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Linda Dawson
*School of Information Management and Systems, Monash University, Melbourne*

Joze Kuzic
*School of Information Management and Systems, Monash University, Melbourne*

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# Does It Really Matter? – First Impressions From A Company's Web Site

**Joze Kuzic, Linda Dawson**

School of Information Management and Systems, Monash University, Melbourne, Australia
Joze.Kuzic@sims.monash.edu.au, Linda.Dawson@sims.monash.edu.au

## Abstract

*As early as 1997 many corporate executives realised that in the network era a web site would influence a company's image immensely. Anecdotal evidence suggests that in the electronic commerce environment nowadays this influence is becoming more visible as the customer quality perceptions of web sites play a vital role in a company's success. Research reported in this paper investigates the influence of visiting and evaluating web sites by the customers on changing their perceptions about a company's image; the most important features regarding first impressions about web sites; as well as possible relationships between each of these features and a company's image.*

## 1 Introduction And Background

According to Dyson (1997), many corporate executives realised in 1997 that in the network era web sites would influence a company's image immensely. Only four years later one of the major issues on the agenda of many executives was how to manage the web image of the company (Jon, 2001). In the electronic commerce environment nowadays it is almost a given that customer quality perceptions of web sites play a vital role in a company's success (Zhang and Dran, 2002). On the other hand, a well designed web site can provide a company with one of the most noticeable benefits of electronic commerce, competitive advantage (Yang, et al 2003). Furthermore, the evidence of that lies in the fact that some customers do change their attitudes towards the company after visiting their web sites, thus influencing its image as well. Consequently, companies have an opportunity to not only attract huge number of customers but to gather so called "right" customers (Huizingh and Hoekstra, 2003).

In addition, from the business point of view, according to Bock (1999), the feature that most helps companies to create profit is the design of the web site, where appropriate links can help people to move through information in a natural and effective way. Another feature that is also capable of increasing sales and therefore boosting company's revenue and profit is the ease of the use of the web site (Vredenburg, 2003).

A body of research that focuses on usability of the web site suggests that a dependent relationship exist between the quality of the web site and its usability (Kim, et al, 2003).

Another important feature that influences first impressions about a web site and is capable of influencing the image of the company is providing background of the company, as well as an explicitly displayed privacy, policy statement on the web site (Ellinger, et al, 2003). In addition, Yang et al, (2003) is of the opinion that for established companies with well known brands one of the most important features of their web sites is their URL.

An investigation of the influence of some of the web site features on the consumers' attitudes toward e-service retailers has been reported by Rose and Straub (2001). In order to investigate the influence of download time on consumer attitudes, the authors used a laboratory experiment that involved a small sample of 42 subjects. These were upper level undergraduate students and MBA students from a large US university. Despite anecdotal evidence, the results from the experiment, however, did not support the hypothesis that download delay has negative impact on consumer attitude toward web retailer. Regardless of the small sample of subjects used in this experiment, the study has provided a valuable insight into the relationship between the download delay and customer's attitudes toward web retailers; and plenty of ideas for future research. Indeed it has inspired us to investigate the possible influence of a number of web site features, including the download time, on a company's image.

In attempts to improve user experiences in day-to-day interactions many companies are moving from a technology driven web site design towards a business value driven web site design (Vredenburg, 2003). From the electronic commerce perspective, web sites represent corporations' primary interface with the customers, thus the quality of the web sites is very critical for a successful electronic commerce strategy that is capable of bringing about benefits. Major roles in that strategy are played by web site attractiveness, - systematic structure, navigation, etc. (Kim et al, 2003).

A review of the literature for this research has revealed the influence of certain web site features such as download time, first impressions and web site design (Rose and Straub, 2001; Schenkman and Jonsson, 2000; and Otto et al, 2003) on "switching" behaviour of the users and consequently on company/brand image. The literature has also revealed some of the benefits that companies might be able to achieve (such as competitive advantage, business effectiveness, customer loyalty, and achievement of real integration in the organisation, etc.) by focusing their attention on improving various web site features (Yang et al, 2003, Vredenburg, 2003, Bock, 1999, Sternberg, 2002). A summary of major findings from the literature review on web site features and their influence on company's image, etc. is presented in Table 1.

***Table 1:*** *Web Site Features Found In The Literature*

| Features | Literature |
|---|---|
| Download time | Rose and Straub, 2001; Otto et al, 2003 |
| Design | Zhang et al, 2001; van Schaik and Ling, 2001; Duce et al, 2002. |
| | Zhang et al., 2002. |
| Usability | Ellis and Kurniawan, 2000; Fu and Salvendy, 2002; Agarwal and Venkatesh, 2002; Palmer, 2002; Huang, 2003; Kim, 2003. |
| First impressions | Schenkman and Jonsson, 2000. |
| Web site configurations | Azzone et al, 2000. |
| Depth of a web site | Huizingh and Hoekstra, 2003. |
| Content of the web site and customer satisfaction | Sen et al, 1998. |
| URL | Yang,2003. |
| Web site accessibility | Romano, 2003. |

## 2 Research Methodology

The aim of this research was to investigate how, and if, the perceptions of users and potential customers about a company might be influenced by the company's web site and to explore the relationships between a company's web site's features and the company's image. The research was guided by the following questions:

1. Does visiting and "evaluating" web sites by potential customers change their perceptions about a company's image?
2. What are the most important features regarding first impressions on a web site?
3. What is the relationship, if any, between the particular features of the web site and the image of the company?

The literature suggests that it is possible to evaluate web sites using variety of evaluation categories. However, there is very little evidence about a consensus among researchers about appropriate criteria for that evaluation (Kim, et al, 2003). For this project we adapted the Web Effectiveness Review tool developed at Trinity College, Dublin by Dan Remenyi. (www://mcil.co.uk accessed 20/03/2004)

This research was accomplished in three phases. In the first phase a group of 113 students from an Australian university were given a task to evaluate 113 web sites using the MCIL website effectiveness review tool, available on (http://www.mcil.co.uk/). The participants were upper level undergraduates (Bachelor of Information Systems - BIS), MBA students and Master of Information Systems (MIS). The use of these groups of students was considered to be appropriate as they all were to some extent computer literate and had a certain level of exposure to WWW, IS and IT issues. In the second phase collated data were analysed using qualitative and quantitative techniques. Findings and conclusions were drawn in the third phase.

## 2.1 Data Collection Method

Firstly, the participants were asked to record their opinion about the image of the companies whose web sites they will be evaluating, on a scale from 1 to 10. 1 indicating a bad image and 10 indicating a very good image.

Secondly, participants were introduced to the MCIL tool and asked to indicate their opinions about the importance of particular features on web sites regarding the first criteria for evaluation called ”first impressions”. Even though the participants were asked to evaluate particular web sites regarding one category, in reality they were looking at importance of the 12 following criteria:

1. Having an intuitive URL
2. Small and quick to download web pages
3. Easily readable, clear and easy to understand web page
4. Ability to enter a site without having to download software
5. Having the home page on one screen
6. Having Unique Selling Point (USP) on the home page
7. Having links to Key Action Points (KAP) on the home page
8. Having a web site capable of getting the user to stay as long as possible and to come back again
9. Providing immediate contact details on the home page
10. Providing credential validation on the web site
11. Providing statement from the management (such as vision and values) on the web site
12. Ability to get into site without having to register

Participants were asked to record their answers on an ordinal Likert scale, ranging from 1 indicating low level of importance to 10 indicating high level of importance. Likert and similar scales have been used by many researchers in information systems and other fields, such as Lawrence et al., (1993); Boynton et al. (1994); Blackwell (1995); Gearson et al. (1995); Revenaugh et al., (1997); Rose and Straub, (2001); Kuzic and McGrath, (2003) and Kuzic and Billington, 2003).

Finally, the participants were asked to express their opinion about the image of the companies, after they evaluated their web sites, again on a scale from 1 to 10. One indicating a bad image and ten indicating a very good image.

## 2.2 Analysis Method

Since the acquired data were measured on an ordinal scale, it was appropriate to perform non-parametric statistical tests (Siegel, 1988).

In accordance with the collated data, appropriate statistical analyses such as the Sign Test, Correlation Analysis and the Kruskal-Wallis Test were conducted. The Sign Test was conducted to establish whether the participants changed their opinions about company's image after evaluating their web sites. The Sign test helped to gain an insight into the perceived companies' image before the students evaluated their web sites and afterwards. This test is often used on occasions such as "pre-test post-test" (Cramer, 1998) and "before and after study" (Siegel, 1988). Similar research with pre-adoption and post adoption examination had been undertaken in the information systems fields by authors such as Kaharana et al. (1999) and Kuzic, et al. (2002); Kuzic and Kuzic (2004).

Correlation analysis was conducted to see if a relationship between the particular features of the web sites and the image of the companies existed. Finally, a Kruskal-Wallis test was conducted to investigate differences for each of the web site features across the three groups of participants.

The sign test that was conducted gave an indication about the changes in perceptions about companies' image after the evaluation of their web sites took place. The results of the Sign test are presented in Table 2.

***Table 2:*** *Sign Test For Image In The Entire Sample*

| Pre-evaluation (Mean) | Post-evaluation (Mean) | Sign test P- value |
|---|---|---|
| 7.4908 | 7.8047 | .278 |

The results of the Sign test suggest that the differences between pre-evaluation and post-evaluation existed. According to P-value of the sign test performed, however, the difference was not statistically significant (>.05).

Thus the results of the Sign test indicated that overall, in the entire sample, features regarding the first impression of the web sites did not have significant impact on the image of companies whose web sites were evaluated.

In order to find out whether the web site features had an impact on companies' image among different groups of participants, the Sign Test was performed using the data collated in three separate groups, namely MBA, MIS and BIS. The results of the Sign Test in these three groups are presented in Table 3.

***Table 3:*** *Sign Test For Image In Mba, Mis And Bis*

| MBA | | | MIS | | | BIS | | |
|---|---|---|---|---|---|---|---|---|
| Pre-ev. mean | Post-ev. mean | S Test Signif. | Pre-ev. mean | Post-ev. mean | S Test Signif. | Pre-ev. mean | Post-ev. mean | S Test Signif. |
| 7.4865 | 7.9639 | .472 | 7.440 | 8.2500 | .021 | 7.5213 | 7.4478 | .626 |

The results of the Sign test suggest that the differences in images between pre-evaluation and post-evaluation existed. However, according to P-values of the sign test, the difference was statistically significant only in Master of Information Systems group (shaded). Thus only students from MIS course significantly changed their attitudes towards the companies' image after the evaluation of their web sites. The reasons for that

could lie in the fact that students in the Master of Information Systems are more informed or appreciative of the IS and IT issues than their colleagues in MBA or BIS.

In order to establish the rank of the importance of web site features in the entire sample of students, their medians were computed. A table containing a descending order of features of web sites from the Likert scale data is presented below.

***Table 4:*** *Rank Order For Web Site Features In The Entire Sample*

| Rank | Features | Median | No of responses |
|---|---|---|---|
| 1 | Ability to enter a site without having to download software | 10.000 | 96 |
| 2 | Having an intuitive URL | 9.0000 | 112 |
| 3 | Having Unique Selling Point (USP) on the home page | 8.0000 | 113 |
| 3 | Small and quick to download web pages | 8.0000 | 113 |
| 5 | Easy readable, clear and easy to understand web page | 8.0000 | 111 |
| 5 | Having a web site capable of getting the user to stay as long as possible and to come back again | 8.0000 | 111 |
| 7 | Having home page on one screen | 8.0000 | 109 |
| 7 | Providing immediate contact details on the home page | 8.0000 | 109 |
| 9 | Having links to Key Action Points (KAP) on the home page | 8.0000 | 108 |
| 10 | Providing credential validation on the web site | 8.0000 | 102 |
| 11 | Providing statement from the management (such as vision and values) on the web site | 8.0000 | 99 |
| 12 | Ability to get into site without having to register | 7.0000 | 98 |

From the Table 4 it can be concluded that the most important web site features in the entire sample include: ability to enter a site without having to download software; having an intuitive URL; having Unique Selling Point (USP) on the home page; small and quick to download web pages, etc.

To find out if there is a difference in ranking the importance of web site features in the three groups, and those in the entire sample, the same computations were undertaken. The analysis has shown that the majority of features in these groups have similar rankings to those in the entire sample. The summary table and the analysis are presented below.

***Table 5:*** *Top Five Features In Entire Sample And Three Groups Of Students*

| | R | A | | N | K |
|---|---|---|---|---|---|
| Samples | 1 | 2 | 3 | 4 | 5 |
| Entire sample | Ability to enter a site without having to download software | Having an intuitive URL | Having Unique Selling Point (USP) on the home page | Small and quick to download web pages | Easy readable, clear and easy to understand web page |
| MBA sample | Having an intuitive URL | Having links to Key Action Points (KAP) on the home page | Providing statement from the management (such as vision and values) on the web site | Ability to enter a site without having to download software | Having Unique Selling Point (USP) on the home page |
| MIS sample | Ability to enter a site without having to download software | Having Unique Selling Point (USP) on the home page | Small and quick to download web pages | Having an intuitive URL | Having links to Key Action Points (KAP) on the home page |
| BIS sample | Having an intuitive URL | Small/quick to download web pages | Having (USP) on the home page | Providing credential on the web site | Having home page on one screen |

If we compare the top five features of the web site for the three groups of students, with the top 5 features for the entire sample we can see the following:

- 60% of the top five features in the MBA group are represented in the top 5 feature for the entire sample.
- 80% of the top five features in the MIS group are represented in the top 5 features for the entire sample.
- 60% of the top five features in the BIS group are represented in the top 5 features for the entire sample.

It can be seen from this comparison that the majority of highest ranked features in the three groups cited are very similarly ranked in the entire population. The reason for this could be that all the participants are exposed to some IS or IT subjects and are therefore somewhat similarly familiar with web site issues.

To further the analysis and to find out whether the differences for each of the web site features across the three groups are *statistically significant,* Kruskal-Wallis tests were performed. Because it allows analysis of more than two independent groups of ordinal data (Christensen et al., 1986) the Kruskal-Wallis test is generally conducted in order to find out whether the differences among the samples signify real population differences or the kind of variations to be expected from the same population (Siegel, 1988). The results of Kruskal-Wallis test for web site features from the three groups of students are presented below.

***Table 6**: Kruskal Wallis Test For Web Site Features*

| Features | MBA (Significance) | MIS (Significance) | BIS (Significance) |
|---|---|---|---|
| Having an intuitive URL | .230 | .665 | .881 |
| Small and quick to download web pages | .000 | .767 | .309 |
| Easy readable, clear and easy to understand web page | .000 | .058 | .689 |
| Ability to enter a site without having to download software | .000 | .714 | .271 |
| Having home page on one screen | .000 | .955 | .559 |
| Having Unique Selling Point (USP) on the home page | .000 | .113 | .795 |
| Having links to Key Action Points (KAP) on the home page | .000 | .259 | .445 |
| Having a web site capable of getting the user to stay as long as possible and to come back again | .000 | .348 | .483 |
| Providing immediate contact details on the home page | .000 | .481 | .976 |
| Providing credential validation on the web site | .000 | .873 | .850 |
| Providing statement from the management (such as vision and values) on the web site | .000 | .508 | .773 |
| Ability to get into site without having to register | .000 | .521 | .185 |

The results from the table above suggested that all of the variations in the MIS and BIS groups were of the kind to be expected among the samples from the same population. All the differences, however, that were suggested to be statistically significant were in the MBA group (shaded). These signify real population differences and may indicate a different approach to web site issues in this group of students as discussed in section 3 below. However, the real reason for it to be more prevalent in one group than in another was not identified from this research, and could be a topic for further research.

To establish whether the relationship between the companies' image and particular features of their web sites exist, a correlation analysis was conducted. The correlation analysis indicated that a number of variables were correlated as well as statistically significant. These correlations are presented in Table 7 (outlined in four subsections: entire sample, MBA, MIS and BIS).

***Table** 7: Correlations Between Companies' Image And Web Site Features*

| **ENTIRE SAMPLE** | **WEB SITE FEATURES** | **Sig.** |
|---|---|---|
| Image | Having home page on one screen | .021 |
| **MBA** | **WEB SITE FEATURES** | **Sig.** |
| Image | Easy readable, clear and easy to understand web page | .018 |
| Image | Having a web site capable of getting the user to stay as long as possible and to come back again | .017 |
| Image | Ability to get into site without having to register | .014 |
| **MIS** | **WEB SITE FEATURES** | **Sig.** |
| Image | Small and quick to download web pages | .030 |
| Image | Having home page on one screen | .048 |
| Image | Having a web site capable of getting the user to stay as long as possible and to come back again | .001 |
| **BIS** | **WEB SITE FEATURES** | **Sig.** |
| Image | Small and quick to download web pages | .037 |
| Image | Having home page on one screen | .010 |
| Image | Having Unique Selling Point (USP) on the home page | .049 |
| Image | Providing credential validation on the web site | .048 |

The level of significance (<.05), as an indicator of the strength of the correlation, indicates that all these correlations were statistically significant (column 3).

# 3 Discussion

Major findings from the research presented in this paper are:

## *3.1 First Impressions*

Although for the entire sample of students the image of the companies did not change after the evaluation of their web sites, compared to the image before the evaluation, first impressions appeared to be influenced in populations of individuals who have had a high exposure to IT. In this study when analyzed as separate groups (MBA, MIS and BIS), the perceptions of companies' images changed after the evaluation of their web sites only in one group (MIS). This could be explained by the fact that this group of students is much more exposed to IS and IT issues and therefore paying more attention to these particular issues

## *3.2 Features Ranked by Potential Customers*

Regarding the first impressions as a criterion in evaluating web sites, in the entire sample, the highest ranked features include: the ability to enter a site without having to download software; having an intuitive URL; having a Unique Selling Point (USP) on the home page; small and quick to download web pages; as well as easy readable, clear and easy to

understand web page. These rankings are echoed throughout the three groups of participants, with 60% to 80% of top 5 ranked features in each group represented in the top 5 ranked in the entire sample.

There were no significant differences regarding features in the first impressions criterion in MIS and BIS groups compared to entire sample, as all the variations in them were of the kind to be expected among the samples from the same population.

There were significant differences for almost all of the features in the first impressions criterion in MBA group compared to entire sample, as all the variations in them signify real population differences. This difference may be due to the MBA group having a higher level of exposure to business rather than to IS or IT issues.

The web site features significantly influencing company's image include: having home page on one screen; easy readable, clear and easy to understand web page; having a web site capable of getting the user to stay as long as possible and to come back again; ability to get into site without having to register; small and quick to download web pages; having Unique Selling Point (USP) on the home page; and providing credential validation on the web site.

## 4 Conclusion

The perceptions of companies' images changed after the evaluation of their web sites by a group of students, indicating significant influence of the web site features on the companies' image.

The highest ranked web site features included: the ability to enter a site without having to download software; having an intuitive URL; having a Unique Selling Point (USP) on the home page; small and quick to download web pages; as well as easily readable, clear and easy to understand web pages.

The following web site features had the most significant influence on a company's image: having home page on one screen; easily readable, clear and easy to understand web page; having a web site capable of getting the user to stay as long as possible and to come back again; ability to get into site without having to register; small and quick to download web pages; having Unique Selling Point (USP) on the home page; and providing credential validation on the web site.

A limitation of this study, as in Rose and Straub (2001), is a relatively small sample size, therefore preventing more grounded implications to be drawn. Nevertheless, the findings provide an insight into the features of first impressions about web site from the point of view of computer literate senior Undergraduate and Masters Students. Finally, the findings of this study are in line with other similar studies undertaken elsewhere (Zhang et al, 2001; Rose and Straub, 2001). In future research we intend to build on these findings to further explore possible relationships between website features and company's image.

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