## DRAFT-Not For Reproduction (12/14/2005 11:07 PM)

		]
Title	Metrics	
Meta Data	usage, number of hits, abandoned tasks, task time to completion, response times, system availability, total number of users, total number of concurrent users, benchmarking, benchmark, measurement, WebTrends, log files, server logs, NetRatings, metrics, measure	
Guideline or Standard	Guideline	
Applies to	All	
Summary	Metrics are measurements of a Web site or application that determine whether the goals and requirements have been met. Performance is evaluated against a benchmark, which is the standard level at which the Web site or application should perform.	
	What to Measure	
	<b>Process data</b> indicates shows the subjective success of a site. Can the users find what they need? Are the key user tasks addressed? Do they users understand the terminology? Is the information architecture clear? Refer to the Standard UX Methodologies guideline for more information on what process data measures.	<b>Formatted:</b> Font: Bold
	According to Jakob Nielsen, the most critical bottom-line metric is the user success rate, which is the percentage of tasks that users complete correctly. User success is key: iIf users can't cannot accomplish their target task, nothing else matters. Other bottom-line metrics include the following:	<b>Comment [LEM1]:</b> Since this is the first time you've mentioned Nielsen in this standard, give a brief description of who he is/why his opinion is important.
	Task completion time	Formatted: Font: Bold
	Error rate	
	Popular pages	
	Percentage of time that users follow an optimal navigation path	
	Where users are leaving your site	
	Tasks that are more difficult on your site than on competitors' sites	
	Total number of visits, total number of users, and concurrent users	
	System availability and response time	
	Raw numbers are not as important as <b>trends</b> . It <u>doesn't does not</u> matter if your Web site <u>got had two-2</u> million <u>visitorusers</u> this month. It only matters if <u>that this is</u> an improvement over the previous month, or <u>over</u> the same month of the previous year.	<ul> <li>Formatted: Font: Bold</li> <li>Comment [LEM2]: The EDS Style Guide uses numerals with terms like "million."</li> </ul>
	AlsoAdditionally, it is worse to measure too many things than not to measure anything at all. Trying to track everything is a common problem in organizations. Selecting the vital few key measures is critical.	
	How to Measure	
	Use surveys, questionnaires, and user observation methods (such as usability testing and user interviews) to gather <b>process data</b> . Testing three to five users is	<b>Formatted:</b> Font: Bold

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	sufficient for process data. After the fifth user, you have all the insight you are likelywill probably to get, and it is time to improve the design to and test it again. Refer to the Standard UX Methodologies guideline for more information on how to collect process data.		
	Use online tools to gather <b>bottom-line data</b> for statistically-reliable results. Jakob Nielsen recommends testing a minimum of 20 users for bottom-line data, so bottom-line data is at least four times as expensive to gather as process data.	1	Formatted: Font: Bold
	Since Because it is more expensive to gather quantitative bottom-line data, and yet qualitative process data is more informative, Nielsen recommends a measurement system based on process data instead of bottom-line data unless the project is well funded.		<b>Comment [LEM3]:</b> I added these words to be sure the user is keeping straight which kind of data is which.
	The majority of Web sites benefit most from studying novice users because		Formatted: Font: Bold
	peopleusers rarely spend enough time on a Web site to become experts.		Formatted: Font: Bold
	Exceptions are sites like-such as Yahoo.com and aAmazon.com, which have highlycommitted and loyal users and can benefit from studying their expert users. Other exceptions are intranets, extranets, and Web applications because they usually have expert users.		Comment [LEM4]: I changed "people" and "visitors" to "users" throughout since we'd decided several months ago to be consistent in what we called users. I didn't
Description	What are Metrics?		change it in at least one place, though, because the word "use" was adjacent to it and would have been
	goals and requirements of a Web site or application that determine whether the goals and requirements have been met. Performance is evaluated against a benchmark, which is the standard level at which the Web site or application should perform.		confusing to say "users use." Comment [LEM5]: No need for changes—I just wanted to say that this is an extremely important point;
	Metrics <b>process data</b> is gathered by qualitative observations of what <u>people-users</u> are thinking and doing. Process data identifies what does and does not work by noting where users are pleasantly surprised, confused, or frustrated.		I'm glad it's in here.
	Metrics <b>bottom-line data</b> consists of quantitative measures that provide statistical significance, such as <u>error rates or</u> the time it takes to complete a task-or the error rate. It is more difficult to collect bottom-line data because many users are required for statistically- <u>r</u> eliable results. Bottom-line data is best for tuning the performance of an existing Web site <u>i</u> I is also good for comparing Web sites. These comparisons can be especially useful for convincing management to make a change.		
	Criteria for Metrics		
	The following are the criteria <u>for<del>of an</del> effective measurementsing system</u> :		
	<ul> <li>Fewer is betterConcentrate on measuring the vital few key variables rather than the trivial many. No one individual can monitor and control more than 20 variables on a regularly basis. You may have hundreds or thousands of metrics in your database, but no individual should focus on more than a few major onesmetrics.</li> </ul>		
	<ul> <li>Measures should bel_linked to success factors Focus on key business drivers. For example, if you have identified technical competence as something that gives you an edge on your competition, make sure that you measure technical competence.</li> </ul>		
	<ul> <li>Measures should <u>R</u>reflect past, present, and future states Ensure that the organization is concerned with all three perspectives.</li> </ul>		
	• Measures should be bBased on the needs of the target audiences.		

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•	Measures should solutions at the top and flow down to all levels of employees in the organization —.—Metrics that the lower employee levels are monitoring should support the measures that upper management has identified as critical.		
•	Multiple indices should be able to be cCombine multiple indicesed into a single index to give an overall assessment of performance.		
•	Measures should be a <u>A</u> djusted as your environment and strategy change.		
•	Measurement gGoals should be based on research, not arbitrary numbers.		
(I C	Brown, Mark Graham. <i>Keeping Score: Using the Right Metrics to Drive World-</i> Class Performance. Quality Resources <sub>x</sub> , 1996.)		
v	Vhere are You on the Web Metrics Continuum?		
N d a C	Not every company should or can measure everything. What you measure lepends on <u>your Web site the g</u> oals of your Web site and the size of your budget. It also depends on where you are and where you aspire to be on the Web Metrics Continuum:		
•	Level 1 – No Server Logs – "We do not look at our server logs."	- F	ormatted: Font: Bold, English J.S.)
•	Level 2 – Occasional Log File Report – "We get daily reports from our hosting service. We look at these once a month to see if there is's anything going on."	F	ormatted: Font: Bold, English J.S.)
•	<b>Level 3 – Log File Analysis</b> – "We have our logs crunched, and we do a formal review every week. We know that <u>peopleusers</u> come to our site more on Mondays and Tuesdays, and traffic peaks at about 10:00 <u>aA.mM</u> . We know which pages are the most popular, and we watch for changes in traffic when we do special promotions. We know which pages <u>peopleusers</u> most often use as entry pages, and we know where they leave. We know that we get the most traffic from Yahoo! and Google and which search phrases they <u>are're</u> using to find us. Once a month, we print out a huge color graph that shows our progress and pin it to the wall where everybody can see it. "	<b>F</b> , ((	ormatted: Font: Bold, English J.S.)
•	Level 4 – Cookies – "We use cookies to track sessions and do path analysis. We have we got a good picture of how peopleusers navigate the site differently from one visit to the next. We have we got a registration page and have determined that sales do, indeed, go up when we welcome peopleusers back to the site by name. We know which promotions are bringing in the most visitorusers and which are bringing in the most repeat visitorusers. People with direct Web responsibility depend on these reports, and upper management asks about our progress about once a month."	<b>F</b> i (l	ormatted: Font: Bold, English J.S.)
•	Level 5 – Web Analytics Analysis – "Using a variety of tools, we track exactly which ads are turning into sales in the short term and which are boosting loyalty in the long run. We know where to spend our time to increase traffic to the site, increase visit duration, increase sales, or lower costs. An executive committee meets every two weeks to look at our progress and make recommendations."	C CC	omment [LEM6]: "Analysis" is the orrect usage here. ormatted: Font: Bold, English J.S.)
•	Level 6 – Web Information Integration – "We have ve tied our analytics analysis and e-commerce systems together with our offline order processing and inventory control systems and can clearly forecast how much stock we will'# need on hand to meet the needs of various promotions. Representatives in our customer service call center/e-mail center can see which pages callers have looked at and can advise them according to their particular level of	<b>F</b> i (l	ormatted: Font: Bold, English J.S.)

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knowledge "		
<ul> <li>Level 7 – Web Information Distribution – "We make sure that the information we glean off our Web site and from our customer relationship management systems is disbursed throughout the organization. Executives and managers have access to near real-time numbers about what <u>is</u> happening on our site."</li> </ul>		Formatted: Font: Bold, English (U.S.)
<ul> <li>Level 8 – Web Information Comprehension – "We have weekly meetings to ensure that the data we send out is fully understood and becomes part of the decision-making process. We get feedback from the Executive Web Team about the changes they it sees in sales and customer satisfaction. Our compensation is tied to these reports, so we have them audited once a quarter by an outside firm."</li> </ul>		Formatted: Font: Bold, English (U.S.)
<ul> <li>Level 9 – Web Information Incorporation – "It is's a completely closed -loop. We are're responsible for carrying out the work orders from the business unit managers who are responsible for profit and loss. They have their finger on the pulse of the site, catalogue sales, and store sales. They can tell in an instant how a new product line, promotional campaign, or product photograph is</li> </ul>		Formatted: Font: Bold, English (U.S.)
doing." (Where did the above nine levels come from? I expected to see attribution on these since you have quotes around themLEM)		Comment [LEM7]: Add attribution for these nine levels?
Planning Metrics		
Even with hardware <u>getting becoming</u> cheaper and analytic software becoming more prevalent, there is a point of diminishing returns on measurements. Make sure the economics are aligned with your goals and <u>that</u> it does not cost more to capture the metrics than what they are worth.		
<ul> <li>Define the business and competitive goals of the site and determine how to measure success will be measured for these goals. Sample business and</li> </ul>		Formatted: List Bullet 1 Char, English (U.S.)
competitive goals measurements are listed below:		Formatted: List Bullet
How many users does the site need to stay in business?		Formatted: List Bullet 2
—— How many visitors users need to become paying customers (the conversion rate)?		
—— How many visitors users need to become community members?	1	Formatted: List Bullet 1
<ul> <li>Also specify the design goals and how they to will be evaluated them. Sample design goals are listed below:</li> </ul>		Formatted: Font: Bold, English (U.S.)
Reduce the average number of mistakes that users make on the existing		Formatted: List Bullet 2
site from 3-three per user session to one4 per user session.		Comment [LEM8]: The spell vs. numeral rule I'm using (a standard one that is also in the EDS Style
The average time to complete a purchase will be no more than 1.5 minutes.		Guide) is spell out below 10 unless
<u>——</u> Keep download time below 20 seconds for 90 percent of the target audience.		It's a decimal (like your 1.5 in the next bullet) or something like a step number.
Use these steps to plan your measurement system:	1	Formatted: Font: Bold
<ol> <li>Assess: Where are you now? What tools do you have? What expertise do you? have? What level of <u>management</u> commitment do you have from management?</li> <li>Determine: Where do you want to be in five5 years?</li> </ol>	É	Formatted: Indent: Left: 0.03", Numbered + Level: 1 + Numbering Style: 1, 2, 3, + Start at: 1 + Alignment: Left + Aligned at: 0.25" + Tab after: 0.5" + Indent at: 0.5", Tabs: Not at 0.5"
3. <b>Decide:</b> What do you really need to know? Measuring everything just because		Formatted: Font: Bold
		Formatted: Font: Bold
	-	

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		-	
<u>you can</u> <del>isn't_is not</del> a good idea <del>just b</del>	ecause you can.		
<ol> <li>Ask: What are the three or four metric effort from a developer but be a huge</li> </ol>	s that would only take require a small pain for management?		Formatted: Font: Bold
5. <b>Prioritize:</b> Work out a plan of attack b	ased on your priorities.		Formatted: Font: Bold
<ol> <li>Budget: The Web team should not ha for which they are directly responsible uptime statistics. Everything else belor Human Resources wants to know how</li> </ol>	ve to fund metrics projects except those server performance, network load, and ogs to the different business units. If HR many peopleusers looked at a given job		Formatted: Font: Bold
offer, or if <u>M</u> marketing wants to know a need to <u>should</u> pay for it.	bout the cost of eyeball acquisition, they		<b>Comment [LEM9]:</b> Is this a well- known term? Unless you're sure it is, either use a more specific (and
<ol> <li>Outlook: After you have a couple of w systems, Web servers, and application</li> </ol>	ins in your pocket, look at your existing s, and map out a master plan. Which		common) term/phrase or explain it briefly in parentheses.
Web sites should be completely rebuil are-will you going to tie your legacy sy How are-will you going to retrofit all of you can actually tell what your compar	? Which only need a few patches? How Stems into the user-facing applications? your number-crunching capability so that your so that your and what that it means?		<b>Comment [LEM10]</b> : This wording may be too vague for non-native English speakers. Can you reword to be more specific? Also, explain "wins"—wins in what area/category?
What to Measure			Formatted: Font: Bold
Process data indicates the subjective suc	cess of a site. Can the users find what		Formatted: Font: Bold
hey need? Are the key user tasks address erminology? Is the information architecture Methodologies guideline for more informat	ed? Do they users understand the eclear? Refer to the Standard UX on on what process data measures.		
According to Jakob Nielsen, the most critic success rate, which is the percentage of t success is key: <u>-li</u> f users <u>can't-cannot</u> acco natters. Other bottom-line metrics include	al bottom-line metric is <b>the user</b> asks <del>that</del> -users complete correctly. User mplish their target task, nothing else the following:		Formatted: Font: Bold
Task completion time			
Error rate			
Popular pages			
<ul> <li>Percentage of time that-users follow ar</li> </ul>	optimal navigation path		
• Where users are leaving your site			
• Tasks that are more difficult on your si	e than on competitors' sites		
• Total number of visits, total number of	users, and concurrent users		
• System availability and response time			
Raw numbers are not as important as <b>tren</b> Web site got had two million visitorusers th mprovement over the previous month, or <u>c</u> /ear.	<b>ds.</b> It <u>doesn't does not matter if your</u> is month. It only matters if <del>that this</del> is an <u>ver</u> the same month of the previous		Formatted: Font: Bold
AlseAdditionally, it is worse to measure too anything at all. Trying to track everything is Selecting the vital few key measures is crit	many things than not to measure a common problem in organizations. cal.		
When to Measure			
Add an intro sentence here saying someth throughout the System Life Cycle (SLC) ar	ng like "You will gather metrics d not just in the later phases:" or		Formatted: Body Text

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## Comment [LEM13]: I added this to

November 2005.)	,	1 I	Sources field.
Metrics reports should meet the following criteria:		1	Formatted: Font: Bold
<u>be rRegularly scheduled</u>	<del>*</del>		Formatted: List Bullet 1 Char, English (U.S.)
• <u>_ a</u> Activity _ based	~		Formatted: List Bullet
• <u>and also aAvailable by</u> -request-	,		Formatted: List Bullet 1 Char, English (U.S.)
They should sSupport a user-defined reporting period     and be able to be eExportedable to Microsoft Office applications.			Formatted: List Bullet 1 Char, English (U.S.)
	J		Formatted: List Bullet 1 Char, English (U.S.)
Log Files	1		Formatted: List Bullet 1 Char.
Web servers collect a huge amount of data in server logs every day.	These log files		English (U.S.)
provide benefits useful for metrics analysis but also have some proble	<u>ems.</u>		Formatted: List Bullet 1 Char, English (U.S.)
Benefits of Log Files			Formatted: List Bullet 1 Char, English (U.S.)
<ul> <li>the Log files show when users link to your site from another where users were when they linked to your site.</li> </ul>	site and		Formatted: List Bullet 1 Char, English (U.S.)
<ul> <li>Log files show the search terms users typed into a search en your site. An ongoing review of the terms can indicate which</li> </ul>	igine to locate marketing		Formatted: List Bullet 1 Char, English (U.S.)
efforts are working and as well as show the changes in the la the public uses to find your type of goods and services. Site	anguage <del>that</del> content and		Formatted: List Bullet 1 Char, English (U.S.)
<ul> <li>information architecture should always match the users' term</li> <li>Server logs can show the most-used entry and exit pages on</li> </ul>	the site		Formatted: List Bullet 1 Char, English (U.S.)
These are the pages most people use as a door into your site page they looked at view just before they leftleave. Discover	e and the last		Formatted: List Bullet 1 Char, English (U.S.)
people users decide to leave your site can give you valuable problem areas and pages where users become disillusioned.	pointers to		<b>Comment [LEM14]</b> : This is a fairly rough version of what needs to be
<ul> <li>Server logs record server errors, <u>helping</u> -so that you can ensistence incoming links are pointing to valid pages.</li> </ul>	sure that		added here; rewrite if you think of better wording!
			<b>Comment [LEM15]:</b> The "always" seems to be implied as well as important here, so I added it.
		Ì	Formatted: Font: Bold, English
<ul> <li>Cache files can cause undercounting on in the log files.</li> </ul>			(U.S.)
<ul> <li>Automated crawling tools, such as spiders and robots, can can overcounting over counting on-in the log files.</li> </ul>	ause		
<ul> <li>Accesses from the same one Internet Protocol (IP) address I all came from the same person, which is not always true, esp dynamic assignment of IP addresses.</li> </ul>	ook like they becially with		
<ul> <li>Conversely, <u>you should eliminate</u> an excessively-large numb accesses made from <u>the sameone</u> IP address should be eliminate not to so that you avoid skewing the numbers.</li> </ul>	per of <del>hinated so as</del>		
<ul> <li>You must analyze tThe huge amount of data on in the log file analyzed to pull usable information from themit. Proper server takes a lot of borsepower fragmently more than what is required</li> </ul>	es <del>must be</del> er log analysis		
the pages of the site itself.			with the correct term from the computer industry—bandwidth, RAM, whatever is the one most affected
			here.

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	WebTrends	
	The most well-known log analysis tool is WebTrends. Standard WebTrends reports include the following:	
	<ul> <li>Overall Number of Visits — -Users are counted based on sessions. If a user is gone for more than 30 minutes, that session is considered closed. The next time they that user clicks is counteds as a new session.</li> </ul>	
	<ul> <li>Top Pages — -Which pages are most popular? How often are does the they looked at by the surfing public look at them? How long did users remain on each page?</li> </ul>	
	<ul> <li>Top Entry Pages — The first pages users see when they come to your site can make a serious first impression. <u>However, y</u>You may find that the home page is not <u>the your</u> most common entry to your site<u>page</u>.</li> </ul>	
	<ul> <li>Advertising Views and Clicks –-How many times were-was an ade seen on your site, and how often were-was itthey clicked? This report is not only of interestimportant to advertisers but and can also be useful for information about special offers, closeout specials, or promotions that cross_reference other areas within your site.</li> </ul>	Comment [LEM17]: I changed the reference to ads to be singular, since you don't care so much how often ALL ads are seen/clicked but instead on the performance/visibility of each
	Top Referring SitesKnowing how people users find your site is crucial.	specific ad. I know you know this, but the plural wording implied something else.
	<ul> <li>Top Search Phrases — This report shows the populatity of search terms that drew people users to your site. What were people users searching for when they found you? This report also shows which search engines are sending you traffic.</li> </ul>	
	(WebTrends, Inc. WebTrends WebTrends, Inc., 2005, accessed 14 November 2005.)	Comment [LEM18]: I added this to Sources field.
		Formatted: Font: Italic
	"Big Picture" Metrics	
	NetRatings, Inc. provides Internet and digital media measurement and analysis. As shown below, the the list of tFop rRankings for Web usage and most-frequently accessed sites is available on the NetRatings site. Detailed information about users of a specific site is available to paying clients.	

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Nielsen//NetRatings A global leader in Internet media and market research			13			
United States: Top 10 Parent C Week ending October 31, 2005 Home Panel	ompanies					
Parent Name	Unique Audience (000)	Reach %	Time Per Person			
Microsoft	58,640	52.53	00:31:28			
Yahoo!	53,554	47.98	00:50:33			
Time Warner	52,374	46.92	01:24:20			
Google	38,570	34.55	00:11:06			
eBay	20,039	17.95	00:49:22			
InterActiveCorp	15,642	14.01	00:10:32			
United States Government	12,810	11.48	00:11:19			
Amazon	11,236	10.07	00:10:55			
Walt Disney Internet Group	10,319	9.24	00:21:40			
Viacom International	10,260	9.19	00:25:26			
NetRatings, Inc. <u>Nielsen/NetRatings<mark>-Net</mark></u>	Ratings, Inc	<del>.</del> , 200	5, accessed	15	1	Comment [LEM19]: I added this to
ovember 2005.)				>	1	
						Formatted: Font: Italic
Acting on the Results						
insure that everyone using the metrics u	nderstands	the <b>te</b>	rminoloav (	used in the		Formatted: Font: Bold
esults. For example, "nNumber of hits" is	often misin	terpre	ted; the follo	wing are all	ľ	
ounted as hits:-						
An individual hit is recorded when the	server sen	<u>ds </u> a fi	le is actually	<del>' sent by the</del> -		Formatted: List Bullet 1
<del>Server</del> .						
If a request is made for a page with the actually occur: one for the page and o	wo graphics, one each for	, <mark>there</mark> r the g	e are three re raphics.	equests		
If <del>, however,</del> the page cannot be foun	d, <del>the respo</del>	<del>nse th</del>	at is sent is	an error		
message <u>is sent,</u> which can <u>also</u> be r	ecorded as	a sing	ie nit.			
t is more difficult to apply <b>bottom-line d</b> lata does not identify the cause of the pri- dentifies when users are going too slowly iddress the issuescauses, you 'II have to lesion a solution. However, be sure to the	ata than proc oblems. It ju / or making <u>must</u> go bac pather proce	cess c i <del>st<u>Bott</u> too m ck in</del> to	ata because om-line data any mistake the design	e bottom-line a only s. To <del>solve</del> phase <del>to and</del> w design as		Formatted: Font: Bold
<u>rell</u> .	J					
ermine the relative importance of <b>per</b> o site that is intended <u>designed</u> for free ormance might be weighted higher th site that will only be used once, prefe	ormance ve quent use (s an preference erence may	ersus tock q ce. Fo get the	satisfactio uotes, for ex or an enterta e higher wei	n. For a (ample), inment site ght.		Formatted: Font: Bold
cording to Nielsen, if your site's usabili <u>cent</u> per year by applying both proces a re falling behind relative to both the	ty does not i s-based and competition	improv d botto and t	ve by at leas om-line-base he needs of	t 20 <del>%</del> d metrics, the new,		

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	less technically-inclined users who are coming online.		
Related Guidelines and Standards	Standard UX Methodologies		Comment [LEM20]: If you only have one bullet, you don't need bullets at all. I changed this to regular text instead of a bullet; if you add more items, though, you'll need to go
Technical	Design Web sites with measurement in mind. For example, if there are ten 10		back to bullets.
Considerations	questions and answers on a single Frequently Asked Questions (FAQ) page, then	×.,	Formatted: Body Text-subnead T
	main FAQ page with ten 10 questions that are linked to their respective answer		and up are written as numerals.
	pages, then by reading the log files, you can tell which are the <b>most</b> frequently- asked questions by reading the log files.		Formatted: Font: Bold, Not Italic
	To the extent Whenever possible, design repeatable, measurable processes on common platforms to enable measurement, comparison, and trend analysis.		
	When new content or features are requested for the site, require that success metrics are included in the request. Build these measurability goals into the new features.		
Why is this important?	Web site evaluation is the most often overlooked part of terative site design and site maintenance. Without evaluation you cannot know if you have met your target goals, which aspects features are working, and which are not. Capturing and evaluating metrics is how you knowtells you objectively if you are successful. Metrics can reveal trends, usability issues, and design_improvement opportunities.		<b>Comment [LEM22]:</b> Design is probably enough to say here since you're referring to all design—original and the maintenance changes and upgrades to design (and you also mention maintenance in this sentence).
Sources	Brown, Mark Graham. <i>Keeping Score: Using the Right Metrics to Drive World-Class Performance.</i> Quality Resources; 1996.		<b>Comment [LEM23]:</b> I changed to "features" because "aspects" really means perspective/point of view.
	Nielsen, Jakob. "Success Rate: The Simplest Usability Metric." Jakob Nielsen's Alertbox, <i>useit.com</i> , 18 February 2001, <u>http://www.useit.com/alertbox/20010218.html</u> (accessed 7 November 2005).		
	2001, <u>http://www.useit.com/alertbox/20010121.html</u> (accessed 7 November 2005).		
	NetRatings, Inc. <u>Nielsen/NetRatings</u> , 2005, http://www.netratings.com/ (accessed 5, 15 November 2005).		Formatted: Font: Italic, No underline
	Sterne, Jim. <i>Web Metrics: Proven Methods for Measuring Web Site Success</i> . John Wiley and Sons; 2002.	``	Formatted: Citation
	Van Duyne, Douglas K., James Landay, and Jason Hong. <i>The Design of Sites: Patterns, Principles, and Processes for Crafting a Customer-Centered Web Experience</i> . First edition, Addison-Wesley Professional; 2003.		
	Visibility Factor, Inc. Visibility Factor, http://www.visibilityfactor.com/, 2004		Formatted: Citation
	(accessed 14 November 2005).	·	Formatted: Default Paragraph Font,
	(WebTrends, Inc. WebTrends, http://www.webtrends.com/, 2005 (accessed 14 November 2005).		Formatted: Default Paragraph Font
	Wieder, Tamara. "E-Commerce Benchmarking." <u>Computerworld</u> , 7 August 2000, <u>http://www.computerworld.com/managementtopics/ebusiness/story/0,10801,48235</u> ,		

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00.html (accessed 11 November 2005).

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