GROUP INFLUENCE ON BLOGS DESIGN BEHAVIOUR

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ABSTRACT

Issues of national culture influence on web design behaviour have been rampant and stimulating on static web pages across the globe. The emergence of a new breed of publication-type web page brought about by the advancement of web technology however, saw a different species of online communication groups. Bloggers as these groups are called; used blogs as their communication and publication tool to distinguish themselves from other websites and online social media users. Since bloggers are groups that are recognised and credited to cultivate their own culture, the idea that national culture has an influence on blogs design behaviour and preferences may have been weakened. Bloggers groups themselves would be the influential factor that determines design preferences of bloggers in a network of blogs. To address the issue, this paper has conducted an assessment on blogs from six countries using content analysis method, national culture traits and SIDE model to ascertain design features characteristics and behaviour. Results from both the global and local blogs in each country showed that blogs design preferences in one country differ between both the global and local bloggers. Furthermore, global bloggers design preferences in countries under observation are found to be similar to one another.

Keywords: Blogs, culture, groups, web design, Social Identity Theory.

1   INTRODUCTION

For decades, issues of culture in Information Systems (IS) discipline have been dominated by a variety of cultural aspects influence in technology from aspects of cultural differences in the acceptance of the computer hardware interfaces to the cultural influence in Information Technology (IT) logistics decision-making (Myers and Tan, 2002). IS scholars argued that cultural understanding is important to ensure the successful implementation and acceptance of IT related gadgets since interface served as the connection between people and technology. Researches however, focused and emphasised on the concept of national culture as the main culprit in interpreting the agenda of cultural differences across the globe. Aspects of national culture have gained substantial coverage in the literatures of IS with models of national culture being used to develop indicators and apprehension that built up the humanistic approach to technology. Similarly, the internet and web design are not neutral from this form of scholarly debates and enquiries. National culture concept managed to insinuate itself into design aspects and brought about a significant contribution towards web successful acceptance in various culture. The advancement of the Information and Communication Technology (ICT) draw the challenges in web design management due to the fluidity of the medium by which the web is accessed and the passing of time. Web users are provided with a variety of choices with regards to the medium that they could used to access the web, the social media and the online groups that they wished to join and the latest web technology as a result of the advancement of web research.   Among the invention of web technology is blog; a text-based, digital-typed, publication communication medium. The innovation of blogs created a new hype in the sensational cultural debates in IS since blogs are different from the usual static websites and other social media. Blogs are individually owned and maintained, used Web 2.0 technology that allowed bi-directional

communication and are linkage networks. Unlike static web pages, blogs users are given a diverse choice in selecting and changing the format and setting of their blogs pages in terms of colour, layout and personal appearance. As such, it changes the level of the cultural playing field since blogs now function as its own group, cultivate its own culture (Porter, 2008) and displayed substantial influence in a variety of manner since blogs have their own followers and readers (Drezner and Farrell, 2004). The issue concern now is do design preferences of bloggers in a network of blogs are influenced by the group their blogs belong to in lieu of national culture.

This paper will address the issue in six sections by highlighting blogs in online affiliations and networks. Section one provided an introduction into the issue of culture in IS and web design particularly the nature and level of culture that are in focus. A review of culture in the literatures of IS are highlighted in section two with aspects of behavioural science and social research taken into consideration and explored. The review is followed by the development of research model and hypotheses in section three and subsequently, the adopted methodology in section four. Section five and six on the other hand deal with analysis of results and the discussion on the findings to arrive to a conclusion of the paper.

2   LITERATURE REVIEW

The concept of culture has various dimensions and definitions according to whom defined and interpreted the cultural concept. However, the form and concept of culture have developed and progressed along with the history and civilisation of man. As culture progressed with time, culture afforded a variety of forms through space and time. Discussions on the concept of culture have been continuous and progressing. Extensive work on culture has produced various literatures to explain culture from various different perspectives and various fields. Straub et al. (2002) emphasised that literatures that focused on the definitions of culture could be classified in three main groups; shared values, problem-solving and general definition. The first group consists of scholars that defined culture based on shared values. They argued that shared values are the central feature and distinct characteristic of culture, stating that values that are acquired and learned early in life are integrated into a system of value. This value system is relatively stable in nature but could change over time. Hofstede (2001)'s dimensions of culture falls under this category. Scholars in the second group viewed culture based on the perspective of culture outcomes and its accomplishment. Culture according to this definition focused on problem-solving and how this defines a particular group of people. Moran and Stripp (1991) for example, define culture as a group problem-solving tool that enables individual to survive in a particular environment. The third group defined culture in ways that tend to be more abstract and implicit. One example is Hall (2000) which he stated that all culture can be situated in relation to one another through styles in which they communicate.

Although the concept of culture remain contentious, there are some common ground of understanding the principles of culture. Among these are; culture is shared by one two or more people; it is defined by values, attitudes and behaviours and can be characterised by a variety of indicators (Davidsons and Mattinsons, 2003). These indicators include relationships with the environment and other people (Schein, 1985) and the relevant assumptions in the forms of language, space and time (Schneider, 1997). Culture is thus characterised by the behaviour of those in groups as a whole or part thereof that function in a coherence form (Davidsons and Mattinsons, 2003). Therefore, the behaviour, attitude and expectations that shape people's thoughts and actions have to be observed and understand to study a particular culture.

Interest in the information systems literature research particularly to the impact of cultural differences on the usage and development of ICT had been increasing tremendously. Studies in information systems from a cultural perspective had focused on a wide variety of issues, ranging from the general management issues, information systems and infrastructure, to the issue of cultural transfer and culture in system analysis and design. Cultural issues in IS thereon spanned across various types and levels of culture. Apart from national culture, studies also focused on organisational culture and professional culture (Karahanna et al., 2005).

The invention of world wide web and its implementation at the end of 1990 (Rettberg, 2008) has shifted the focus of studies from the general IS issues toward web browser and the internet. On the web, user experience becomes more important compared to other communication products. It is user experience that differentiates one product to the other and in turn it creates loyalty. As the web continued to flourish as a publishing medium across the globe, culture becomes a functional issue. Understanding cultural characteristics of websites is becoming increasingly important in a global context. From the United States to China, from Europe to South America, cross-cultural variation on web design had captured the interests of various researchers across the globe. Marcus (2001, 2006), Fink and Laupase (2000), Robbins and Stylianou (2002), Ross (2001), Simon (2001) and Singh et al. (2001, 2003, 2008) are among the few researchers that had acknowledged and discovered cultural diversity in user-interface design for the web using different culture as validation points. These studies take into account the cultural differences in the design of metaphors, mental models, navigation, interaction and appearance. Depending on the cultural environment of user and the context of use, studies on cultural variation on design variations have been bias toward national culture and Hofstede's concept of national culture. Majority of studies concerned with cultural aspects of the development, implementation and management of IS have relied on Hofstede's model of national culture. Table 2.2 showed that the majority of the IS research into the effects of culture on web design behaviour relied on Hofstede's concept of national culture to validate propositions and arguments on variety of design issues. Hofstede's model therefore has a significant influence on IS research and web design variation studies in particular.

Author	Level	Cultural Model
Shore and Venktachalam, 1995	National	Hofstede
Khaslavsky, 1998	National	Hofstede
Gould et al., 2000	National	Hofstede
Marcus, 2000	National	Hofstede
Simon, 2001	National	Hofstede
Marcus and Gould, 2001	National	Hofstede
Robins and Stylianou, 2002	National	Hofstede
Sun, 2001	National	Hall
Singh et al., 2003	National	Hofstede
Cyr and Trevor-Smith, 2004	National	Hofstede
Marcus and Baumgartner, 2004	National	Hofstede
Park, 2004	National	Hofstede
Singh and Baack, 2004	National	Hofstede
Callahan, 2005	National	Hofstede
Cook and Finlayson, 2005	National	General
Wurtz, 2005	National	Hall
Marcus, 2006	National	Hofstede
Marcus and Alexander, 2007	National	Hofstede
Singh et al., 2008	National	Hofstede
Tong and Robertson, 2008	National	Hofstede
De Angeli, 2009	National	General

Table 2.2   Levels and models of culture in web design research

According to Straub et al. (2002), Hofstede's model of culture is unique because it offers a mechanism whereby a culture value can be assigned to a particular group of people determined by national boundary. This categorisation of culture suggests that culture consists of patterned ways of thinking that are shared across people in a society, based on values. Despite its popularity and uniqueness, Hofstede's model is not without critisms and weaknesses especially with regard to the model's unit of analysis i.e. the nation-state and the assumption that each nation has its own culture. One related argument is that national culture is not the only level of culture that influences individual

behaviour (Straub et al., 2002). Straub et al. (2002) proposed that there are other levels of cultural interactions that influence behaviour in the forms of ntional, group and other sub-cultures depending on the situation and their own personal values. Depending on the relative influence of the different levels of culture on individual behaviour, the nature of behaviour under investigation (Ali and Brooks, 2009) will have to be taken into consideration. Therefore, examining cultural influence on the web will have to take into account the context within which the influence occurs. Since blogs are individually owned, the types of influence on design elements of blogs should take into account the level of influence at the micro (individual) rather than the macro (nation) level. Straub (2002) proposed the need for a theory-based individual conceptualization and measurement of culture. He suggested the Social Identity Theory as the base to measure cultural influence at the level of individual for future IS research.

Social Identity Theory (SIT) argued that individuals tend to classify themselves and others into various social categories such as memberships, clubs, religious affliation, gender and age cohort (Tajfel, 1978). Therefore, people may be classified in various categories and different individuals may use different categories at any one time. Turner (1982) suggested that these categories are defined by typical characteristics abstracted from the members themselves. According to Ashforth and Mael (1989), the social classification serves two purposes. Firstly, it cognitively segregate and arrange social environment in a manner that provides individual with a systematic methods to define others. Once an individual is classified, he or she would be assigned the typical characteristics identified to the segment that they are categorised. Secondly, social classification allows an individual to identify and define himself or herself in the social environment. The self concept embodied in SIT is comprised of both personal identity and social identity. The personal self includes distinctive personal characteristics such as abilities, psychological traits, interests and hobbies while the social identity encompasses salient group classifications; the perception that an individual belong to some group or society.

To SIT, membership in social groups or collectives provides an important basis for self definition. To the extent of whatever traits or characteristics people used to describe themselves as unique individuals, they tend to locate themselves in the social context through their claims to social categories. These categories include demographic categories (gender, ethnicity), social role (parent, spouse) and membership organisations (conservatives, soldier, republican). Deaux et al. (1995) argued that identities are developed and adopted within a common cultural context and as such represent a culturally shared form of social representation. Threfore, the application of SIT in studies of cultural attitudinal and behavioural would generate better predictions and analysis. This is because attributes for behaviours and outcomes would differ in the individualistic function compared to the collective basis of identity. Since all identities are different and they resulted in important consequences, studies on identities and groups will benefit from continued consideration in identity categories variations (Deaux et al., 1995). Table 2.3 showed various studies where SIT was applied to explain group behaviours.

Author	Social Identity Theory Categorisation	Focus Group
Abrams and Brown, 1989	Self-consciousness and self regulation	Students
Ashforth and Mael, 1989	Organizational socialization, role conflict and intergroup relations	Organisation
Brewer, 1991	Depersonalization and group size	Group membership
Mehra et al., 1998	Distinctiveness Theory	Minority groups
Jackson & Smith, 1999	Intergroup perception, in-group attraction, interdependency beliefs and depersonalization	Groups of students
Hogg and Williams, 2000	Social identity and collective self	Social groups
Lea et al., 2001	Social Identity Model of Deindividuation	Online group

	Effects (SIDE)	discussion
Postmes et al., 2001	Social identity approach to communication and commitments	Organisations
Ellemers et al., 2002	Group commitment	Social groups
Green, 2004	Partisanship	Political parties
Michinov et al., 2004	Social identity and group process	Computer-mediation communication group
Reicher, 2004	Social identity	Group domination, resistance and change
Hogg et al., 2004	Intergroup relations and self-conception	Small groups
Hogg et al., 2007	Group identification	Group uncertainties

Table 2.3   Application of SIT in groups

Depending on the cultural environment of user and the context of use, studies on cultural indicators in IS implementation and adaptation particularly on web design had largely confirmed that culture indeed had become a necessity to design practices of the web. Using SIT would allow different levels of culture and different types of behaviour on IS related studies to be discussed and examined appropriately from various perspectives. Studies on social network sites and the online social behaviour have focused primarily on user intention and motivation with regards to the use of IS application tools. Most of these studies examined and investigated individual intentions, motives and participation of web users to a particular online behaviour, focusing on the nature and roles of social influence. Interestingly, the issue of different levels of influence mechanisms on web design had not been touched by any researchers as of date. Thus, the approaches involving the influence of different types and nature of different levels of culture spread through social interactions on design behaviour on blogs are not known in the literature of information systems. The literatures are less informative on how these different levels of culture persuaded 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. Furthermore, the use of Social Identity Theory in this particular case is inevitable since blogs involved group level-based network and membership.

3   RESEARCH MODEL AND HYPOTHESES

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 web pages design classify weblog contents into three design categories: information design, visual design and navigation design components (Garret, 2003; Cyr, 2008). These components, according to Cyr (2008), represent key elements of web sites usability. Blogs are a form of web page that is similar to other text-based, digital-typed web sites in terms of layout. The difference between the two is blogs have dynamic features that allow blogs users to personalise and customise blogs layout according to individual preferences where as web sites have static layout once they are created. Therefore, design components in web sites could be used in similar analysis in personal blogs since blogs share similar general characteristics with web sites.

The authors wish to highlight that design preferences of blog users would follow similar pattern since blogs are web pages that allow users to choose their own design elements. Unlike the static web pages, the decision to choose design elements for personal blogs can be conducted at the beginning when blog user starts a new blog page or at anytime that the blog user wishes to change design elements. This phenomenon in blogs happen due to use of web 2.0 technology that enabled features that could be customised according to blog users' preferences like colour, layout, content and personal

information, while at the same time blogs contained features that are static. The static features include search engine, chat box and site metres are among similar items that are being offered to all users by blogs providers. The static items could not be customised according to the users' preferences. Therefore, design components that are taken into consideration consist of three elements. They are information design, visual design and author's profile. These components are chosen since they are design choices made through mimicry (follow others) and fiat (personal choice) by blog users. Since they are personal choices made by blog users, these components contain design elements that share similar pattern with other users based on individual selection. The navigation design on the other hand is not considered since the design choice of this type of design component is made by default. The design components categories chosen are shown in Figure 3.1.
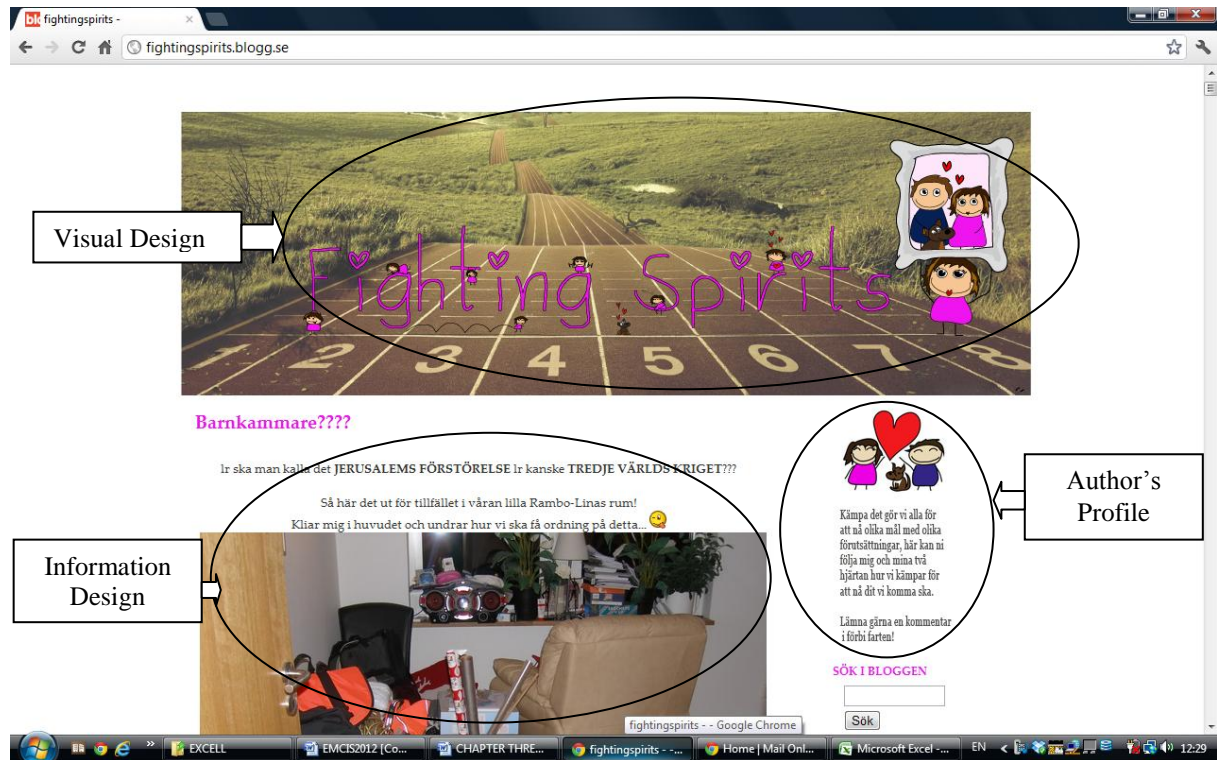

Figure 3.1   Blog design component categories

Based on the above discussion, weblog design is defined as follows.

Definition 1: Weblog Design Ω = {*AP, IDC, VDC*} where;
 AP = {<ap_attr, ap_val>} where ap_attr is an author profile attribute name and ap_val is the value of the attribute,
IDC = {<idc_attr, idc_val>} where, idc_attr is an information design component attribute name and idc_val is the value of the attribute;
VDC = {<vdc_attr, vdc_val>} where, vdc_attr is a visual design component attribute name and vdc_val is the value of the attribute.

Definition 2: *The weblog design space* is a Cartesian product of subsets of the design components.
$$\text{Weblog Design Space } \Xi = AP \times IDC \times VDC$$
Each weblog user has a choice of choosing one point in Ξ that characterise the user's preference on the weblog design.

The following hypotheses has been proposed based on the above concept of web design and cultural values. The research hypotheses are derived from the Social Identity model of Deindividuation Effects (SIDE) that aims to explain cognitive and strategic effects of visibility and anonymity in both

intragroup and intergroup contexts. In the SIDE model, anonymity refers to visual anonymity, not anonymous in identity. This term is used to describe the communication environment among members in online groups that are conducted in NON face-to-face interactions. The SIDE model proposed that certain features of computer-mediated communication such as this form of relative anonymity could actually intensified social influence (Postmes et al., 1998), and reduced the interpersonal communication cues within the group and allowed certain information that is dependent on visual cues for its communication to become more salient (Lea et al., 2001). By doing so, the effect is a person perception is shifted from personal to the group and thus encouraged behaviour that is normative for the salient group. In addition, SIDE proposed that in a computer-mediated-communication group, visual anonymity promoted a shift in self awareness from the individual to the group without a loss in self-awareness. Hence, under anonymity, perceptions of others shifted from primarily interpersonal to being group-based perceptions without there being a loss of attention to others. Studies have been conducted to support the theory and observations have been done in face-to-face groups and also in computer-mediated groups focusing on normative group behaviour. In a classic deindividuation study, Reicher (1984) found that deindividuation in group condition worked by altering the salience of personal towards group identity and enhance adherence to the group norm. In computer-mediated groups where actors were physically isolated and visually anonymous, studies (Lea and Spears, 1991; Posmes et al., 1998) found anonymity affected group attraction and encouraged group cohesiveness. Deindividuation does not mean that interactions with other become impersonal or task-focused. It simply means that perceptions and behaviour become stereotyped in term of the salient group.

The deindividuation process in the online blogging community could be explained through two group processes i.e. group attraction and group influence. Group attraction began where anonymity among bloggers as online groups affects group attraction. Anonymity encouraged depersonalisation perception of self to occur making an individual blogger feels attracted to be in a group (Lea et al., 2001) and would prefer to be presented more in terms of the individual similarities to the perceived attributes the salient social group. In turn, group behaviours such as stereotyping and group cohesiveness are the normative behaviours of such online group. In the blogging community, it could mean following and copying design features of the majority of group members to show association and cohesiveness with online blogging community where one blogger belong. Therefore, the design preferences of bloggers in a same blogging group depicted similarities in design features that would create a stereotype design behaviour showing the group own culture. Design preferences in a blogging community on the other hand are stereotyped design features of group instead of national culture. Apart from group attraction, the deindividuation process in the blogging community could also be explained through group influence process. Postmes et al (2001) found that anonymity in online group could facilitate group influence. Anonymous group conformed to the efficiency-oriented behaviour that was primed in half of the group under study. Similarly, norms in online groups such as design features that are displayed on web pages are prime behaviour that would be followed by others. In turn, the normative process may shape behaviour and strengthened social influence which encouraged members of the same blogging community to mimick design features of majority of members of the group. Therefore, the design preferences of bloggers in a network would be influenced by the group through the deindividuation process. We believed that blog users will follow their own group culture and follow the trend design features of the group rather than the national culture of individual bloggers.

H1a: There will be a significant difference in the number of personal awards between local and global blogs when the cultural values of the two groups of weblogs differ from each other.
H1b: There will no significant difference in the number of personal awards between local and global blogs when the cultural values of the two groups of weblogs are similar to each other.

H2a: There will be a significant difference in the number of personal information disclosure between local and global blogs when the cultural values of the two groups of weblogs differ from each other.

H2b: There will be no significant difference in the number of personal information disclosure between local and global blogs when the cultural values of the two groups of weblogs are similar to each other.

H3a: There will be a significant difference on the number of traditional or group images between local and global weblogs when the cultural values of the two groups of weblogs differ from each other.

H3b: There will be no significant difference on the number of traditional or group images between local and global weblogs when the cultural values of the two groups of weblogs are similar to each other.

H4a: There will be a significant difference on the number of multimedia between local and global weblogs when the cultural values of the two groups of weblogs differ from each other.

H4b: There will be no significant difference on the number of multimedia between local and global weblogs when the cultural values of the two groups of weblogs are similar to each other.

H5a: There will be a significant difference on the number of simple layout between local and global weblogs when the cultural values of the two groups of weblogs differ from each other.

H5b: There will be no significant difference on the number of simple layout between local and global weblogs when the cultural values of the two groups of weblogs are similar to each other.

H6a: There will be a significant difference on the number of copyright statement between local and global weblogs when the cultural values of the two groups of weblogs differ from each other.

H6b: There will be no significant difference on the number of copyright statement between local and global weblogs when the cultural values of the two groups of weblogs are similar to each other.

H7a: There will be a significant difference in design preferences between local blogs in different countries with different cultures.

H7b: There will be no significant difference in design preferences among blogs from different cultures in the global blog sites.

4   RESEARCH METHODOLOGY

The methodology decided in this research is quantitative. The philosophy adopted by this research is positivism in accordance to the quantitative methodology decided upon this research. As the purpose of positivism is to generate hypotheses that can be scientifically tested, the truth and the reality can be revealed through empiricism. Following suit, the most suitable approach is deduction. The research employed content analysis method to study the level of cultural 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). Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding (Krippendorff, 2004). According to Stemler (2001), content analysis could be applied to various practical applications. Firstly, content analysis could be used to determine authorship by compiling a list of suspected authors, examine their prior writings and correlate the frequency of nouns or function words to help build a case for each person's authorship of the data of interest. Secondly, content analysis is also a useful tool for examining trends and patterns in document. Stemler and Bebel (1998) used content analysis method to make some inferences about programme effectiveness based on schools mission statements. In addition, content analysis could be applied to provide an empirical basis for monitoring public opinions. Data from documented publication could be compared to data collected in the future to determine if policy changes have manifested themselves in accordance to the written documents. Krippendorff noted that "content analysis is an unobtrusive technique that allows researchers to analyse relatively unstructured data in the view of meanings, symbolic qualities and expressive contents they have and of the communicative roles they play in the lives of data sources" (p.44). The research will be conducted in accordance to the components of content analysis as described by

Krippendorff (2004). Seen in Figure 4.1, the step-by-step approach of the content analysis method is shown and explained.
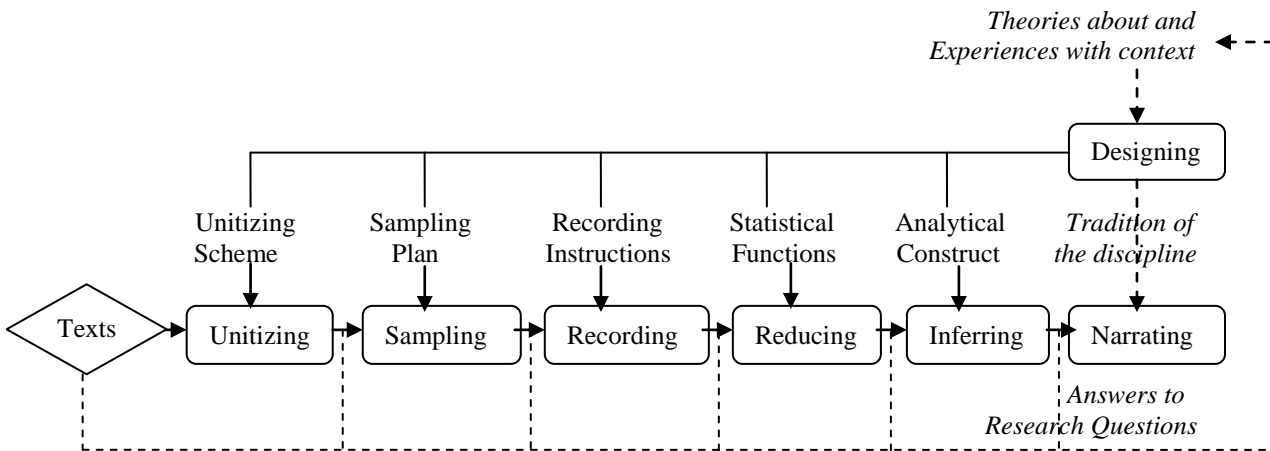

Figure 4.2   Components of Content Analysis
Source : Krippendorff (2004) p.86

According to Krippendorff (2004), unitizing refers to the systematic separation of segments of texts into categories like images, voices and other observables that are of interest to an analysis. For the purpose of this research, the unitizing units are the units of measurement used to observe variables and measurements in weblogs. The use of symbols, graphics, colour, language, site features and content are design features that are commonly employed to compare and contrast various web pages across different virtual communities (Cyr, 2008). The indicators and the variables that have been chosen by this paper followed the cultural framework as indicated by Marcus and Gould (2000), Singh et al. (2003) and Wurtz (2005) are shown in Table 4.1. These indicators are chosen based on their suitability to the nature and characteristics of blogs.

Hofstede's Cultural Dimension	Level	
Individualism versus Collectivism	**Individualism**	**Collectivism**
	Personal award Disclosure of personal information	Traditional or group image Restricted personal information
Uncertainty Avoidance	**High**	**Low**
	Simple layout Statement of disclaimer or copyright	Complex layout
Hall's Cultural Dimension	**Level**	
High Context versus Low Context	**High Context**	**Low Context**
	Extensive use of image and multimedia (Implicit communication)	Less use of image and multimedia (Explicit communication)

Table 4.1   Indicators and variables of weblogs design components

To economise research efforts, sampling is done by limiting observations to a manageable subset of units that is a statistical representation of the population or universe of interest. Sampling in this

research would be conducted at two levels; sampling of blogs and sampling of countries. The sample will constitute groups of weblogs where each group consists of 51 blogs. For the purpose of sampling, firstly the main blogger will be chosen at random. Secondly, the other 50 bloggers have been identified through the main blogger's blogrolls' link. Only bloggers with friend's link of 50 or more are considered to ascertain the strength of influence the main blogger have in determining design preferences of those within a network. Two types of blogs are identified in this research; the global blogs and the local blogs. These two types of blogs are chosen for the purpose of this research to show that should national culture determines the design preferences of blogs, network of blogs irrespective of whether it is local or global blogs within a country would have similar design preferences. For the purpose of this research, the following blogs in the Table 4.2 are considered as sample networks since they are among network of blogs with huge number of users in countries that are selected in this study.

Countries	Global Blog	Local Blog
China		Sina.com
South Korea		Naver.com
Japan	Blogspot.com	Ameba.jp
Germany		Blog.de
France		Blog.fr
Sweden		Blogg.se

Table 4.2   Sample global and local blogs

In addition, sampling purposes are also applied to countries of interests. Hofstede's cultural dimensions divided countries into six clusters: the Anglo cluster, Nordic cluster, German cluster, Latin cluster, Asian cluster and Japan based on the assumption cultural values and cultural differences between countries have existed for a long time. Therefore, these cultural values and differences are stable and they are based on cultural commonalities and similar histories (Robbins and Stylianou, 2002). The identified clusters have been explored by researchers to study cultural differences and thus the choice of countries that represent the clusters and regions are shown in Table 4.3. Each country is chosen based on the significant differences in terms of each cultural dimension.

Cultural Dimension	China	South Korea	Japan	Germany	France	Sweden
Individualism versus Collectivism	Collectivism	Collectivism	Moderate	Individualism	Individualism	Individualism
Uncertainty Avoidance	Low	High	High	High	High	Low
High Context versus Low Context	High	High	High	Low	Low	Low

Table 4.3   Sample countries

Data used in this research are qualitatite data that consists of words and observation. Analysis and interpretation are required to bring meaning and understanding by using a systematic approach in the form of a coding system. This research used categorical data; values and observations that are obtained are sorted according to category. This type of data is not continuous and finding relationship through the use of mean is meaningless. This is because the numerical values attached to the different categories are arbitrary and the mean will depend on how many members each category has (Field, 2005). Therefore, categorical data used frequency analysis to measure the number of items that fall into each combination of categories and Pearson Chi Square to establish whether is there a relationship between two categorical variables. The use of categorical data and Pearson Chi Square do

not require the test of normality since they are not continuous. Data reduction in this research will use descriptive statistics in the forms of frequencies and percentages. However, descriptive statistics give limited and inconclusive information to draw enough evidence that could aid policy and practive. Therefore, inferential statistical tests will be used to enhance better understanding and provide better evidence to derive to a better conclusion. Since the hypothesis testing is to find differences among groups, statistical testing adopted will be the tests that examine differences i.e. association and comparative inferential statistics which are Pearson Chi Square and Multivariate Analysis of Variance (MANOVA).

5   RESEARCH FINDINGS AND ANALYSES

The findings are based on the observations on blogs from six countries (both local and global blogs). The tabulated results are taken from an observation for a period of six months January 2011 until June 2011. The observation on the blogs from the United States is done on its capacity as the control group. Thus, blogs observation is conducted on the global blogs alone (blogspot.com). The results are presented according three stages of analyses. They are:

(a)   country analysis;
(b)   cultural analysis; and
(c)   statistical analysis.

The country analysis are findings that based on observations on blogs from six countries. The observation on blogs from the other six countries was done on both global and local blogs groups and the results are shown as in Table 5.1. A comparison analysis between both the gobal and local bloggers was then conducted on each country observations based on design preferrences observed on cultural indicators. Results from country analysis showed that design preferrences between the global and local bloggers in each country under observation have significant difference in terms of design features and choices. The different design preferrences between two categories of bloggers in one country that experienced similar culture indicated that blogs design preferrences are not influenced by national culture. The findings are strengthened by cultural analysis that showed cultural mapping of design markers do not conformed to the cultural dimensions identified to national cultural traits. Table 5.2 showed the mapping of cultural indicators on blog design features are done according to Hofstede's two cultural dimensions which are individualism versus collectivism and uncertainty avoidance; together with Hall's cultural dimension i.e. high context versus low context. The cultural analysis that have conducted on blogs from countries in the sample observations showed that cultural markers that have been indicated to represent certain cultural aspects on web do not coincided with the national culture theory with regard web pages indicators on culture. To answer the research question and to validate research findings in the country and cultural analyses above, a statistical analysis will be conducted to ascertain that findings are validated internally and to see whether hypotheses are statistically significant.

6   CONCLUSION

As this is a research in progress, the next step therefore is to conduct further analysis using statistics that would provide the necessary related evidence that could confirm the validity of the hypotheses of the research under progress. The aim of the paper is to survey indications of the level of cultural traits on design elements of personal blogs among various countries of different culture. So far, the findings and the analysis that have been conducted showed that national cultural traits are not the dominant influential factor in determining the design preferences of bloggers in countries under observation. Finding the type of influence that determine blog users design preferences will enrich the discussions and debates on the influential forces affecting design of blogs in online network.

Design Components	Indicators	Variables	China		South Korea		Japan		Germany		France		Sweden	
			Global (%)	Local (%)	Global (%)	Local (%)	Global (%)	Local (%)	Global (%)	Local (%)	Global (%)	Local (%)	Global (%)	Local (%)
Author's Profile	Personal Information	No picture	67	4	28	4	32	0	2	0	55	22	29	37
		Own picture	25	59	35	25	29	51	78	49	14	37	71	49
		Others	8	37	37	71	39	49	20	51	31	41	0	14
		Full name	53	29	45	2	21	4	80	35	53	47	63	12
		Nickname	6	28	35	98	65	96	18	18	31	25	16	51
		Anonymous	42	43	20	0	14	0	2	47	16	28	21	37
		Age	6	2	2	0	0	37	0	100	0	84	0	6
		No gender	59	100	33	100	35	31	22	100	27	16	53	94
		Male	31	0	35	0	29	6	0	0	33	35	31	0
		Female	10	0	32	0	36	63	78	0	40	49	16	6
Visual Design	Image	No image	12	33	14	2	8	14	0	18	2	41	33	12
		Personal	14	47	70	98	53	78	100	72	98	51	51	88
		People or landscape	74	20	16	0	23	8	0	10	0	8	16	0
		Tradition or group	0	0	0	0	16	0	0	0	0	0	0	0
		Leader	0	0	0	0	0	0	0	0	0	0	0	0
		No image	12	33	14	2	8	14	0	18	2	41	33	12
		1 – 3 images	23	20	12	10	10	39	0	43	0	12	27	6
		4 – 6 images	25	25	20	6	19	12	2	12	14	21	22	4
		7 – 10 images	20	10	14	6	4	12	0	10	17	8	6	8
		> 10 images	20	12	40	76	59	23	98	17	67	18	12	70
	Colour	Plain	100	94	88	88	90	65	45	78	94	76	92	75
		Colourful or flowery	0	6	12	12	10	35	55	22	6	24	8	25
Information Design	Layout	Simple (1 or 2)	82	92	94	80	94	74	69	33	100	53	94	100
		Complex (3 or 4)	18	8	6	20	6	26	31	67	0	47	6	0
	Award	Yes	0	0	0	22	0	0	28	0	4	0	2	0
	Disclaimer	Yes	0	0	0	0	0	0	73	0	43	12	0	2
	Multimedia	No multimedia	76	49	63	82	72	84	43	39	37	67	53	71
		Video	24	8	33	12	26	12	57	61	61	23	45	25
		Audio	0	33	0	6	2	4	0	0	0	2	0	2
		Both	0	10	4	0	0	0	0	0	2	8	2	2
		No multimedia	76	49	63	82	72	84	43	39	37	67	53	71
		1 – 3 multimedia	14	27	25	14	12	12	57	41	43	17	39	21
		4 – 6	7	20	10	4	16	4	0	12	14	8	4	8
		7 – 10	3	2	2	0	0	0	0	4	6	2	4	0
		➢ 10	0	2	0	0	0	0	0	4	0	6	0	0

Table 5.1   Frequency analysis on blogs observation according to countries

Hofstede'sCultural Dimension	China		South Korea		Japan		Germany		France		Sweden		US
Individualism versus Collectivism	**Collectivism**		**Collectivism**		**Moderate**		**Individualism**		**Individualism**		**Individualism**		**Individualism**
Collectivism	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**
Group Image	0%	0%	0%	0%	16%	0%							
Restricted personal information No picture / Others Nickname / Anonymous No mentioning of gender	67% 48% 59%	4% 71% 100%	28% 55% 33%	4% 98% 100%	32% 79% 35%	0% 96% 31%							
Individualism	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**
Personal Award							28%	0%	4%	0%	2%	0%	
Disclosure of personal information Own picture Real name Gender information							78% 80% 78%	49% 35% 0%	14% 53% 73%	37% 47% 84%	71% 63% 47%	49% 12% 6%	
Uncertainty Avoidance	**Low**		**High**		**High**		**High**		**High**		**Low**		**Low**
High Uncertainty Avoidance	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**
Simple layout			94%	80%	94%	74%	69%	33%	100%	53%			
Statement of disclaimer or copyright			0%	0%	0%	0%	73%	0%	43%	12%			
Low Uncertainty Avoidance	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**
Complex layout	18%	8%									6%	0%	
Hall's Cultural Dimension	**China**		**South Korea**		**Japan**		**Germany**		**France**		**Sweden**		**US**
High Context versus Low Context	**High**		**High**		**High**		**Low**		**Low**		**Low**		**Low**
High Context	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**
Extensive use of multimedia Extensive display of image	24% 88%	51% 67%	37% 86%	18% 98%	28% 92%	16% 86%							
Low Context	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**	**L**	**G**
No multimedia No image							43% 0%	39% 18%	37% 2%	67% 41%	53% 33%	71% 12%	

Table 5.2   Mapping of national cultural markers on blogs design features

References

Ali, M. and Brooks, L. (2009). A situated cultural approach for cross-cultural studies in IS. Journal of Entreprise Information Management, 22(5):548-563.

Bagozzi R. P, Dholakia U M and Pearo L K. 2007. 'Antecedents and consequences of online social interactions'. *Media Psychology*, 9: 77-114.

Bonhard, P. and Sasse, M.R. 2006. 'Knowing me, knowing you – Using profiles and social networking to improve recommender systems'. *BT Technology Journal*, 24(3): 84-98.

Cyr, D. 2008. 'Modeling Web Site Design Across Cultures: Relationships to Trust, Satisfaction, and E-Loyalty'. *Journal of Management Information Systems*, 24(4): 47–72.

Cyr D and Trevor-Smith H.2004.'Localization of web design: An empirical comparison of German, Japanese and United States web sites characteristics'. Journal of the American Society for Information Science and Technology, 55(13): 1199-1208.

Davison, R. and Martinsons, M. 2003. 'Guest Editorial, Cultural Issues and IT Management: Past and Present', IEEE Transactions On Engineering Management, 50(1): 3-7.

De Angeli A.2009.'Cultural variations in virtual spaces design'. Artifical Intelligence and Society, 24(3): 213-223.

Deaux K, Reid A, Mizrahi K and Ethier K A.1995.'Parameters of social identity'. Journal of Personality and Social Psychology, 68(2): 280-291.

Dholakia U.M., Bagozzi R.P. and Pearo, L.K.2004. 'A social influence model of consumer participation in network and small group-based virtual communities'. International Journal of Research in Marketing, 21: 241-263.

Drezner, D. W. and Farrell, H.(2004). The power and politics of blogs. American Political Science Association retrieved on 20 December 2009 from www. cs.duke.edu.

Field A. 2005. 'Discovering statistics using SPSS' 2nd edition, Sage Publications Inc.

Fink, D. and Laupase, R. (2000). Perceptions of web site design characteristics: A Malaysian/Australian comparison. Internet Research: Electronic Networking Applications and Policy, 10(1): 44-55.

Garrett, J.J. 2003. 'The Elements of User Experience: User-Centered Design for the Web'. New Riders.Indianapolis, IN.

Gould, E. W., Zakaria, N., & Yusof, S. A. M. 2000. 'Applying culture to website design: a comparison of Malaysian and US websites'. Proceedings of the 18th annual ACM international conference on Computer documentation: technology & teamwork. SESSION: Globalization.

Hall E T.2000. 'Context and meaning'. In Samovar L A and Porter R E (eds). Intercultural Communication: A reader, 9th edition, Wadsworth Publishing Co, Belmont CA.

Hofstede G. 2001.'Culture's consequences: comparing values, behaviors, institutions and organizations across nations'. Sage Publications Inc, California.

Karahanna, E., Evaristo, J.R. and Strite, M. (2005). Levels of culture and individual behaviour: An integrative perspective. Journal of Global Information Management, 13(2): 1 – 20.

Khaslavsky, J. Integrating culture into interface design.In *Proc. CHI 98 conference summary on Human factorsin computing systems*, ACM Press (1998), 365-366.

Krippendorf. K. 2004. 'Content Analysis: An introduction to its methodology'. 2nd ed, Sage Publications Inc.

Kryssanov V.V, Tamaki H. And Kitamura S.2001.' Understanding design fundamentals: How synthesis and analysis drive creativity, resulting in emergence'. Artificial Intelligence in Engineering, 15: 329 – 342.

Marcus, A. And Gould, E. W.. :Cultural dimensions and global web design: What? So what? Now What?. Proceedings of the sixth conference on human factors and the web, Texas. Retrieved December 19, 2008, from http://www.amanda.com/resources/hfweb2000/AMA_CultDim.pdf (2001)

Marcus, A. and Gould, E.W. 2000. 'Crosscurrents: Cultural dimensions and global web user-interface design'. *Interactions*, 7(4): 32-46.

Marcus A and Baumgartner V J.2004.'A practical set of culture dimensionsfor global user-interface development'. Lecture Notes in Computer Science, 3101: 252-261.

Marcus, A.2006.'Culture: Wanted? Alive or dead?' Journal of Usability Studies, 2(1): 62-63.

Moran R T and Stripp W G.1991. Successful International Business Negotiations. Gulf Publishing Company, Houston, TX.

Myers M D and Tan F B.2002.'Beyond models of national culture in information system research'. Journal of Global Information Management, 10(1): 24-32.

Poster, M. 2008. 'Global media and culture'. *New Literary History*, 39: 685-703.

Rettberg J W.2008.'Blogging: Digital media and society series'. Polity Press, Cambridge UK.

Robbins, S.S. and Stylianou, A.C. 2002. 'A study of cultural differences in global corporate web sites'. *Journal of Computer Information Systems*,Winter: 3-9.

Schein, E. H. (1985). Organizational Culture and Leadership: A Dynamic View.: Jossey-Bass, San Francisco, CA

Schneider S.1997.'Interpretation in organizations: Sensemaking and strategy'. European Journal of Work and Organizational Strategy, 6(1): 93-101.

Shore, B. and Venkatachalam, A.R. 1995. 'The role of culture in systems analysis and design'. *Journal of Global Information Management*, 3(3): 5-14.

Singh N and Baack D W.2004.'Studying cultural values on the web: A cross-cultural study of U.S. and Mexican websites'. Journal of Computer Mediation Communication, 9(4): 181-188.

Sun, H. 2001.'Building a culturally-competent corporate Web site: An explanatory study of cultural markers in multilingual Web design'. SIGDOC '01, October 21–24, 95–102.

Park, M.H. 2004.'A Study of a Cultural Relativism in Web Interface Design'. International Journal of Diversity in Organisations, Communities and Nations*, 5(2): 157-162.

Callahan E.2005.'Cultural similarities and differences in the design of university web sites'. Journal of Computer Mediated Communication, 11(1): 239-273.

Cook J. and Finlayson, M..:The impact of cultural diversity on web site design. Advanced Management Journal, 70(3):15-23 (2005)

Singh N, Baack D, Kundu S K and Hurtado C.2008.'U.S. Hispanic consumer e-commerce preferences: Expectations and attitude toward web content'. Journal of Electronic Commerce Research, 9(2): 162-175.

Tong M C A and Robertson K.2008.'Political and cultural representations in Malaysian websites'. International Journal of Design, 2(2): 67-79.

 Abrams D and Brown R.1989.'Self-consciousness and social identity:Self-regulation as a group member'. Social Psychology Quarterly, 52(4): 311-318.

Ashforth B E and Mael F.1989. 'Social identity theory and the organization'.The Academy of Management Review, 14(1): 20-39.

Brewer M B.1991.'The social self: On being the same and different at the same time'. Personality and Social Psychology Buletin, 17: 475-482.

Mehra A, Kilduff M and Brass D J.1998.'At the margins: A distinctiveness approach to the social identity and social networks of underrepresented groups'. The Academy of Management Journal, 41(4): 441-452.

Jackson J W and Smith E R.1999.'Conceptualizing social identity: A new framework and evidence for the impact of different dimensions'. Personality and Social Psychology Buletin, 25: 120-135.

Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D. and Wetherell, M.S. 1987. 'Rediscovering the social group: A self-categorization theory'. Oxford, Blackwell.

Tajfel H.1978.'Differentiation between social groups'. Academic Press, London.

Tajfel H .1982.'Social psychology of intergroup relations'. Annual Review Psychology, 33:1-39.

Hogg, M. A., & Williams, K. D. (2000). From I to we: Social identity and the collective self. Group Dynamics: Theory, Research, and Practice, 4, 81–97.

Lea M, Spears R and de Groot D. 2001. ' Knowing me, knowing you: Anonymity effects on social identity process within groups'. Personality and Social Psychology Buletin, 27(5): 526-537.

Postmes T, Spears R and Lea M. 2000. :The formation of group norms in computer-mediated communication. Journal of Human Communication Research, 26(3):341-371.

Postmes T, Spears R and Lea M. 1998. ' Deindividuation and anti-normative behavior: A meta-analysis. Psychological Buletin, 123: 238-259.

Postmes T, Spears R, Sakhel K and de Groot, D.2001.'Social influence in computer-mediated

communication: The effects of anonymity on group behavior'. Personality and Social Psychology Bulletin, 27:1243-1254.

Ellemers N, Spears R and Doosje B.2002.'Self and social identity'. Annual Review of Psychology, 53: 161-186.

Green S.2004.'Social identity theory and party identification'. Social Science Quarterly, 85(1): 136-152.

Michinov N, Michinov E and Toczek-Capelle M. 2004. 'Social identity, group process, and performance in synchronous computer-mediated communication. Group Dynamics: Theory , Research and Practice, 8(1): 27-39.

Reicher S.2004.'The context of social identity: Domination, resistance and change'. Political Psychology, 25(6):921-945.

Hogg M A, Abrams D, Otten S and Hinkle S.2004.'The social identity perspective: Intergroup relations, self-conception and small groups'. Small Group Research, 35: 246-275.

Hogg M A, Sherman D K, Dierselhuis J, Maitner A T and Moffit G.2007.'Uncertainty, entitavity and group identification'. Journal of Experimental Social Psychology, 43(1): 135-142.

Simon, S.J. 2001. 'The impact of culture and gender on websites: An empirical study'. Databases for Advances in Information Systems, 32(1): 18-37.

Singh, N. and Matsuo, H. 2002.'Measuring cultural adaptation on the web: a study of US and

Singh, N., Baack, D.W., Pereira, A. and Baack, D. 2008. 'Culturally customizing websites for US Hispanic online customers'. Journal of Advertising Research, June: 224-233.

Singh, N., Zhao, H. And Hu, X. 2003. Cultural adaptation on the web: A study of American companies' domestic and Chinese websites. International Journal of Global Information Management, 11(3): 63-80.

Stemler S and Bebell D.1998.'An empirical approach to understanding and analyzing the mission statements of selected eduacational institutions'. Paper presented at the annual meeting of the New England and Educational Research Organizations, Portsmouth New Hampshire.

Stemler S.2001.'An overview of content analysis'. Practical Assessment, Research and Evaluation, 7(17).

Straub, D., Loch, K., Evaristo, R., Karahanna, E. And Strite, M. (2002). Toward a theory-based measurement of culture. Journal of Global Information Management, 10(1), 13-23.

Wurtz E. 2006. 'Intercultural communication on web sites: A cross-cultural analysis of web sites from high-context cultures and low-context cultures'. Journal of Computer-Mediated Communication, 11: 274-299.