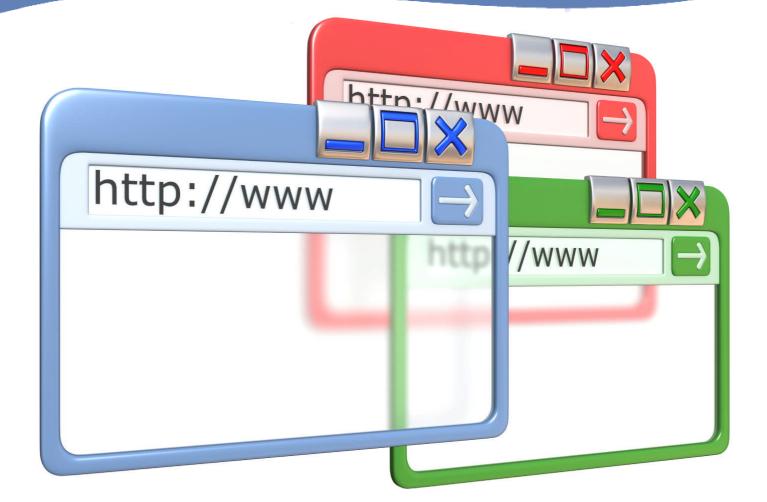


Web Quality and Research Update

Dr. Neil Hair, Dr. Susan Rose and Professor Moira Clark 27th November, 2008



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1. Executive Summary

- Previous research for The Henley Centre for Customer Management found that online experience consisted primarily of thirteen themes and 83 indicators of those themes.
- This years' research has explored the web quality literature. A systematic review of the field revealed a range of scales that have been used to measure web quality.
- One web quality scale has been explored in detail, presented with a methodology for members to implement this in survey format.
- When compared with our findings from last years research the web quality literature only partly accounts for a customers' total experience online.
- Early Spring 2009 The Henley Scale for Online Experience will be tested using participating member organizations.

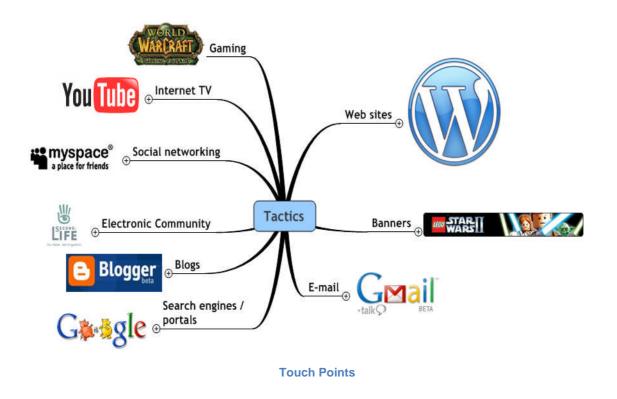
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2. Literature Commentary

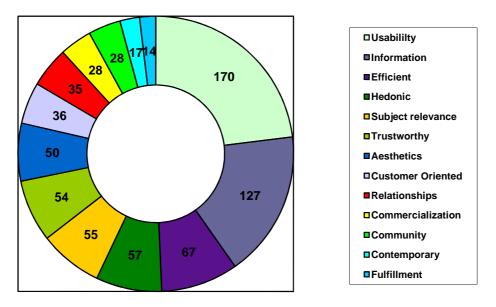
2.1. Touch Points

Increasingly customers are interacting with organizations online using a multitude of touch points. Despite recent changes to the way we interact, the academic and practitioner literature has only started to touch on the nature of customer experience in these new settings. These can be seen in the following diagram.



Previous research conducted in 2007 for The Henley Centre for Customer Management identified a range of thematic areas that are important conduits of the ideal online experience. 13 themes and 83 indicators explored 132 customer experiences across business-to-business and business-to-consumer sectors. These can be seen below.





Results: Frequency counts of mentions

A review of a closely related field on web quality revealed a rich history of multi-dimensional scaling as a means of profiling web quality by users online. Web quality is defined as; "the perceived overall quality of a Web Site according to the customer's viewpoint." (Poddar et al 2008).

2.2. Web Quality Factors

A range of factors in the web quality field are summarized in the table below;

Author	Factors examined				
Kaynama & Black 2000	Content and purpose, accessibility, navigation, design, responsiveness, personalization, customization				
Aladwani & Palvia 2002	Technical adequacy, web content, web appearance				
Loiacono et al 2002	Ease of use, usefulness, entertainment, complementary relationship, customer service				
Shchiglik & Barnes 2004	Information quality, web interaction, site design				
Chakraborty et al 2005	Informativeness, usability, quality of information				
Lee & Kozar 2005	Information quality, service, systems, vendor specific quality				
Calero et al 2005	Functionality, reliability, usability, efficiency, portability, maintainability				

Literature on Web Quality



Barnes and Vigden 2006	Usability, information quality, service interaction				
Kang & Kim 2006	Quality, entertainment, navigation, informativeness, attitude				
Liao et al 2006	Appearance, content quality, specific content, technical adequacy, trust, usefulness, continuance intention				
Ahn, et al 2007	System quality, information, service, playfulness, ease of use, usefulness, attitude, behavioral intention				
Hwang and Kim 2007	Quality, enjoyment, system anxiety, ability,				
Yen et al 2007	Accuracy, relevance, completeness, media, timeliness, size, page layout, navigation, response time, security				
Grigoroudis et al 2008	Relevance, usefulness, reliability, specialization, architecture, navigation, efficiency, layout, animation				
Schaik and Ling 2008	Usability, hedonic value, beauty, goodness				
Ha and Stoel 2008	Trust, enjoyment, ease of use, usefulness, attitude, intention to shop, customer service, experiential				
Poddar et al 2008	Solidity, enthusiasm, genuine, sophisticated, unpleasant, web site customer orientation				
Law and Bair 2008	Functionality, usability, customer satisfaction, purchase intention				

8 primary themes exist in this field;



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Unfortunately the nature of scale / survey methodology reduces complex phenomena into sets of short questions. Examples of these can be seen below;



2.3. eQual survey tool

As a result of this weakness The Henley Centre for Customer Management set out to explore ways by which we can extend knowledge in this field by including experiential factors. One such scale though stood out as being particularly useful in assessing quality aspects of websites – eQual4 by Barnes and Vigden (2006). The 22 questions that make up the tool together with suggestions for application by members can be found below.

Web Quality Scale Questions (Barnes and Vidgen 2006 eQual)

- 1. I find the site easy to learn and operate
- 2. My interaction with the site is clear and understandable
- 3. I find the site easy to navigate
- 4. I find the site easy to use
- 5. The site has an attractive appearance
- 6. The design is appropriate to the type of site
- 7. The site conveys a sense of competency

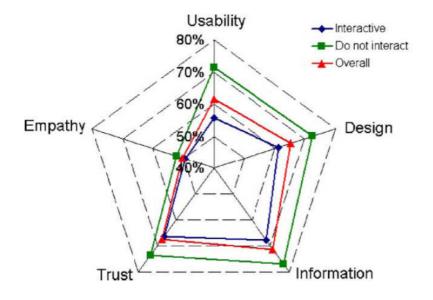


- 8. The site creates a positive experience for me
- 9. Provides accurate information
- 10. Provides believable information
- 11. Provides timely information
- 12. Provides relevant information
- 13. Provides easy to understand information
- 14. Provides information at the right level of detail
- 15. Presents the information in an appropriate format
- 16. Has a good reputation
- 17. It feels safe to complete transactions
- 18. My personal information feels secure
- 19. Creates a sense of personalization
- 20. Conveys a sense of community
- 21. Makes it easy to communicate
- 22. I feel confident that goods/services will be delivered as promised

Suggestions for application

- Likert Scale 1-7 with a N/A option
- Measure Performance of the site AND importance to the user
- Use an online survey tool e.g. Cardiff Teleform or Survey Monkey.

Example Result





2.4. Conclusions from the Web Quality Literature

- Need for empirical work in non e-retail domains.
- Vast majority of studies use students .
- Outdated technological enhancements, web 2.0 movement.
- Limited hedonic / enjoyment in Web Qual scales.
- In-depth understanding of application of scale items.
- Focus on interface not experience.

3. Experience v's Quality

Web Quality is defined as *"the perceived overall quality of a Web Site according to the customer's viewpoint."* (Poddar et al 2008)

We define the Online Customer Experience as *"the cognitive and affective impressions formed as a result of online customer-organisation interactions".*

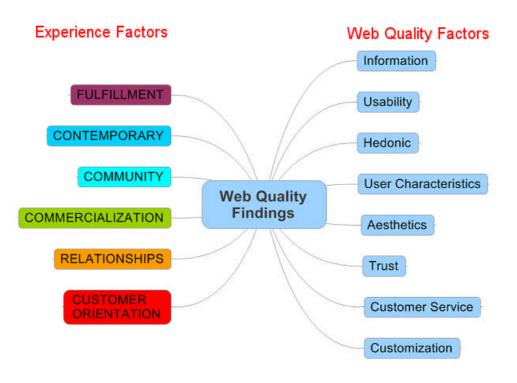
So the question to be answered is: "what does customer experience mean in the context of web quality"?

Target 2009:

The development of a Henley Centre for Customer Management Scale of Ideal Online Customer Experience

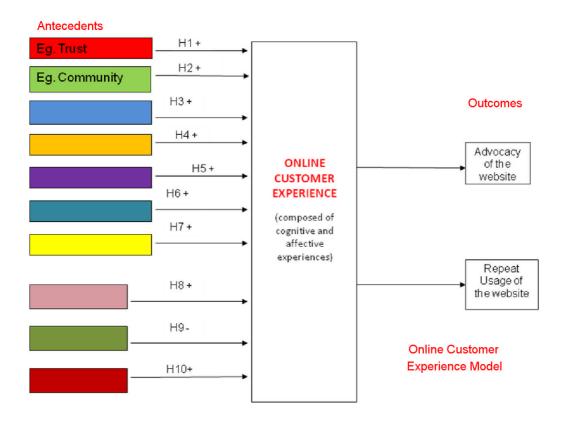
The differences between experience and quality were discussed in the final meeting of 2008. It was clear that members see conceptual differences between experience and quality and that the former is a more powerful measure of hedonic or emotional experiences formed online. As a result the research team are working on a Henley Centre for Customer Management Scale for Ideal Online Customer Experience. This will be made available to members in the Spring of 2009. The main differences between the web quality literature and our initial findings of customer experience online can be seen below (Blue = Web Quality findings, Coloured items are from last years research findings).





Web Quality v's OCE Findings

The research agenda for 2009 can be seen in the following diagram which outlines a conceptualization of the Henley Scale for online Customer Experience.





4. Invitation to Participate

Members are invited to participate in pre-testing the scales developed in this research project. Interested parties can contact Anne Tabner in the first instance at The Henley Centre for Customer Management.

5. References

- Stuart Barnes and Richard Vidgen (2006) "Data triangulation and web quality metrics: A case study in e-government." Information and Management 43, pp.767-777
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- Neil Hair, Susan Rose, Moira Clark (2009) "Using qualitative repertory grid techniques to explore perceptions of business-to-business online customer experience." Journal of Customer Behavior, Map 2009 (forthcoming)

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The Henley Centre for Customer Management

The Primary Objective of the Henley Centre for Customer Management is to promote Customer Focus and Service Excellence best practice through observing practice in leading companies and synthesising this into useful knowledge that helps members to improve their own Customer Management and Customer Service plans and implementations.

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Each year, the Centre aims to attract a membership of between 10 and 20 organisations, each a leader in their sector.

Members in 2008 were:-

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