

With this information about your visitors' goals you can design and test use cases or visitor activities.



## Open-ended Site Survey

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- Each response is open ended and needs to be classified. (300 to 1,000 responses collected)
  - Visitor activity (e.g. buy, support, info)
  - Specific product area (e.g. digital camera, photo service, etc.)
  - Business unit
- Once these data are analyzed you will have a good understanding of the goals of the visitor and some of the challenges that your site presents.
  - Self identified success rate
  - Key site activities
  - Key content areas utilized, missing or difficult to find

## **Usability Testing**

Usability is defined in the standard as:

The effectiveness, efficiency and satisfaction with which specified users achieve specified goals in particular environments.

We follow the approach to usability recommended in the International Standard ISO 9241-11 'Guidance on usability measures and specification'. In this standard, usability is a <u>quality measure</u> and includes measures of <u>effectiveness</u> (achieving task goals), <u>efficiency</u> (effort and resources required) and <u>satisfaction</u> of the participants. The process involves specifying the users and tasks, setting appropriate benchmarks for effectiveness, efficiency and satisfaction and then conducting tests with user representatives against these benchmarks.

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## **Usability Testing**

**Usability testing** is a means for measuring how well people can use some human-made object (such as a web page, a computer interface, a document, or a device) for its intended purpose, i.e. usability testing measures the **usability** of the object. Usability testing focuses on a particular object or a small set of objects, whereas general humancomputer interaction studies attempt to formulate universal principles. *http://en.wikipedia.org/wiki/Usability\_testing* 



In lab testing facility

- market research facility, agency, etc.

Remote - web based tool

-WebEx, NetMeeting, UserView, Ethnio, etc.

Web based survey / usability tools

-KeyNote, RelevantView, UserZoom, etc.

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Search

### **Testing Facilities**





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### How many participants?

- In the early 1990's Jacob Nielson stated "Elaborate usability tests are a waste of resources. The best results come from testing no more than 5 users and running as many small tests as you can afford."
- Virzi, R.A., Refining the Test Phase of Usability Evaluation: How Many Subjects is Enough? Human Factors, 1992, showed through mathematical modeling that problems continue to be uncovered beyond the 5<sup>th</sup> participant. *(see Appendix slide 39)*
- Bruce Tognazzini advocates *close-coupled testing*: "Run a test subject through the product, figure out what's wrong, change it, and repeat until everything works. Using this technique, I've gone through seven design iterations in three-and-a-half days, testing in the morning, changing the prototype at noon, testing in the afternoon, and making more elaborate changes at night."
- We typically have 8-12 participants in our studies

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## What is an Activity?

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- An usability activity is a scenario that represents a web visitor's goal for coming to your site.
- There are typically a variety of user goals so your usability test needs to represent a variety of activities.
- The design and wording of the activity is important to test the desired aspects of the visitor experience and while not biasing the participant

An example of an activity: You attended a trade show and saw a new product from Kodak called the ScanStation 100. Go to the Kodak website and find out how many pages per minute the ScanStation 100 is capable of running.

Possible path – Home Page – What's Inside Kodak.com – DI Page – SS100 - Specifications

## **Usability Testing**

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### Metrics

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- Completion rates successful, unsuccessful, successful with a hint
- First click
- Time to completion
- Post test questionnaire
   Other Data
- Click stream
- Verbal responses during the activity



### **Post-Test Questionnaire**

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On completion of the final task users are asked to complete a questionnaire derived from A. Lund's USE Questionnaire (USE stands for Usefulness, Satisfaction, and Ease of use). The questionnaire aims to measure the most important dimensions of usability for users, and to measure those dimensions across domains. The questionnaire has been tested across software, hardware, services, and user support materials. It allows meaningful comparisons of products in different domains. The items in the questionnaire have a certain amount of face validity for both users and practitioners.

"Most people will find this website does everything they expect." Strongly Disagree 1---2---3 Strongly Agree NA "Most people will find that it takes a lot of steps to complete common tasks with this website." Strongly Disagree 1---2---3 Strongly Agree NA

> USE Questionnaire Link (see Appendix for Post-Test Questions)

## **Results of Usability Testing**

- Allow you to identify key barriers to navigation.
- Barriers could involve the structure of the site, failure of the search engine, poor or inconsistent terminology ... to name a few.
- Execution → Document a corrective action plan. This plan must be put in place to ensure the research is acted upon.

## Key Experiences

- To design a satisfying web experience You must develop an intimate knowledge of the "voice of the visitor"
- It is easier to operate "at home"
- Local facilities allows you to bring your local team
- Regional facilities broader recruiting for full in lab studies
- International work utilized contacts with local experience – test your prototype
- Maintain research flexibility
- Based on the results develop an action plan to improve the visitor experience





- the internet is not a product
- the internet is not a <u>service</u>



Search

 the internet is a <u>technology</u> that enables customer relations such as advertising, brand building, and online sales and services. The user evaluates web site satisfaction differently than satisfaction with products or services.

### Satisfaction is in the "eye of the beholder"

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- A satisfying site experience is based on the perceptions of the visitor
- Visitors are looking for "easy"
  - Ease finding what your looking for
  - Ease making a purchase
  - Ease in servicing a product

Not knowing where to look = frustration

Search

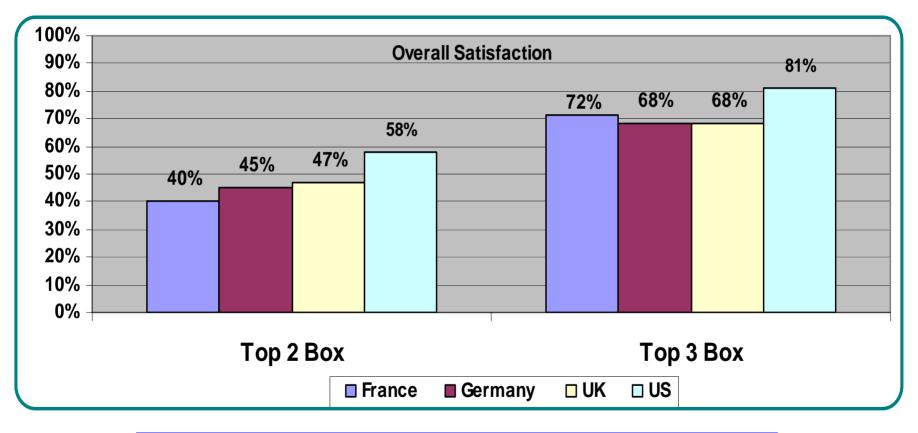
#### Kodak Site Satisfaction

Remote survey / usability tool used to conduct this study

- Email invites sent to consumer panel for each country
- Participants screened to match demographics, quotas filled
- Incentive for those who complete, approx. time 25 min.
- N = 200 participants per country
- Activities start on home page, each participant completes two, then responded to:
  - Successful completion
  - Verification question
  - Difficulties/frustrations with activity (list provided)
  - Experience rating for each activity
  - 'Information where expected' rating for each activity
  - Comments on experience / why successful or not
- Final questions after completion of activities:
  - Rate overall satisfaction with Kodak.com
  - Rate (8) performance attributes of the site
  - Optional comments about Kodak website



#### Top 2 box\* and top 3 box\* satisfaction was significantly higher in the US.



\* Top 2 Box = 6 or 7 on a 7 point scale of Completely Dissatisfied > Completely Satisfied

\* Top 3 Box = 5,6 or 7 rating

#### Differences of 9 ppt or greater are significant at .05

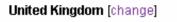
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## Satisfaction is lower in Europe than the US

Possible reasons:

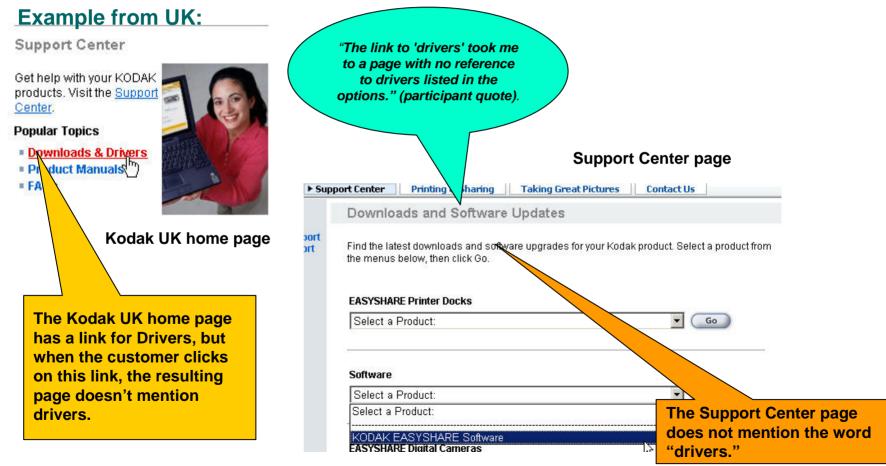
- Cultural sensitivities to web design
- Potentially Kodak approaches the web from a US perspective
- Cultural sensitivities to Likert scale
- Specific issues sited:
  - Consistency
  - Unclear terms and labels
  - Information hard to find



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#### Inconsistent use of terminology and labeling of links causes confusion.

Participants click on Downloads & Drivers link, but when they get to the Support Center page, there is no mention of drivers.



#### Inconsistencies across Kiosk pages negatively impact visitor experience and success.

Erstellen Sie Bilder am KODAK Picture Maker

#### **Example from Germany:**

Participants may have been confused by the inconsistency in naming (Kodak Kiosk and Picture Maker).

Also, unlike the Kodak UK and Kodak France websites, Kodak Germany's website has two different types of Kodak Kiosks under Store Locator.

Issue: The Kodak Germany website's Store Locator offers two different choices for Kodak Kiosks.\*



Sie können Ihre Fotos von der Speicherkarte der Kamera oder einer CD auf den KODAK Picture Maker übertragen und erhalten KODAK Bilder und Vergrößerungen sofort zum Mitnehmen.

#### Jetzt können Sie

- KODAK Bilder von der Digitalkamera erstellen
- KODAK Bilder von Bildvorlagen erstellen
- KODAK Bilder von Ihren digitalen Fotos auf CD erstellen
- KODAK Bilder vom Foto-Handy erstellen

Weitere Informationen zum KODAK Kiosk



#### Kodak Kiosk Store Locator

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#### Inconsistent labels and technical terms cause confusion in 'Find Compatible Dock Activity.

Camera model numbers used on Digital camera main page, but Compatibility Chart uses camera series term

Difference between Camera dock and Printer dock not clear to many; no definitions provided

Having Printer Dock and Camera Dock charts on same page causes some confusion.

#### **Example from UK:**



Compatibility of KODAK EASYSHARE Docks

KODAK EASYSHARE Printer Docks make printing, sharing, and charging your camera battery one-touch simple.

Use the charts below to determine which camera or dock works with your existing KODAK EASYSHARE product.

Print

E-mail n

How do I know which dock I have?

Printer Dock Compatibility Chart

EASYSHARE Products	Printer Dock Series 3*	Printer Dock Plus* Printer Dock* Printer Dock 6000	Printer Dock 4000		
EASYSHARE- ONE C Series V Series Z Series Picture Viewer LS755	Compatible, No Adapter Required	D-22 Adapter Required			
CX7000 Series DX7000 Series CX6000 Series DX6000 Series LS753 LS743	D-26 Adapter Required	Compatible, No Adapter Required	Not Compatible		

Printer Dock Compatibility Chart

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### Search works well in simple cases, but is not responsive to variations in spelling or for searching on multiple items.

Activities most impacted: Camera Phone Tips and Compare Cameras (visitors tried to use search for multiple features.)

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#### **Example from UK:**

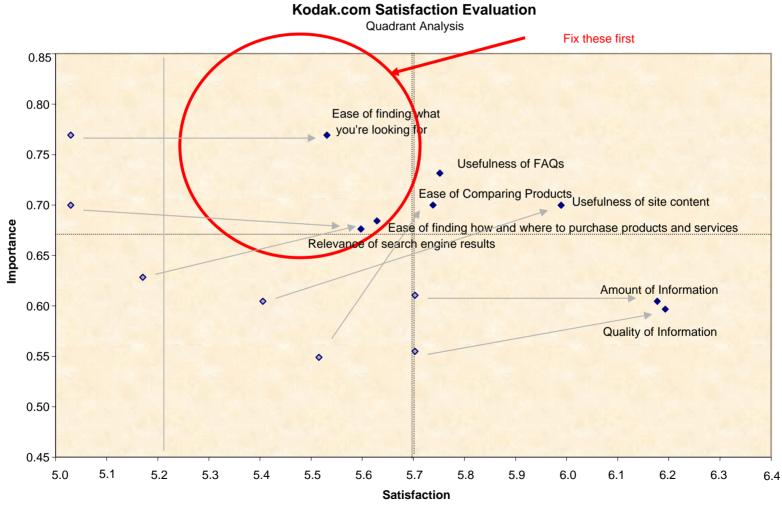
odak J United Kingdo	Share Momen m ( <u>change country / langua</u> d	its. Share Life." <sub>ge</sub> ) ∣ <u>Join / Login</u>		Ľ		Search
Consumer Photography	Pro Photographer / Lab	Cinematography	Health & Dental	Graphic Communications	Business & Government	Corporate
р	roducts Support Ce	nter Printing & S	haring 7	Faking Great Pictures	Contact Us	

Your search for cameraphone returned zero results.

Currently, when customers enter "cameraphone" into the Search field, it returns zero results, and doesn't suggest alternate spellings.

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*"Ease of finding what you are looking"* for has consistently been a key driver of site satisfaction and a key improvement opportunity



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*See Appendix page 41-42 for methodology* (c) Eastman Kodak Company, 2006

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### Conclusion

- Test your web site with actual site visitors
  - Test your marketing assumptions against visitor goals
  - Test your content

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- Test your navigation
- Test your site visitors satisfaction
- Continuously improve your site
- Benchmark your progress

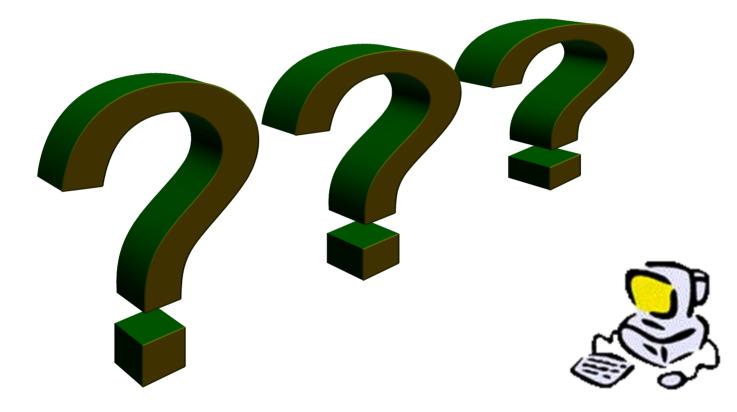




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**Questions** ???





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## Appendix

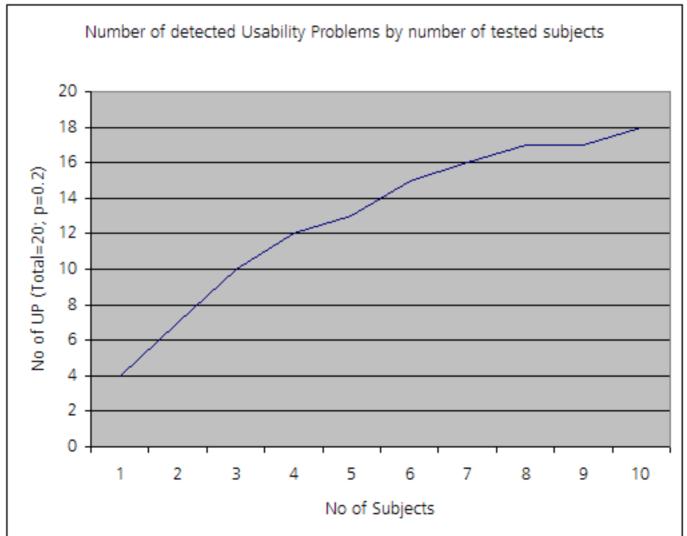
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Search

### Virzis Formula



Mike Span Virzi, R.A., Refining the Test Phase of Usability Evaluation: How Many Subjects is Enough? Human Factors, 1992. 34(4): p. 4573468 Eastman Kodak Company

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Go Back

### Appendix C: Post-Test Questions

Imagine that a photography magazine reviewed this website and made the following comments about it.

Indicate your degree of agreement or disagreement with the critic's comments. "Most people will find this website does everything they expect." 1. Strongly Disagree 1---2---3----5 Strongly Agree NA "Most people will find that it takes a lot of steps to complete common tasks with this website." 2. Strongly Disagree 1---2---3----5 Strongly Agree NA 3. "Most people will think this website looks difficult to use." Strongly Disagree 1---2---3----5 Strongly Agree NA 4. "Most people will learn how to use this website quickly." Strongly Disagree 1---2---3----5 Strongly Agree NA 5. "Most people will need to read the on-line help to use this website." Strongly Disagree 1---2---3----5 Strongly Agree NA 6. "Most people will think that this website works the way they expect." Strongly Disagree 1---2---3----5 Strongly Agree NA "Most people will need to take time to become skilful with this website." 7. Strongly Disagree 1---2---3----5 Strongly Agree NA "Most people will find this website pleasant to use." 8. Strongly Disagree 1---2---3----5 Strongly Agree NA 9. "Most people will recommend this website to their friends." Strongly Disagree 1---2---3----5 Strongly Agree NA 10. "Most people will find that this website doesn't meet their needs." Strongly Disagree 1---2---3----5 Strongly Agree NA "Most people will discover that this website helps them to be more productive." 11. Strongly Disagree 1---2---3----5 Strongly Agree NA 12. "Most people will forget how to use this website." Strongly Disagree 1---2---3----5 Strongly Agree NA

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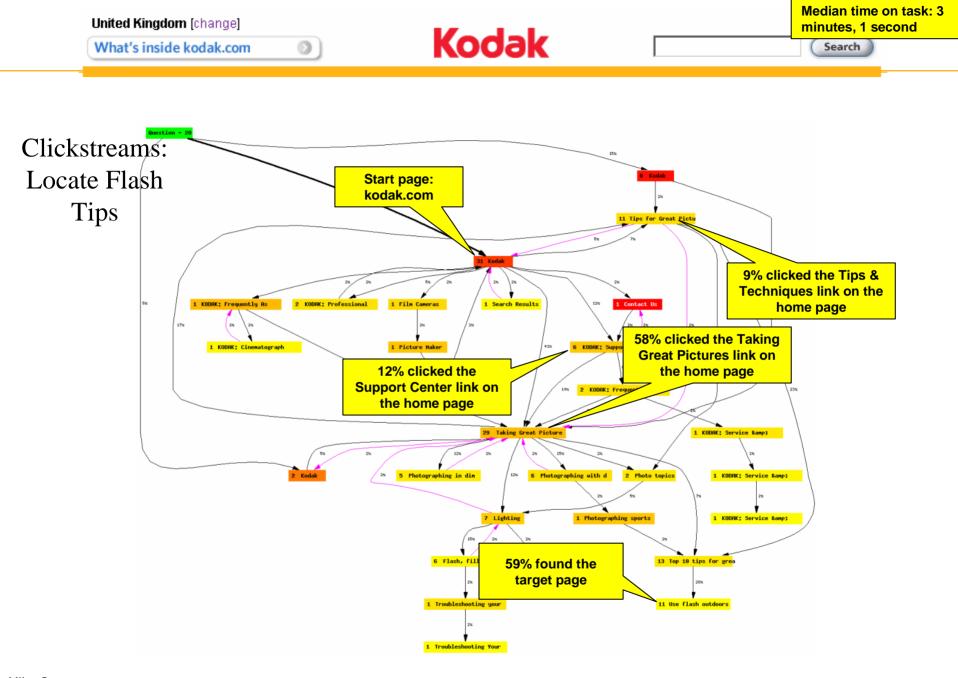
### Key Driver Analysis Methodology

- Importance of attributes to overall satisfaction can be garnered in two ways:
  - Ask respondents (stated importance)
  - Use a statistical calculation (derived importance)
- Preferred method: derived importance
- Why?
  - Saves time on survey
  - Respondents tend to rank/rate everything "important"
- Pearson product-moment correlations were developed for each variable to derive the relative importance of each variable to overall satisfaction
  - Attribute ratings were correlated to the overall satisfaction question for Total Homepage sample and by segments



### Key Driver Analysis Methodology (continued)

- All of the correlation coefficients showed a statistically significant correlation with overall satisfaction, suggesting that all variables were considered "important" by respondents
- For example, the correlation coefficient for "usefulness of site content" is .816, the highest correlation, indicating the most important variable, while the correlation coefficient for "ease of comparing products" is .671, indicating it was somewhat less important



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### **Recommendations grid**

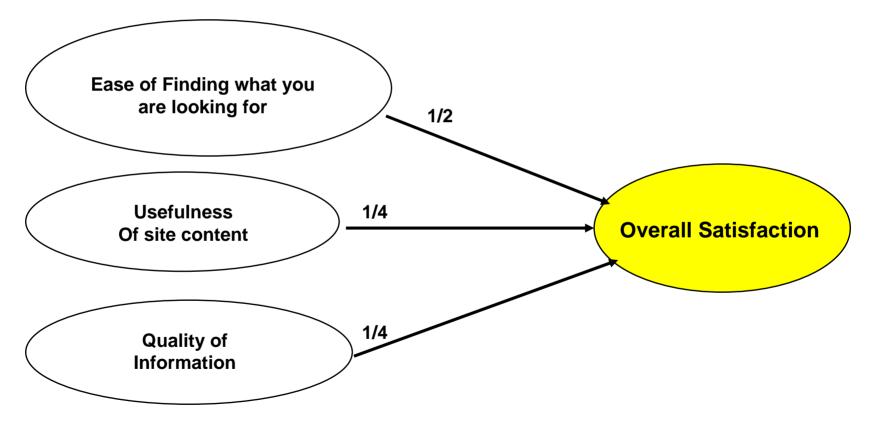
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		Impact Assessment 1=most impact 3=least impact		Technical Difficulty 1=least difficult 3=most difficult	NOTE: See Legend at bottom of column	Priority		Resources				Dates & Times				
		Marketing	Customer	Technical	Technical				Leadership	IA - UID -				Estimated	Projected Completion	Complete? (Yes OR
Ranking	Recommendation	OR Support	Satisfaction	Difficulty	Assumptions	Н	м		Owner	Usability	VID	Technical	Other	Start Date	Date	No)
	Miscellaneous															
	clean up Email a							, I								
	Friend interface	3	2	3				Х	Gail	Corey	Mike					
	create a visual cue															
	which															
	distinguishes the															
	homepage	3	1	TBD	С		х		Peter	Corey	Peter					

Assumptions Legend					
A=leverage existing					
formatters & functionality					
B=no new schemas					
C=requires design					
requirements					
D=tedious & laborious					
E=no new assets					
(content or graphics)					



Ease of Finding what you are looking for, Useful of site content and Quality of Information are the main predictors of overall satisfaction with Kodak.com, with 'Ease of finding what you are looking for' having nearly twice the influence on satisfaction as the other key drivers.



Note: Amount of Information and Ease of Comparing Products dropped out of model, indicating they have minimal influence on Overall Satisfaction.

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