

## **MODELING THE IMPACT OF COLLEGE'S WEBSITE ON THE INDIVIDUAL'S IMPRESSION OF THE COLLEGE**

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### **ABSTRACT**

This research looks into the relationship between the impact of college website and the impression formed about the college by the students. Previous literatures have shown that websites play an important role on forming an impression about an organization, and presentation, structure of navigation, quality of information, trust and perceived risk, and internet self-efficacy to be the important dimensions of an organizational website. This research extends that study to the educational sector. A survey methodology is used to conduct this research. The results reveal that college website do have an impact on the impression formed about the college, and presentation, structure of navigation, and quality of information posted on the website are the important factors that influences the impression of prospective students about the college.

### **INTRODUCTION**

The internet greatly affects the way organizations carry out their business. It is a part of everyday life and a very common means of advertisement in businesses. Businesses use the internet as a channel to support market research, recruitment, and information dissemination (Winter et al., 2003). Numerous authors have examined the marketing aspects of internet websites (Hoffman et al., 1997; Palmer & Griffith, 1998; Singh & Dalal, 1999). Previous literature shows that people form impressions about an organization based on their contact with the organization's website (Cook & Sellers, 1995; Miller, 1999; Zhang et al., 2000), and this impression has little to do with the physical characteristics of the organization (Hoffman et al., 1997). For example, a good website can give a good impression to the people even about a bad organization and also vice versa. Past research shows that website plays a great role in influencing an individual's perception about an organization (Winter et al., 2003). However, there is little or no research on what influences the website impression of colleges. The purpose of this study is to extend the

theory that website influences individual's perception about an organization and see whether the same holds true in the educational sector. Schools can be comparable to organizations. Schools can be seen as learning organizations (Cibulka et al., 2003). According to Klinger, universities and colleges act like businesses by their active recruitment of employees and students. Students, while selecting a particular college for education, look at the college or university from a consumer point of view rather than that of a student (Klinger, n.d.). "Students have become customers, and colleges have become vendors" (O'Meara, 2001). From the above descriptions of past literatures, it is seen that colleges and schools can be seen as an organization, wherein schools try to sell their product, i.e., education, to customers, i.e., the students. It is also seen that a lot of research has been conducted to determine the effect of websites on organizations and the sale of products (Lohse & Spiller, 1999; Tedeschi, 1999). Not much research has been carried out to see the affect of college websites influencing student's to join the college. This leads to our two important research questions: (1) Does college website have any influence on the students about the impression of the college, and (2) what dimensions of the college websites influence the student's impression about the college. Answering these questions would help the college management to better project their college through the internet and thereby attract more quality students.

The next section deals with the research model and hypotheses, and then we go on to explain the data collection method, methodology used to test our hypotheses, and give the results and discussions. Then we conclude with limitations and the conclusion section.

## **RESEARCH MODEL AND HYPOTHESES**

This research focuses on the impression formed about the college on the student by the college websites when a potential customer (student) visits the website. A lot of researches have been conducted to determine the dimensions of websites that would generate a good impression about the websites (Aladwani & Palvia, 2002; Gamberini & Valentini, 2003; Winter et al, 2003; Zhang et al, 2000). A lot of factors have to be taken into account while analyzing any websites. According to Zhang et al (2000), the three dimensions that affect the impression on the organizational websites are presentation, structure of navigation, and quality of the website. This research extends these dimensions of presentation, navigation, and the quality factors that affect the organizational website and looks in to how they affect the college website design. Another important term used in this paper is webpage. A webpage is an individual page, and a website consists of two or more than two web pages. Here, for our purpose these two terms website and webpage can be used interchangeably because a website that has good presentation, navigation, and quality must have web pages with good presentation, navigation, and quality, and the vice-versa must also be true. The research model is given below (Fig 1) and the constructs are explained in the subsequent sections.

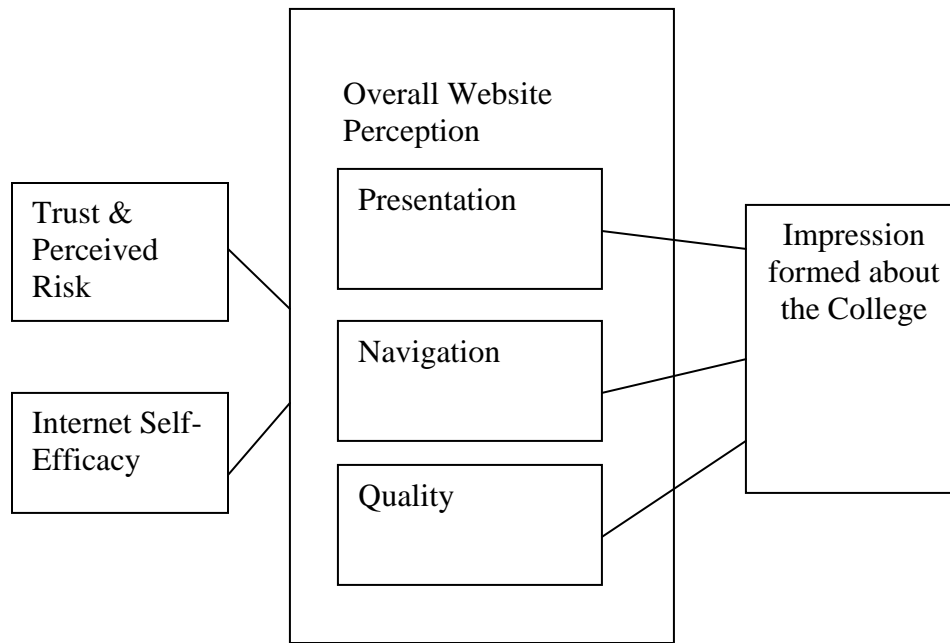


Fig 1. Research Model

Overall Perception: Studies in advertising have shown that attitudes towards the brand influence the attitudes towards the product (Brown and Stayman, 1992; Mackenzie et al, 1986). Drawing the same analogy, it can be said that students' perception towards the website of the college can influence his impression about the college. This leads to our first hypothesis

*H1: Overall Perception of the college website is positively related to the impression formed about the college.*

Trust and Perceived Risk: Review of past web quality literatures showed that trust and perceived risk has a significant impact on the perception of the web sites (Liacono et al, 2002; Zhang & Prybutok, 2005). "Lack of trust in the web site can erode an individual's desire to carry out transactions on the web, even if all other characteristics of the Web site were very positive" (Liacono et al, 2002, pp.17). Zhang and Prybutok (2005, pp.464) defines perceived risk as "the likelihood of experiencing loss from engaging in an activity." Zhang and Prybutok (2005) suggest that perceived risk has been identified as one of the major concerns that prevent consumers from doing transactions on the internet. Based on these literatures, we believe that trust and perceived risk will have significant impact on the college website too. This leads to our second hypothesis.

*H2: Trust and Perceived Risk of the college website has a significant impact on the overall perception of the college website.*

Internet Self Efficacy: Bandura (1997, pp.3) defines self efficacy as "the belief in one's capability to organize and execute the courses of action required to produce given attainments." Bandura (1996) posits that self-efficacy impacts people's choice of activities, the amount and the

extent of efforts they would put in when dealing with very demanding situations. People who are unsure or uncomfortable with their ability in using the internet have weak Internet Self-Efficacy (Eastin & LaRose, 2006). Thus, people with weak self-efficacy may form poor perception about the website and conversely people with strong self-efficacy may form good perception about the website. Thus our next hypothesis states that,

*H3: Internet Self-Efficacy is positively related to the overall perception of the college website*

Presentation: A good presentation of the website depends on the proper usage of color and graphics, and how information is organized and presented (Zhang et al, 2000). According to McClure et al. (1997), good presentation of a website depends on the location of the information, the usage of graphics, and the avoidance of distracting elements on the website. The design of the webpage must be aesthetically appealing, interesting to the visitors, and should entice the visitor to further navigate into the site (Zhang et al, 2000; Graham, 2000; Huizingh, 2000). In designing a website, it is important to avoid annoying and distracting design elements (Karp and Karp, 1997). Presentation looks at how the website appears to the prospective customer or student. Moustakis et al (2006), posits that appearance describe the characteristics of the website that relates to the “look and feel” of the site. Ultimately the presentation of the website must encourage the students to visit the college. Presentation is one of the dimensions that affect organizational websites (Zhang et al, 2000). Extending that to college website, presentation of the college website must have a significant impact on the overall perception of the college website. This leads to our hypotheses.

*H4a: Presentation of the college website is positively related to the impression formed about the college.*

*H4b: Presentation of the college website is positively related to the overall perception of the college website.*

Navigation: Navigation is one of the important measures in assessing any website. In our context, it refers to the ease with which one can go from one webpage to another in a website. The feature of navigational ease depends on the user being able to easily find the required hyperlinks to look around the website (Zhang et al, 2000). Some of the important criteria for interactivity listed by Hlynka and Welsh (1996) for a good webpage consist of functionality, quantity, and the significance of hyperlinks. Moustakis et al (2006), suggests ease of moving around, ease in understanding site structure, validity, and availability of links as the essential elements to be included in the navigational structure of a good website. A good navigation structure depends on the ease and the promptness with which relevant information can be found in the website (Huizingh, 1998; Palmer and Griffith, 1998). A good navigation structure of the website would consist of graphics and icons that would help in understanding the navigation process and finding the relevant information without depending on chance (McClure et al, 1997). Therefore a college website that has a good and easy to use and understand navigation structure would help the students to get the relevant information easily and quickly. This further will improve the image of the college. Navigational structure is another dimension that affects organizational websites (Zhang et al, 2000). Extending that to college website, navigational structure of the college website must have a significant impact on the overall perception of the college website. This leads to our next hypotheses.

*H5a: Navigation structure of the college website is positively related to the impression formed about the college.*

*H5b: Navigation structure of the college website is positively related to the overall perception of the college website.*

**Quality:** It is very difficult to define the quality of a website as different people have different definition of quality (December and Ginsburg, 2005; Reeves and Bednar, 1994; Zhang et al, 2000). In this research, we look into the quality of information that has been provided in the college websites. According to Zhang et al (2000), a quality webpage must have quality information. It is highly imperative for any website designer to seek out the most accurate, the most stable and the highest level of information source to post in the web pages (McClure et al, 1997; December and Ginsburg, 2005). Moustakis et al (2006) posits that information conveyed by the website must be reliable and must be free from errors. According to December and Ginsburg (2005), the user should be easily able to understand the information provided in the website and he should not be forced to construct meanings to disorganized pieces of information. Note, the quality of information presented over here is different from the appropriate placement of information given under the construct presentation. The quality of the information deals with the reliability of the information itself where as the presentation construct deals with the organizing and the placement of information in the web page. “A website should do more than just present information; it should attract visitors to the company” (Zhang et al, 2000). Using the same analogy to our research, a good quality website must attract students to the college. The third dimension that affects organizational websites is Quality (Zhang et al, 2000). Extending this to college website, quality of the college website must have a significant impact on the overall perception of the college website. This leads to our final hypotheses.

*H6a: Quality of the college website is positively related to the impression formed about the college.*

*H6b: Quality of the college website is positively related to the overall perception of the college website.*

## **RESEARCH METHODOLOGY**

A survey methodology is used to collect data for testing the research hypotheses.

### **Operationalization of Constructs**

The constructs were measured using previously validated instruments. For measuring presentation, structure of navigation, and quality of the website, the instrument was borrowed from Zhang et al (2000). For measuring trust & perceived risk, the instruments were borrowed from Loiacono et al (2002), and Zhang and Prybutok (2005). For measuring Internet Self-Efficacy, instruments were borrowed from Tsai & Tsai (2003), and Eastin and LaRose (2006). New questions were developed to measure the construct of Impression about the college based on the items used to measure the construct of organizational impression from previous literatures. The survey items were measured using a five point Likert scale with an (1) indicating “strongly disagree” and a (5) indicating a “strongly agree”.

## **Survey Administration**

The survey was administered through web surveyor. The questionnaire was posted on the web site. A convenient sampling was used. Respondents were all undergraduate and graduate students from the college of business administration at the University of North Texas. The two colleges selected for the study are the Business School of Youngstown State University (YSU), and the Business School of Widener University (WID). The websites for these schools are: <http://www.wcba.ysu.edu> and <http://www.widener.edu/sba>. The respondents were asked to visit these websites and fill out the questionnaire based on their impression about these two colleges.

## **DATA ANALYSIS AND RESULTS**

### **Demographics**

The total number of respondents was 225. Majority of the respondents were from the department of Accounting, Finance, Information Technology and Decision Sciences, Management, Marketing, and Logistics. About 49% of the respondents were male, and 51% of the respondents were females. 42.7% of the respondents were in their Freshman and Sophomore years, 52% were in their Junior and Senior years. The remaining 5.3% of the respondents were graduate students. 68% of the respondents were unfamiliar with Widener University and 9% of the respondents were very much familiar with the university. 55% of the respondents were unfamiliar with the YSU University and about 13% were very much familiar with the university.

### **Reliability and Validity**

The constructs were tested for validity using factor analysis. All the constructs were tested individually to see how the items loaded within the constructs, as they were borrowed from previously validated instruments. Items having factor loadings greater than 0.45 on the constructs on which they are supposed to load are considered to be satisfactory measures for that construct (Hair et al., 1992). Three items from the overall perception of the college for Youngstown State University, and one item from the overall perception of the college website for Widener University had to be deleted to get a clean loading for that particular construct. After the deletion of these items all the items exhibited a loading of greater than 0.45 on their respective hypothesized factors. The constructs were also assessed for the reliability of the data using Cronbach's alpha (Cronbach, 1951). All the constructs had Cronbach's alpha greater than 0.70, indicating they had adequate reliability (Nunnally, 1978).

### **Hypotheses Testing**

The hypotheses were tested individually for both schools using Linear Regression Analyses. Hypotheses H1, H3, H4a, H5a, H5b, and H6b were supported for YSU. With regards to WID, the result indicates support for the hypotheses H1, H4a, H4b, H5a, H5b, H6a, and H6b. The results further indicate that for YSU, 53.1% of the variance in the overall perception of the college can be explained by the structure of navigation and quality of the website, around 7% of the variance in the overall perception formed about the YSU college website is explained by the

internet self efficacy of the respondents. About 45% of the variance in impression formed about the YSU College can be explained by the overall perception of the YSU website, and around 39% of the variance in the impression formed about YSU College can be explained by the presentation, and the structure of navigation of the YSU website. The quality of the YSU website was not a significant predictor of the impression formed about the college. Also, trust and perceived risk were not significant predictors about the overall perception of the YSU College website. For Widener University, 65.5% of the variance in the overall perception of the college can be explained by the presentation, structure of navigation and quality of the website. The structure of navigation was significant at 10% significance level. Internet self-efficacy, and trust and perceived risk were not significant predictors about the overall perception of the Widener University website. About 63.5% of the variance in impression formed about the Widener University can be explained by the overall perception of the Widener University website, and around 56% of the variance in the impression formed about Widener University can be explained by the presentation, the structure of navigation, and the Quality of the Widener University website. The table 1 below gives the summary of results of hypotheses testing for both the schools.

## **DISCUSSION AND IMPLICATIONS**

As hypothesized, the overall perception of the college website is a significant predictor of the impression formed about the college. Also, as per our hypotheses, presentation of the website, and the structure of navigation significantly impact the respondent's perception about the college. Thus, if the college is aesthetically appealing to the eyes of the students then they may form a better impression about the college. Similarly, if the navigation buttons and graphics are in place where the respondents generally expect them to be, and if they are able to access the required webpage without much difficulty, they may form a better impression about the college. Quality of the website proved to be significant predictor of the impression formed about the college for Widener University, but it was not a significant predictor for Youngstown State University. In our study, quality of the website relates to the accuracy and the reliability of the information posted on the website. 68% of the respondents were unfamiliar with Widener University, whereas only 55% of the respondents were unfamiliar with Youngstown State University. Hence, more respondents were aware of the Youngstown State University than Widener University. This could be one of the reasons why quality of the information did not matter with respect to YSU, as majority of the respondents were familiar with the university, whereas the quality of the respondents mattered in case of Widener University as majority of the respondents were unfamiliar with the university.

As hypothesized, presentation, structure of navigation, and quality of the website were significant predictor of the overall perception of the college website for Widener University. Structure of navigation, and Quality of the website were significant predictor of the overall perception of the college website for YSU, but presentation was not a significant predictor for the overall perception of the college website for YSU. This could be also due to the fact that majority of the respondents were more familiar with the college, and they didn't give much importance to the aesthetic beauty of the website. Their overall impression about the website could be based only on whether it was easy to navigate and whether the quality of information was good based on their previous knowledge about the college.

Trust and Perceived Risk also did not significantly affect the overall perception of the college website for either college. As no information was being exchanged through the internet, the respondents may not have given much significance for trust and perceived risk of the college webpage. Internet self-efficacy was a significant predictor of overall perception of the college website for YSU, but it did not matter for Widener University.

This study extends the findings regarding the influence of organizational websites on the impression formed about the organization to the education sector. This study shows that colleges are like any other commercial organizations wherein college websites has the potential to impress prospective students into attending the college. This study can be helpful for college web administrators wherein they can use their web developing skills to attract prospective students to the college.

### **LIMITATIONS AND FUTURE STUDIES**

The sampling methodology used was convenient sampling. All the respondents were from the College of Business Administration in the University of North Texas. Moreover this study targeted only the college of business; it did not take into account any other colleges. The main focus was on finding the relationship between the impact of college website and the impression formed about the college. An attempt was made to look only into the effect of website, but there could be other factors that influence the impression formed about the college such as the proximity of the college from the respondent's house, the fee structure of the college, and the availability of funds and scholarships. Further research should be carried out wherein these other factors are also included. Respondents from different schools such as science, education, and arts can also be included, and website of different schools can also be incorporated into the study. This will help in knowing whether the same dimensions of the website holds true for different schools and whether the respondents from different schools form the same impression about the colleges based on the website.

### **CONCLUSION**

This study extends the impact of organizational websites on the impression formed about customers regarding the organizations to the educational sector. It can be seen that the overall perception about the college website influences the impression formed by the student about the college. The findings of this study show that for students who are unfamiliar with the college, presentation, structure of navigation, and quality of the college website play an important role in influencing their impression about the college.

### **REFERENCES**

References are available upon request from Thiagarajan Ramakrishnan.