

CULTURE OR SOCIAL INTERACTION? A STUDY OF INFLUENTIAL FACTORS ON WEBLOG DESIGN

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Abstract

The importance of blogs and social networking as medium of interactions had gain substantial popularity in mainstream media. Such popularity is due to blogs timely publication, ease of use and wide availability. Blogs hypertext and hyperlinks spread information and influence through an underlying social network. Taking into consideration that past studies on web design have focused on cultural traits on design elements, this paper aims to analyse the patterns on blog design from the perspectives of social influence and interactions. Examining design patterns from five networks of blogs using content analysis method, the results show that design of blogs in an online network shares similar elements and the pattern is different from one network to the other.

Keywords: Blogs, social networking, web design, social influence, culture.

1 INTRODUCTION

The cultural influence on the web design has been one of the most popular research topics in information systems area for the last decade (Ning Shen and Khalifa, 2007). However, most of the existent studies are targeting static web pages where the users are information consumers and the interactions between web users are in the minimum level. The advent of the Web 2.0 has dramatically turned the mass information customer into information producer through participatory applications. The active user participation in Web2.0 led to more increased user interactions on the web and the way such social interactions influence user behaviour is gaining bigger importance in web-based information systems research (Hookway, 2008). How social interactions among web site users influence the customisation of web pages is the major research question of the paper.

The online social network groups have become prominent, due to the increase number of online communities and the rapid growth of social networking sites (Backstrom et al., 2006). How the online communities behave and are developed over time become interesting research issues in the social sciences domain. Researchers find that online memberships are playing bigger and wider roles in various aspects of members' life from friendship, learning, giving advice and opinion, purchasing and consuming products and obtaining services (Bagozzi and Dholakia, 2002). Indeed, Bagozzi *et al.* (2002) suggests groups that are formed through identification are very influential in shaping and changing members' opinion, preferences and actions. Dholakia et al. (2004) found that decision-making in online membership is a direct function of social influence and indirect function (through social influence) of value perceptions. Given that personal weblogs are social groups, social interactions may induce changes in design based on users experience and usage and as frequent interactions among the same individuals result in greater knowledge and interpersonal relationships, ideas and knowledge are exchange frequently among regular groups of friends. The online social interactions give rise to issues:

- Is there any commonality in design preferences of blogs in a linked network?

To seek an answer to the research question, this paper adopts content analysis method on sampled weblogs in Malaysia. The initial process involved finding whether blogs in online affiliation share similar design preferences. This covers network of blogs with commonality in members based on demographic data. The network of blogs are analysed based on design elements based on five categorisation, namely the author's profile, blog profile, information design, navigation design and visual design. Findings on analysis of blogs design patterns concluded that blogs in a network share similar design elements and there is significant different of design patterns among different networks of blogs.

This paper will be broken down into 6 sections. Section 1 will provide brief introduction on the issue followed by section 2 which will illustrate review on the theoretical foundation of understanding culture and social aspects on the web. Section 3 touches on the research model while section 4 draws the proposed methodology of the research. Brief analysis on the initial observation of blogs will be presented in section 5 while section 6 focuses on the discussion and conclusion of the paper.

2. LITERATURE REVIEW

Earlier studies on web design focuses on cultural influence across national boundaries. Cultural markers and indicators for design variations that appeal to specific culture have been verified with various cultural models with the most popular one being Hofstede's cultural dimensions (Marcus and Gould, 2001; Robins and Stylianou, 2002; Park, 2004; Marcus and Alexander, 2007; Singh, 2008). Depending on the cultural environment of user and the context of use, studies on cultural indicators on design variations had been bias toward culture and commercial web sites with regard to web design.

While very few studies noted the social influence on web design in Web2.0 context, there are abundant studies that implicate the positive relationship between the two in sociology. Ali-Hasan and Adamic (2007) argued that the existence of relationships between bloggers should be considered a social network since their interactions is not one-time exchange. Literatures on online communities' social factors and behaviours started in the 1990s with researchers like Keisler (1984), Galletta et al. (1995), Kraut et al. (1998), Marc (1998), McKenna and Bargh (1999), Compeau et al. (1999) propagated the ideas that social interactions on the web is an area of research that has vast potential to be explored and examined. Currently, virtual communities had been perceived as an interest group that interacts online to achieve personal or shared goals of their members. Recent studies on online networking focus more on the influence of social interactions have particular actions and behaviours of members through understanding the nature and the role of the influence. Postmes et al. (2001) for example, argued that in groups that used computer-mediated communication, the existence of group norms is significant and influential. Dholakia, Bagozzi and Pearo (2004) examined the effects of group participation of online communities from the perspective of marketing on two different online communities i.e. network and small-group-based. In a study of online interaction of Facebook, Ellison, Steinfield and Lampe (2007) found that the use of Facebook as a medium of interaction had a strong association with social capital and encourage psychological well-being.

However, the approaches involving the influence of elements and nature of social interactions on design behaviour are not known in the literature of information systems. The literatures are less informative on how social influence persuades design preferences in larger scale social contexts over time. Rather, the studies had focused on the explicit behaviour of online communities' members ranging from buying decision to offline interaction behaviour (Dholakia et al. 2004; Bagozzi et al., 2007) leaving the implicit behaviour of design preferences an area of potential research interest.

The popularity of blogs as social networks research is reflected in their growing presence in scholarly studies (Jiang and Wang, 2009). As a new technological innovation that has social influence capacity, the growing research on blogs and blogging centred on blogs and its hyperlinks. For example, (Wellman et al., 1996) described the importance of online communication compared to personal face-to-face communication since computer-supported social networks accomplish a broader and encompassing relationship. Cohen (1977) shown that similarity breeds friendships and the selection into relationships with others with similar interests appears to be stronger than interpersonal influence in a friendship network. Kandel (1978) demonstrated that the behaviour patterns of the selection into relationships members are homophilous in nature because the friendship cliques entail behavioural influence. McPherson et al. (2001) indicate that other types of network either based on advice, friendship and association respond to the principle of homophily despite different networks have different structural characteristics based on age, religion, education, race, space, ties and roles. On the other hand, Drezner and Farrell (2004) explained the types of links in blogs and how those hyperlinks are interconnected in a networked endeavour amounting to wide readership and influence.

Blogs and its links form a dynamic network. The social capacity and social capital of blogs are two distinct characteristics of blogs that attract traffic and influence. Studies on blogs influence are done within a network capacity since all blogs can be seen as a part of a set of communities with characteristics and norms of its own (Albert and Barabasi, 2002). Blood (2004) traces of social relationship and influence on blogs are conducted based on blog ties namely blog rolls, comment, citation and trackback. Recuero (2008) showed the relationship between bloggers' motivation and perceived social capital have influence on the flow of information on blogs. Ali-Hasan and Adamic (2007) demonstrated through an analysis of blogrolls and blog comments that different types of blog links have different characteristics and relationships. Jiang and Wang (2009) concluded that in a blogging community, there exist central bloggers that act as exclusive source of information based on their study on blog nodes and edges.

Several mechanisms and approaches had been utilised in the studies of social influence on blogs. Most of these studies examined and investigated individual intentions, participation and blog links to a particular online behaviour, focusing on the nature and roles of social influence. Interestingly, the issue of social influence mechanisms on web design had not been touched by any researchers as of date. Social determinants of web design changes as a result of social influence on weblogs are not known in the literature of information systems and social network.

3. RESEARCH MODEL

Interpreting the design behaviour on the web should be focused on the design choice, which is the explicit representation of individual design preferences (Kryssanov, Tamaki and Kitamura, 2001). Design preferences are usually visualised through choosing preferred design components on the web.

Existing studies on weblog design classify weblog contents into 5 categories: author profiles, blog features, information design, navigation design and visual design component (Garret, 2003; Cyr and Bonanni, 2005). These components, according to Cyr (2008), represent key elements of web sites usability. The author's profile has been chosen from Bonhard and Sasse (2006). They argued that profiles and the information that they carry are often perceived as virtual social capital in social systems. As the main aim of social networking is connecting people who are similar, profiles serve as a basis for personal references since users express their individuality and interests that other users may be interested in.



Figure 1. Examples of blog design components categories

Based on above discussion, this paper formally defines weblog design as a set as follows:

Definition 1: Weblog Design $\Omega = \{AP, FT, IDC, NDC, VDC\}$

where $AP = \{ \langle ap_attr, ap_val \rangle \}$ where ap_attr is an author profile attribute name and ap_val is the value of the attribute,

$FT = \{ \langle ft_attr, ft_val \rangle \}$ where, ft_attr is a blog feature attribute name and ft_val is the value of the attribute,

$IDC = \{ \langle idc_attr, idc_val \rangle \}$ where, idc_attr is an information design component attribute name and idc_val is the value of the attribute,

$NDC = \{ \langle ndc_attr, vdc_val \rangle \}$ where, ndc_attr is a navigation design component attribute name and ndc_val is the value of the attribute,

$VDC = \{ \langle vdc_attr, vdc_val \rangle \}$ where, vdc_attr is a visual design component attribute name and vdc_val is the value of the attribute,

From above definition, each subset of Ω has any number of elements which is a 2-tuple (attribute and value). For example, AP may have one element of author name as $\langle name_revealing, "First Name Only" \rangle$.

Definition 2: The weblog design space is a Cartesian product of subsets of the design components.
Weblog Design Space $\Xi = AP \times FT \times IDC \times NDC \times VDC$

Each weblog user has a choice of choosing one point in Ξ that characterise the user's preference on the weblog design.

Definition 3: Weblog design distance is the distance between two different user choices in Ξ . That is,

$$D_{ij}^2 = [(x_i - y_i)^T S^{-1} (x_i - y_i)]$$

where x and y are design components indices of two users

The purpose to calculate the design distance is to account for differences in variation among different design preferences of users. The T denotes matrix transpose while S denotes the common (non-singular) covariance matrix in each group. A covariance matrix is the matrix of

covariances between variables in a case. The presence of covariance matrix, S will allow for the different scales on which the variables are measured and for non-zero correlations between variables. If the variables are uncorrelated in each group and were scaled in unit variance, the covariance matrix, S would be the identity matrix. The consequences would be that the distance calculation now is a measure of difference between groups.

Based on the above definition of weblog design, this paper proposes the following two hypotheses.

H1 : Cultural elements do not influence the design preferences of personal blogs

From the perspective of culture, web design preference is an individual choice. This is especially true for personal weblogs that function as personal diary and personal online journal. However, there arise question whether should culture be the main decisive factor in design preferences if the web sites in focus are social system. Studies that contrast and compare culture and social influence show that in a social group, interactions and social motives can be more influential than culture. Zhang and Daugherty (2009) in their study of third-person effect and social networking, found that the relationship between ambiguous and mixed social influence and corrective behaviours has more positive consequences in a collectivistic cultural background. Therefore, word-of-mouth communication and online marketing influence on marketing behaviour is much stronger with people in a collective society rather than those in individualistic culture. Social influence was also found to be a more prominent factor than culture in enhancing learning efficiency. Lim and Zhong (2006) showed that cultural diversity has a negative effect on collaborative learning performance. Interestingly, the effect was reversed in the presence of leadership that encourage contributions from all learners. Under the influence of leaders, members are encouraged to achieve better performance by enhancing participation since leaders exercises greater influence than other members (Alavi and Leidner, 2001). Social status and image are the social symbol motivations found among Korean student populations adoption of mobile TV rather than personal display (Lee et al., 2010) indicate that such strong social influence exists in various social groups. Since blogs are social networks that play an important part in the diffusion of information among consumers (Steyer et al., 2006), increased online social interactions among bloggers lead to the diffusion of ideas, knowledge, experience as well as best practices, fashion and trends on the web. In addition, increasing social presence is supplement with graphics, animation, video and sound that increase the velocity of interactions, support collaboration and maintain online connections (Wellman et a., 1996). Due to the social nature of weblogs, social ties between users may induce the changes in design as social influence elements work in any social system. As Anagnostopoulos et al. (2008) stated that in systems where social influence exists, ideas, behaviour or new technologies can diffuse through the network like an epidemic. Thus, the design preferences of personal blogs tend to be influenced by interactions among members of the same online communities rather than culture.

H2: Network affiliation affects the design preferences of bloggers

H2a: The design distances of a linked network of weblogs is significantly smaller than the design distances of a random group of weblogs which are not connected.

H2b: The dominant design preferences in different independent linked networks of weblogs will be different to each other.

H2 suggests that blogs that belong to a certain online group tend to share similar design elements with other members of the same group. H2a and H2b propose that while the weblogs in a linked network have similarity in the design preferences, different networks will have significantly different design preferences to each other.

Design acts as self-representation of oneself in virtual world that connect individual users to one another (Raento and Oulasvirta, 2008). Turner et al.(1987) offer insight into when and why people's emotions will be influenced by the group to which they belong. This is in accordance with the fundamental human motivation i.e. the sense of belonging. Baumeister and Leary (1995) noted that by understanding the need to belong, human interpersonal behaviour and bonds could be explained according to the group to which they belong. Blogging communities are networks that affiliate and connect people (Wellman et al., 1996). These connections are social networks with their own characteristics and features. The computer-supported social networks gain more importance than face-to-face network since it accomplish broader and encompassing relationships.

Affiliation refers to a group or community whose members join voluntarily (Khaled et al., 2006). In this type of group formation, members take pride in the characteristics of the group and these characteristics contribute to the feelings of affiliation. Members of an affiliation are likely to be engaged with the thoughts and actions of other members in the same group (Yuki, 2003). Since computer networks are social networks, the existence of social awareness and social influence are inevitable. McKenna and Bargh (1999) found that social interactions on the internet inflict two distinct types of motivations that drive internet social behaviour, self-related and socially related. For an individual, belonging to an online group brings about one's identity and self-esteem as well as reducing feelings of social isolation in individual. In term of social framework, individuals form bonds with others who share their interests and become accepted members of that social group. It also provides them with the opportunity to widen their social spheres and integrate the relationships into their offline lives. Baumeister and Leary (1995) assert that the concept of belonging in human being is a motivation that pushes them to establish and maintain a certain amount of satisfying interpersonal relationships. It is a fundamental need that has survival and reproductive payoff. According to Baumesiter and Leary (1995), the need to belong surpasses the need for a mere social contact. The need to belong depicts that social relationships are mutually desired and seen part of a long-term commitment. In addition, the sense of belonging encourages activities that are designed to satisfy those commitments. This leads people to cultivate social attachments that solidify social bonds that are stronger than the need for affiliation and intimate connections (Baumeister and Leary, 1995).

Vittengl and Holt (2000) supported Baumeister and Leary (1995) hypothesis through a study of an association between social relationship facilitation and affect. They found that the positive effect experienced before and after conversations combined with social attractions and self-disclosure, had resulted in participants achieving a more positive feeling in relationships. This in line with Baumeister and Leary's suggestion that the need to belong will encourage people to form and strengthen relationships. In online communities and in computer-supported networks, solidification of bonds is done through rapid transmission and communication among and between individuals shown through similar design preferences.

4. RESEARCH METHOD

The research employs content analysis method to study social influence on weblog design. Content analysis has already been widely adopted in studies that aimed to investigate the cultural impact on web design (Simon, 2001; Robbins and Stylianou, 2002; Singh et al., 2003; Marcus, 2006). Data collected via content analysis is preferred to the data collected from interview or questionnaire survey as it reflects end users view after specific behaviour rather than their intention to behave which is not always implemented in real world. For the operationalisation of the variables used in the definition, this paper identified the following indicators as shown in Table 1. Observation of each weblog will be done over a period of time tracing changes in design. Frequency counts will be used to detect similar design elements, with blogs display patterns of similarities in the choices of information, navigation and visual components.

Component of Design	Attributes	Value Range
Author's Profile	<ul style="list-style-type: none"> • Name • Age • Gender • Location • Occupation • Interest • Education 	<ul style="list-style-type: none"> • Full-name disclosure • Age disclosure (scale 1 – 6) • Gender differentiation • Regional location (scale of 1 – 6) • Types of employer (scale 1 – 5) • Stated / Not stated • Levels of education (scale 1 – 5)
Blogs Features	<ul style="list-style-type: none"> • Purpose • Advertisement • Chat Title • Archives • Recent Comments • Search Engine • Blog Survey • Credits/Awards • Statistics 	<ul style="list-style-type: none"> • Blogging reason (scale 1 – 4) • Existence of advertisement (Yes/No) • Types of journal (scale 1 – 6) • Yes / No • Exist / Absence • Exist / Absence • Survey provider (scale 1 – 4) • Yes / No • Exist / Absence
Navigation	<ul style="list-style-type: none"> • Navigation System • Site Registration • Security Provision • Visitor Counter • Navigational Links • Blogrolls 	<ul style="list-style-type: none"> • Customise / Contextual • Required / Not required • Exist / Absence • Exist / Absence • Control / Supportive • Customise / None
Information	<ul style="list-style-type: none"> • Information Sorting • Accessibility • Organisation of Information • Types of Information • Content • Focus • Symbols • Audio • Colour • Emphasis 	<ul style="list-style-type: none"> • Hierarchical / Non-hierarchical • Restricted / No barriers • Priority / Equal importance • By task / By modular • Personal achievement / Group • Youth and action / age and experience • Materialism / Family / None • Exist / Absence • Exist / Plain • Relationship / Rules
Visual	<ul style="list-style-type: none"> • Symbols • Picture • Animation • Tracker • Chat box 	<ul style="list-style-type: none"> • Rules / No symbol • Personal / Group • Exist / Absence • Exist / Absence • Design / Task / None

Table 1. Indicators of Weblogs Design Component

Four different groups of weblogs were sampled. Each group contains 51 weblogs making up 204 weblogs in total. For the sampling, firstly the main blogger was chosen at random. Secondly, other 50 bloggers have been identified through the main bloggers' blogroll links. To ensure the independency of each network, it was checked that a member of a network was not a member of any other three networks. Figure 2 shows the topography of networks of blogs.

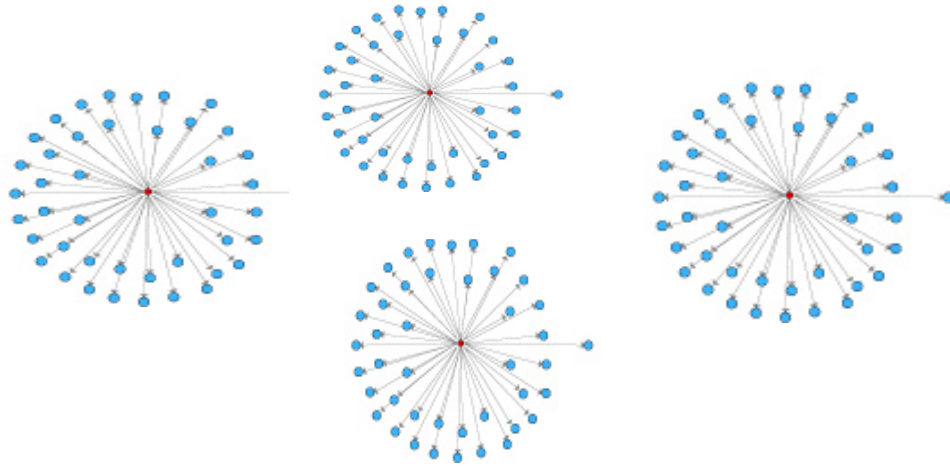


Figure 2. Weblogs topology and independency

5. DATA ANALYSIS

Results from the initial study collected from four independent networks on design elements show traces of design preferences that are similar within blogs in a network. Bloggers' demographic characteristics are quite similar in terms of age and occupation. Although 56% of the bloggers do not revealed their age group, the disclosed age in Network 2 is in a range between 10 to 60 years with a substantial number of bloggers in the said network occupy positions in the private sector while some are self-employed. The demographic characteristics of bloggers particularly age groups and occupational categories are shown below.

	10 - 20	21 - 30	31 - 40	41 - 50	51 - 60	Not Mentioned
Network 1	2%	84%	0%	0%	0%	14%
Network 2	2%	28%	8%	4%	2%	56%
Network 3	18%	47%	2%	0%	0%	33%
Network 4	65%	4%	0%	0%	31%	0%

Table 2. Age Group Profile

Bloggers in Network 1, 3 and 4 are mainly youth in their early twenties and mostly are students with age ranges between 10 to 30 years. On the other hand, bloggers in Network 2 are more diversify in terms of age and occupation.

	Government	Private	Self-employed	Student	Not Stated
Network 1	0%	4%	0%	92%	4%
Network 2	2%	36%	8%	4%	50%
Network 3	0%	24%	0%	45%	31%
Network 4	8%	22%	10%	33%	27%

Table 3. Occupation Categories

The similarity in terms of age group between bloggers show that peer influence play a role in blogs identification and group cohesiveness. Under the assumption that blogs from one country are subject to similar cultural influence, analysis found that blogs under study do not display cultural markers associated with any elements of the Malaysian culture. Among the design elements observed are symbols, content of information, information focus, picture attachment and colours. Gould et al. (2000) analysis of three Malaysian websites used Hofstede and Trompenaars cultural models to gauge cultural markers based on the following cultural dimensions.

Cultural Dimensions	Ranking	Score
Hofstede		
Power Distance	1	104
Individualism / Collectivism	36	26
Masculinity / Femininity	25	50
Uncertainty Avoidance	46	36
Trompenaars		
Universalism	9 (of 24)	62
Individualism	22 (of 31)	45
	19 (of 24)	56
	17 (of 29)	42
Specific Relationships	18 (of 33)	72
	9 (of 26)	75
Neutral Communication Style	25 (of 33)	30
Achievement	Unranked	
Time Orientation: Long Term Horizon	35 (of 41)	4.23
Nature orientation: Mastery	21 (of 29)	26

Table 4. Malaysian Ranking according to Cultural Dimensions

Source: Gould et al. (2000)

Malaysia according to this ranking, occupies the highest position in power distance and a highly collective society. These cultural dimensions indicate that the citizen of the country expect and accept that there are differences in status and position in the society depicted by the use of symbols, pictures and colours (Gould et al., 2000). Blogs from Malaysia are expected to use these cultural markers either in the visual and/or information aspects of the blogs. However, blogs in either Network 1, 2, 3 and 4 do not display any particular symbols associated with nation, religion or institution. The findings show a total of 202 blogs do not have any logo, artefact, sign or ritual design on the content page that could be associated with symbolic cultural representation while only 2 blogs carry symbol markers as web page design. The symbolic characteristics or representation are not found in the content of information either.

The content and focus of information of majority of the blogs in either Network 1, 2, 3 and 4 describe personal and individual achievements with the focus on youth and action. 90% of blogs contain description of daily activities and chronology of personal events since blogs tend to serve as personal journals. The balance 10% contains information on group achievement, traditional and historical elements. The use of pictures and colours amounted to personal collection and individual taste. 90% of pictures on display in the Malaysian blogs under study are individual collection while less than 1% of blogs attached group picture. The use of colours' display shows the colour choices that are either plain or no existence of colours. 90% of blogs have colours combination that is plain, with white or black background. The use of colours display in the majority of blogs is not substantial to represent any significant meaning to cultural traits. Thus, reject hypothesis 1 and it can be concluded that blogs are not affected by cultural elements.

The design distances are calculated using cluster analysis with SPSS. In cluster analysis, distance measures are most often used as a measure of similarity with higher values representing greater dissimilarity. The suitable method is Mahalanobis Distance since it accounts for variable intercorrelations and weights each variable equally. The total number of observations of 204 is considered moderate with equally sized clusters. It starts by standardising all variables to mean 0 and variance 1. This resulted in all the variables being on the same scale and being equally weighted. In the first step, SPSS computes for each pair of blogs, the squared distance of each variable identified in Table 1. This is simply the sum across variables ($i = 1$ to v) of the squared

difference between the score on variable, i for one user (x) and the score on variable, i for another user (y). Then, the squared distances between each blogs in a cluster are computed and compared until all of the blogs in a similar cluster are treated similarly. The smaller distances values indicate that blogs are similar to one another and the larger distances values show that blogs in a cluster are less similar to one another.

To test for hypothesis 2a and 2b, the design components distances for Network 1, 2, 3 and 4 are analysed as shown in Table 5. The Chi Square method is used to test the difference between two or more groups of objects with respect to several variables simultaneously, in this case the related network of blogs.

Networks	$D_{ij}^2 = [(x_i - x_j)^T S^{-1} (x_i - x_j)]$	χ^2	p
Network 1	11.292	20.000	0.220
Network 2	16.185		
Network 3	12.134		
Network 4	14.696		
Network 5	17.353		

Table 5. Analysis of Design Distances of Networks of Blogs

Preliminary examination of data revealed that the design distances of a linked networked of blogs showed that the value for Network 1, 2, 3 and 4 are smaller than design distances of a random group of blogs, Network 5. Therefore, hypothesis 2a is accepted; design distances are significantly smaller for network of blogs than design distances of group of blogs that are random. The analysis yielded a chi-square value of 20.000 and is not significant at either 0.05 or 0.10 levels. The test showed that there is no association in design preferences between networks and accept hypothesis 2b. It can be concluded that being in a network affiliation affects design preferences of bloggers.

6. DISCUSSION AND CONCLUSION

The aim of the pilot study was to survey indications of similar preferences on design elements of personal blogs among members of the same online network. Initial findings found that design elements of blogs in a same network do share similar design preferences shown by the number of similarity occurrence of design preferences across blogs in the same network. The sense of sharing among member bloggers in a virtual community is in line with findings of Bagozzi (2007), Dholakia et al. (2004), Postmes (2001) that members of virtual communities tend to share sense of belonging, values and preferences among each other. The blogger-to-blogger communication is influential in shaping opinions and behaviours (Bagozzi et al., 2002) such that member bloggers in a same network have influence on design elements preferences in blogs. Indeed, Bagozzi et al. (2002) suggests groups that are formed through identification are very influential in shaping and changing members' opinion, preferences and actions. This coincides with members identified with certain network in term of blogging and membership. This research examines design patterns in networks of blogs that are independent of each other. The findings detect similarities in design preferences corresponding to the blogs within a network and illustrate differences in design preferences among networks of blogs. The study however does not examine the underlying influences on design patterns at this stage. Although blogs depict design elements and characteristics that are similar, the interplay of influence on blog design preferences has yet to be determined. As this is a research in progress, the research will continue with assessing the determinants of influence on design preferences and will evaluate the degree of influence that correlates with the corresponding blogs.

For personal blogs, maintaining interpersonal connectivity and social interactions are coherent attributes that emphasise the types of influence available in online communities. Bagozzi et al. (2005) established that in online high-interactivity groups, social influence effects incorporated into the values and goals of decision makers that are shared with members of their group. The longer the existence of the group, the level of interactions between members becomes stronger resulting in a collective behaviour among members. The longer they are in groups, the stronger the impact of group norms on intention (White et al., 2009). The norms of social groups should influence the willingness to engage in behaviours according to the group interactions rather than individual intention (Terry and Hogg, 1996). Similarly, the choice of design on personal blogs will be determined by either culture or social depending on how that choice is influenced by other bloggers through online interactions. Increasing social presence is supplement with graphics, animation, video and sound that increase the velocity of interactions, support collaboration and maintain online connections (Wellman et al., 1996). People sharing strong attachment to a group will be more likely to participate and provide support to others in the group and online social grouping tend to share similar sense of belonging, values and preferences among members of the same online communities (Hinkle and Brown, 1990). An indicator that could be adopted to leverage the level of influence between bloggers are age group and blogs of similar interests.

To test for the impact of social influence on design, the choice of blogs would involve those within network affiliation with similar age characteristics and similar interest. Social influence in this case appears in the form of peer influence and sense of belonging, disseminated through online interactions. As interactions increase in number and frequency, the levels of social influence become stronger. This is supported by Miller and Brunner (2008) that an online participant's total number of contributions illustrates a consistent presence throughout the interaction while the participant's number of words demonstrates an immediate physical presence.

So far, the initial observation had been conducted on online networks in one country under the assumption that the weblogs are influenced by the same culture. The objective is to minimise the influence of culture while finding indications of social influence on blogs. To explore the co-existence of culture on design preferences of networks of blogs, a comparative study between Malaysia and another country would provide enlightenment on design preferences in networks of blogs under different cultural values. This would incorporate another dimension on design preferences in network of blogs under the influence of culture. It would be interesting to study the level of influence social and cultural have on design preferences of blogs and compare them between countries. Findings in the second part of the research will enrich the discussions and debates on the influential forces affecting design of blogs in online network.

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