

Designing Persuasive Destination Website: The Role of Visual Aesthetic

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ABSTRACT

The primary role of destination websites is to attract visitors to destinations. Persuasive design of destination websites could influence Internet user's beliefs, perceptions, and attitudes about a destination. Attractive destination web design encourages potential tourists to visit the destination. This study aimed to test the influence of visual aesthetic Website features on intention to travel. A total of 50 subjects participated in web-based experiment to examine the influence of selected website features on intention to travel. The results revealed perceived visual aesthetic of destination websites strongly influenced the measured effect. The findings emphasize the importance of attractive website design in tourism contexts and provide practical implications for the design of persuasive destination websites.

KEY WORDS: visual aesthetic, website design, destination marketing.

INTRODUCTION

The global nature of the Internet and its different interactive capabilities have led to the increasing number of organizations using the web for marketing purposes and promoting products and services (Ranganathan & Ganapathy, 2002). One of the primal industries, which applied electronic business and the Internet, was tourism Industry (Buhalis, 1998; O'conner & Frew, 2008). Internet has become the growing advertising channel in the tourism industry (Foa, Riggs, Dancu, & Rothbaum, 1993; Wu, Wei, & Chen, 2008; Wynne, Berthon, Pitt, Ewing, & Napoli, 2001). Destination marketing has been largely affected by Internet technology and destination websites are recognized as the major tools for promoting destinations (Kim & Fesenmier, 2008; Loda, Teichmann, & Zins, 2009).

The primary role of destination website is to convert site viewers to site users, moderate users, and to heavy users and to create favorable images of destinations (Foggs, 2002). There are a number of research that discussed the effect of website design on promotion and marketing of destination websites (Baloglu & Pekcan, 2006; Han & Milles, 2006; Jung & Baker, 1998; Zhang, 2000). So it is important to understand how design of destination websites influences behavioral outcomes (eg., intention to travel) of site viewers. However previous research of web interface have mainly focused on technical aspects such as page loading (Mazaheri, Richard, & Laroche, 2011).

Within the context of destination Websites, the emphasis on scenic beauty (using visual, auditory, and/or imagery oriented features) reflects underlying aim of destination marketing to build a strong and positive associative link or image about the destination and to create seductive experiences so that the positive images encourage potential tourists to visit the destination. Visual style of website not only influence usage frequency, but also consumer decision making (Niederst, 2001).

In human-computer interaction, effect of visual aesthetic on perceived usefulness, satisfaction, behavioral intentions and purchase has been revealed by many scholars (Moshagen & Thielsch, 2010). Attractive design creates more favorable attitudes towards purchasing than unattractive design (Veryzer & Hutchinson, 1998). So, destination website designers use visual web features to improve the aesthetic for tempting users (Nielsen, 1999), inspiring them to visit or stay longer on the websites (Niederst, 2001).

REVIEW OF LITERATURE

According to the American Heritage Dictionary of the English Language, aesthetic means "an artistically beautiful or pleasing appearance." Within online environment many studies have been conducted to indentify website characteristics that influence perceived visual aesthetic (Moshagen & Thielsch, 2010). Researchers identified a wide range of factors which affect interface aesthetic. Factors such as animations, visual effects, style, color, structure, images, icons, graphics, novelty, creativity, interestingness, text, fonts and links have been recognized as aspects of visual aesthetics of websites in last researches. Table 1 shows summary of factors that interface website aesthetic.

In human-computer interaction area, before 2000, researchers focused on effectiveness and efficiency of interactions. In 2000, as one of the primary studies, Tractinsky et al., (2000) examined the role of perceived aesthetic in evaluation of usability. Recent research showed visual aesthetic improves

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performance (Moshagen, Musch, & Göritz, 2009; Sonderegger & Sauer, 2010) and influences evaluation of website's content (Aladwani & Palvia, 2002; De Angeli, Sutcliffe, & Hartmann, 2006; Palmer, 2002; Sutcliffe & De Angeli, 2005; Thielsch & Hirschfeld, 2010) and trust (Cyr, Kindra, & Dash, 2008; Karvonen, 2000; Kim & Moon, 1998). For instance, Moshagen & Thielsch (2010) proposed factors of simplicity, diversity, colorfulness and craftsmanship for assessing the visual aesthetic of websites. Result showed perceived visual aesthetic affect perceived website usefulness, quality of content and also intention to revisit the website. As another example, Bonnardel et al., (2010), studied the effect of color on some web users' behavior such as navigation duration and number of pages visited. The results confirmed the effect of color on website's appeal and user's first impression. As last example, Schenkman & Jönsson (2000) examined visitors' first impressions and found that the best predictor of overall judgments by typical Website users was the impression of beauty.

Table 1: Factors of visual aesthetic of websites

Factor	Authors
Animation, visual effects, movement, dynamics	Lavie & Tractinsky (2004), Rau et al. (2007), Sutcliffe and de Angeli (2005), Tarasewich, Daniel, & Griffin (2001)
Balance, equilibrium, symmetry	Bauerly and Liu (2008), Brady and Phillips (2003), Lai et al. (2010), Lavie and Tractinsky (2004), Ngo et al. (2000), Zheng et al. (2009)
Coherence, craftsmanship, harmony, modernity, professionalism, style	Sutcliffe, & Hartmann (2006), Kim et al. (2003), Hassenzahl (2004), Lavie and Tractinsky (2004), Thielsch (2006)
Color	Brady and Phillips (2003), Coursaris et al. (2008), Cyr et al. (2010), Sutcliffe and de Angeli (2005), Hall and Hanna (2004), Kim et al. (2003), Ling and van Schaik (2002), Papachristos et al. (2006), Schrepp et al. (2006), Shieh and Lin (2000), Simon (Simon, 2000), Sutcliffe and de Angeli (2005), Tarasewich et al. (2001)
Complexity, diversity, variety	de Angeli et al. (2006), Ngo et al. (2003), Pandir and Knight (2006), Tuch et al. (2009)
Grouping, structure, order	Bauerly and Liu (2006), de Angeli et al. (2006), Lavie and Tractinsky (2004), Ling and van Schaik (2002), Schmidt et al. (2009), Schrepp et al. (2006), Schenkman and Jonsson (2000)
Homogeneity, unity, regularity, uniformity	Kim et al. (2003), Ngo et al. (2003), Tarasewich et al. (2001)
Images, icons, graphics	de Angeli et al. (2006), Lai et al. (2010), Schenkman and jonsson (2000), Schmidt et al. (2009), Simon (2001), Tarasewich et al. (2001)
Novelty, creativity, inventiveness, interestingness	Haig and Whitfield (2001), Lavie and Tractinsky (2004), Pandir and Knight (2006)
Proportion, cohesion	Bauerly and Liu (2006), Ngo et al. (2000)
Simplicity, clarity, parsimony, density	de Angeli et al. (2006), Karvonen (2000), Lavie and Tractinsky (2004), Ngo et al. (2003), Rau et al. (2007), Schmidt et al. (2009)
Text, fonts, links	Ling and van Schaik (2002), Schenkman and Jonsson (2000), Schmidt et al. (2009), Tarasewich et al. (2001)

Within the context of destination websites, scholars suggested images on the website could affect intention to visit the destination (Ismail & Murphy; Smith & MacKay, 2001). In addition, travel visuals (eg., video & audio) help viewers imagine, intend, and plan destination visits (Syed-Ahmad, Hashim, Horrihan, & Murphy, 2009; Tussyadiah & Fesenmaier, 2009).

This study seeks to study the role of website aesthetic on intention to travel. According to Cyr (2008), visual web design factors refer to aesthetic, balance, and emotional appeal of website. Based on Wang (2011) this study use factors of color and multimedia (as visual web design features) to evaluate the aesthetic of destination websites website. Color refers to "the aspect of appearance of website design and light sources that may be described in terms of hue, saturation, and lightness for the website". Multimedia refers to using images, video, flash, and music in the website. So the following hypothesis is developed:

H₁: Visual design of destination websites positively affects perceived aesthetic.

It is widely accepted that perception of web design aesthetic affects the first impression of website (Wang, 2011). In this study aesthetic refers to "conscious design of websites which creates pleasing and emotional feelings in the web users". Positive perception of experiences with online purchasing is significant predictor of continued online search intention and purchase intention (Watchravesringkan & Shim, 2003). So the following hypothesis is proposed:

H₂: Perceived of destination websites positively affects intention to travel.

Figure 1 shows the conceptual model of this study. The model examines the influence of web visual design features on perceived aesthetic which may influences intention to travel.

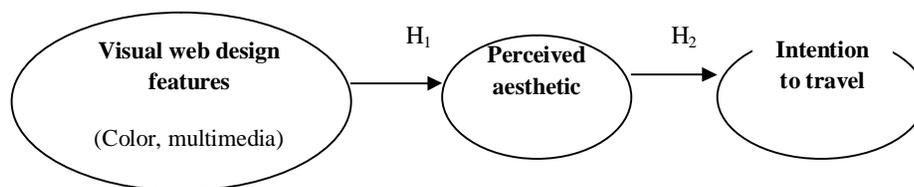


Figure 1 Conceptual model

METHOD

Experiment was considered the appropriate method for this study. For the purpose of this study, experimental websites were selected through existing official destination websites (Website of Stkilda heritage site (Figure 2) and website of (Figure 3)). Website of Tikal national park is a simple website which has used warm colors in designing. While Website of Stkilda area, is a professional one with background sound, flash videos and high quality images. In addition the dominant color of Stikilda's website was soft colors.

Participants

Fifty undergraduate students volunteered to participate in this study (37 men, 13 women). Participants were paid RM 20 each.

Scale development

In this study the instrument of survey which was questionnaire was used to collect the data. This study adapted previous established questionnaire (the construct measurement were adapted from previous literature) (see Table 2). All items are measured using the 7-point Likert scales.

Procedure

Since one objective of this study was to examine if there were any differences between users' intention to regarding to perceived aesthetic, participants were randomly categorized to two subsamples (25 persons/each group). One subsample browsed website of Stkilda and the other one browsed website of Tikal national park. In the computer lab, at the beginning, participants informed briefly about the study. Then participants were asked to browse the website for 5 minutes. After stop the browsing, participants answered the questionnaire.



Figure 2 Website of St. Kilda



Figure 3 Website of Tikal National Park

DATA ANALYSIS

Coronbach's alpha calculated to test the scale's reliability. The results showed good reliability (for the all factors Alpha coefficients exceeded 0.80). Based on Table 2 the factor loading for all factors were higher than 0.50. The model was tested with SEM (Structural equation modeling). For the STKilda subsample, the result were chi-squared= 534, d.f.=178, p=0.000, chi-squared/df= 3, CFI=0.91, GFI=0.90, AGFI=0.86, RMC=0.05. For the Tikal park subsample, the result were chi-squared= 537, d.f.=178,p=0.000, chi-squared/df= 3.01, CFI=0.91, GFI=0.91, AGFI=0.86, RMC=0.05. The results showed good fit of model for both subsamples (chi-squared/df< 5).Figure 4 shows the result of the model testing in Stkilda and Tikal subsamples.

Table 2: Reliability and factor loading of constructs

Measure/Scale Item	Stkilda subsample		Tikal park subsample	
	Loading	Alpha	Loading	Alpha
Color				
CL1: The color composition is attractive	0.61	0.81	0.62	0.82
CL2: The colors do not match	0.60		0.57	
CL3: The choice of color is botched	0.50		0.67	
CL4: The colors are appealing	0.69		0.66	
Multimedia				
ML1: The multimedia (eg., photo,animation, video) in this website is funny.	0.82	0.80	0.80	0.83
ML2: The multimedia in this website can attract me.	0.66		0.83	
ML3: The multimedia in this website can make me feel interesting	0.82		0.77	
Perceived aesthetic				
PA1: Generally speaking, I think the design of this website is attractive.	0.71	0.85	0.67	0.84
PA2: Generally speaking, I think the design of this website is comfortable.	0.87		0.86	
PA3: Generally speaking, I think the design of this website is professional.	0.88		0.90	
Intention to travel				
IT1: I intend to travel to this destination in the near future.	0.75	0.89	0.62	0.86
IT2: It is likely that I will travel to this destination.	0.82		0.80	
IT3: I expect to travel to this destination in near future.	0.87		0.84	

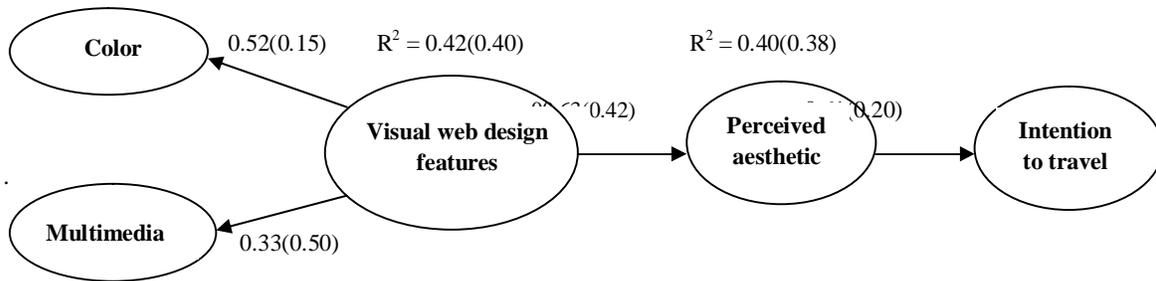


Figure 4 The result of analysis (P<0.05) (the values in parentheses show the values for the Tikal)

Based on Figure 4 perceived aesthetic of websites were significantly influenced by visual web design features ($\beta=0.42, 0.61, p<0.05$). In addition Figure 4 shows perceived aesthetic significantly affected intention to travel ($\beta=0.61, 0.20, p<0.05$). T-tests were used to examine if there were any different between users' perceptions of aesthetic of two destination websites and intention to travel. Among perception items, "attractiveness of multimedia" and "coordinate of colors" were founded significantly different and higher in Stkilda subsample. The perceived aesthetic and intention to travel were significantly higher in the Stkilda subsample.

DISCUSSION

Within the context of destination websites, multimedia and color influences perceived aesthetic. In addition perceived aesthetic was determinant of intention to travel to destination in both subsamples. The main objective of this study was to investigate whether users' perception of website's visual aesthetic and intention to travel were different across the users of two different destination websites. Significant differences were found between the two sub samples regarding to perceived aesthetic and intention to travel. In the Stkidla subsample the most important determinant of perceived aesthetic was the attractiveness of multimedia. So destination websites should be fun and use different multimedia capabilities to absorb users' attention. By providing an enjoyable web surfing, destination website could encourage web users to travel to destination. Applying different kinds of multimedia helps web users to imagine destination and travel decision making will be easier for them. Thus, in order to increase web users' perceived aesthetic and their intention to travel, designers should focus on adding multimedia features such as sound and flash movies and notice to harmony of colors.

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