Global Survey on Culture Differences and Context in Using E-Government Systems: A Pilot Study

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Abstract. The purpose of this paper is to discuss some preliminary results, which were collected from a global survey on cultural differences and context in using e-government website services. The primary objective of this research is to make suggestions that could contribute to a more effective and usable e-Government website in the specific countries taking into account the cultural context of the society it is serving. This s important and can be used to assist governments to ensure their website address the needs of specific contexts of their users. The focus of this research will be on the selected populations with the emphasis on culture context as a cultural dimension. In order to measure the cultural profile of the selected populations, a questionnaire was applied. Ten participants were identified through purposive sampling and divided into two groups (5) in low-context culture and (5) in high-context culture. Six tables represent three different sections for both groups. The three sections are preferences general websites, preferences in government web sites and culture characteristics in society. The results contradicted the literature in three tables and the most significant results are that high-context participants changed their preferences when using government websites although they preferred high-context styles for general Internet usage which was not the case for government websites. Here they preferred more low-context styles. Another result was that high-context participants had characteristics of which were more representative of low-context cultures and vice versa.

Keywords: global study, culture context, culture, e-government.

1 Introduction

This paper will mainly focus on results from a pilot study which was done on a global scale to determine the influence of culture and context on e-government services. Design in the context of the Web is not only about visual things – aesthetics, layout, colour – but about a dynamic interaction between users (citizens) and an organization (government) providing a service. Therefore it is important to understand the interaction-based design and factors related to e-government and how different cultures all over the world engage with these or what their perceptions are about this service. Its relevance to the scientific community is therefore also important as developers of websites need to be aware of these preferences of different types of users in their specific contexts.

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Citizens want more than privacy and security protection they want the same efficiency, convenience and service orientation that they experienced in their dealings with private sector companies.

Difference in culture, as was found by Hofstede [1] shows there are significant differences between nations, which can lead to differences between national groups within the same organization. Hofstede [1] specifically indicates that there are five cultural dimensions which are power distance index (PDI) which indicates that power is distributed unequally, individualism (IDV) where everyone looks after themselves and their immediate families, masculinity (MAS) where the focus is the role distribution between males and females, uncertainty avoidance index (UAI) which shows how comfortable or uncomfortable members are with unstructured situations and finally long-term orientation (LTO) which focus on how people achieve their goals in society.

According to a few authors [2], [3] and [4] culture focuses on three concepts: context, time and space. These views on culture can have the effect that those groups can either understand knowledge differently or have significant barriers to participating in the sharing of knowledge. Culture is so embedded into people's lives that our ignorance of it usually leads to failures. Therefore systems designers within organizations should have as much knowledge as possible about culture to escape mistakes made due to a lack of cultural awareness and understanding.

This can be regarded as a pilot study of the global survey. The survey is in the form of an online questionnaire. It examines user preferences and perceptions in terms of the culture-context dimension. The dimension itself is analysed in terms of web site design and cultural characteristics within a society. This is a qualitative research study to elicit the experiences of different types of users in different types of context as to their preferences of using e-government websites. Purposive sampling was applied to select a representative sample.

A background discussion regarding the culture-context dimension and its role within society and web design will be conducted. Following this will be a brief discussion on how the preliminary results will be analysed.

2 Background Information

The background discussion on the culture-context dimension will be based on three perspectives:

- Definition
- Country classification
- Web design features.

2.1 Definition

"A high-context (HC) communication or message is one in which most of the information is already in the person, while very little is in the coded, explicitly transmitted part of the message. A low-context (LC) communication is just the opposite; i.e., the mass of the information is vested in the explicit code" [5].

Depending on whether meaning comes from the setting or from the words that are being exchanged in a communication, cultures can be categorised as either being a

high- or low-context society [6]. There is a dramatic distinction between cultures as to how much of the context or environment is important and meaningful within a communication event.

In a low-context culture, the surrounding context has no influence on the communication event. It is the message itself that provides all the meaning. In a high-context society, cultures will assign great value and meaning too many of the stimuli that surround an explicit message [7] so verbal messages on their own have very little meaning: it is the surrounding context that will provide meaning to the verbal messages.

2.2 Country Classification

There is a general idea as to which countries are classified as high-context cultures and which are classified as low-context cultures. Low-context countries primarily consist of countries from North America and much of Western Europe. High-context cultures primarily consist of countries from Asia, Africa, South America and much of the Middle East [8; 9].

Figure 1 displays the hierarchy of countries according to the two types of cultures. The countries start off at a high-context level and, as they move down the levels, they tend to be of a lower context nature. The figure contains the hierarchies of two different sources. There are slight differences but both generally tend to agree on the cultural-context levels of the various countries. Generally, high-context countries and people would include the Maoris of New Zealand, Native Americans and Chinese,

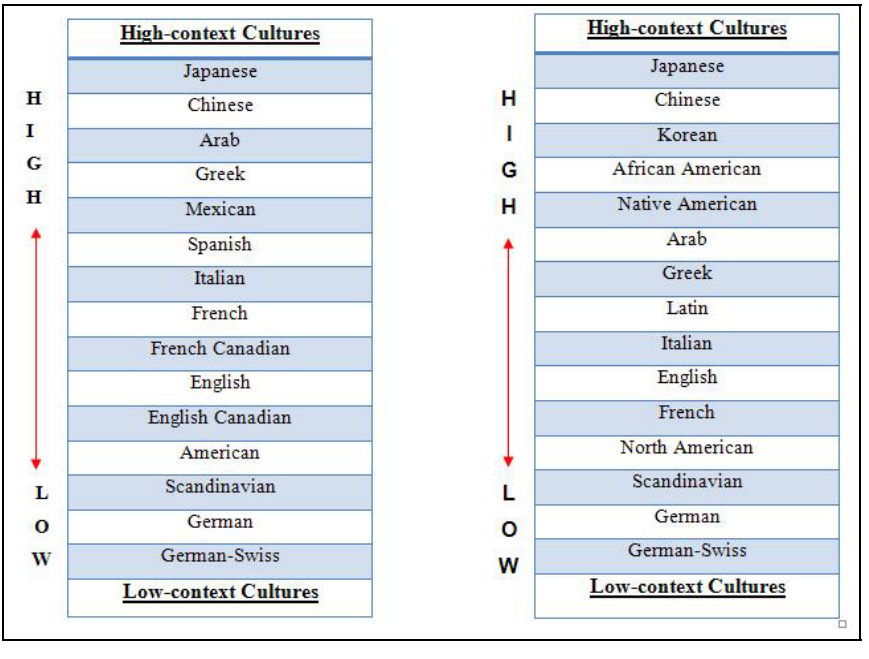

Fig. 1. High- and low-context nationalities scale according to culture (Left diagram [7]; Right diagram [5])

Chilean, Iraqi and Japanese people. On the other hand, low-context countries include the United States, Norway, Austria, Germany, Canada, England and Sweden.

Figure 2 displays the communication pattern that is followed by high- and low-context cultures. A message that is being transmitted needs to be explicitly explained in low-context cultures. The higher the cultural-context of a culture, the more implicit the transmitted message becomes.

In terms of Figure 2, Switzerland is the lowest cultural-context culture on the high- and low-context continuum. Thus, the transmitted message here will be in its most explicit form. On the other hand, Japan is the highest cultural-context culture on the high- and low-context continuum. Hence, the transmitted message there will be in its most implicit form.

If countries from Africa were to be positioned on the "Communication patterns" diagram, they would reside somewhere within the red circle. This conclusion was reached by an investigation of the relevant literature.

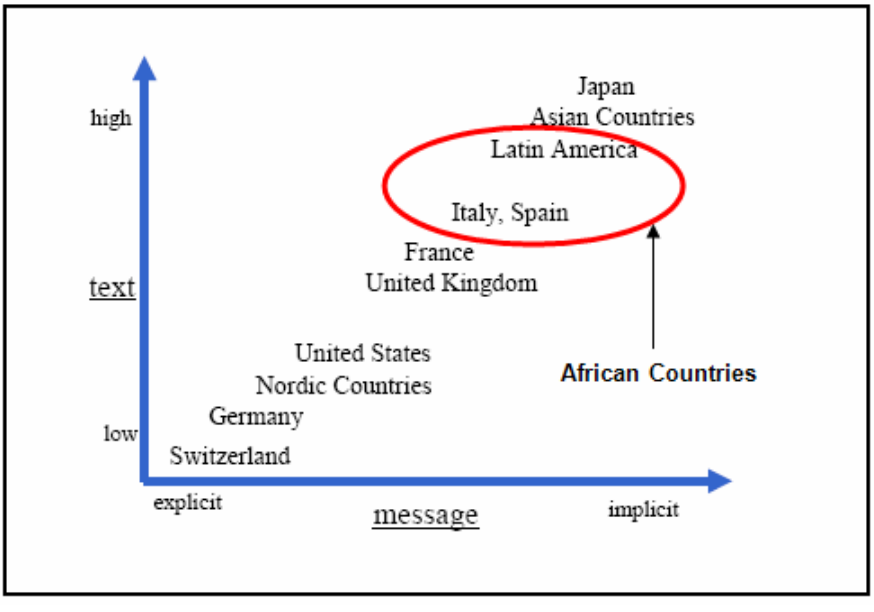

Fig. 2. Communication patterns [10]

Knowledge of where different countries are pitched is important but it is also relevant to highlight web design features when analysing culture-context dimensions.

2.3 Web Design Features of Different Context Countries

By analysing the culture-context dimension in terms of web design, patterns can be identified. These patterns can then be associated with features on a web site, which are preferred in high- or low-context societies respectively. Some of these web design features are summarised in Table 1.

Table 1. High- and Low-context features [11; 12]

High-context features	Low-context features
Polychronic aspects of time	Monochronic aspects of time
Multiple use of images and/or banners	Less use of images and/or banners
Multiple use of links (external links promote a collectivist nature, working together)	Less use of links
Use of Flash features	Little use of Flash features
Being polite and indirect	Being direct and even confrontational
Create a friendly relationship with the customer (soft-sell approach)	Sales orientation (hard-sell approach)
Use of aesthetics to elicit emotion (harmony, beauty, nature, art, designs)	Direct communication (focus on rank and prestige, superlatives, terms and conditions)

One can better comprehend the difference in web design preferences by examining a web site in terms of five parameters. These parameters are displayed in Table 2. The use of each parameter is assessed by means of a high- or low-context culture.

Table 2. Observations of the HC and LC tendencies in terms of parameters [13]

Parameter	Tendency in high-context cultures	Tendency in low-context cultures
Animation	High use of animation, especially in connection with images of moving people	Lower use of animation, mainly reserved for highlighting effects e.g. of text
Promotion of values	Images promote values characteristic of collectivistic societies	Images promote values characteristic of individualistic societies
Individuals separate or together with the product	Featured images depict products and merchandise in use by individuals	Images portray lifestyles of individuals, with or without a direct emphasis on the use of products or merchandise
Level of transparency	Links promote an exploratory approach to navigation on the website; process oriented	Clear and redundant cues in connection with navigation on a website; goal oriented
Linear vs. parallel navigation on the website	Many sidebars and menus, opening of new browser windows for each new page	Few sidebars and menus, constant opening in same browser window

There are a number of values and characteristics that are useful to consider when designing software products for both low- and high-context cultures. The values are withdrawn from the society itself and are determined by the way a culture perceives and understands life.

3 Methodology

As the primary objective of this research is to make suggestions that could contribute to a more effective and usable e-Government website in the specific countries taking into account the cultural context of the society it is serving. The focus has been on the selected populations with the emphasis on culture context as a cultural dimension. In order to measure the cultural profile of the selected populations, a questionnaire focussing on the following aspects has been used:

- the culture-related behaviour of citizens in general Internet usage
- the culture-related behaviour of citizens when using their countries government website
- the general culture-related behaviour of (not related to ICT in any way).

Thus this is a qualitative research study with the aim to elicit experiences from different cultures around the world to determine their cultural context of the use of their e-government websites.

A phased approach has been followed to gather information for the purpose of this research as the study has the potential to be expanded into a very large study.

Phase I

- Identification of participating countries
- Distribution of online survey to sample populations
- Analysis of survey data
- Preparation of survey report
- Presentation of findings

Phase II

- Expert review of participating countries' sites by design experts
- Analysis of expert reviews
- Preparation of report on expert review
- Data triangulation (which may require interviews with citizens from the different countries)
- Presentation of findings

For the purpose of this paper only data from phase one was analysed and discussed.

A sample is a representative part of the targeted population that is methodologically selected to participate in a study [14]. To address the purpose of this study purposive sampling has been applied when sampling the various participants.

According to Babbie [15] purposive sampling involves the selection of the units to be observed on the basis of your own judgment about which ones will be the most useful or representative. Purposive sampling is also called judgmental sampling. Participants were therefore selected to fully represent both high- and low-cultural

context countries through purposive sampling. For this paper two groups were selected, one representing the low-context culture and included the countries: Germany, Finland, France and Scotland and the other group (low-context cultures) consisted of South Africa, India, China and Zimbabwe.

A total of ten participants' results have been analysed. Five participants have been selected from each type of culture, low- and high-context respectively. The questionnaire has four main questions (or parts):

- Question 1: Biographical information.
- Question 2: Culture-related behaviour in Internet usage. In this section, the focus is on the participants' preferences' when using any type of web site except government ones.
- Question 3: Culture-related behaviour: government websites. In this section, the focus is on the participants' preferences when using government web sites in particular.
- Question 4: General culture-related behaviour. The focus in this section is on the participants' cultural behaviour within their society.

Most of the items in sections 2 and 3 of the questionnaire focus on particular web design aspects. These items are therefore grouped according to the task or feature that they examine. However, a number of items are not incorporated into any groups. Rather, they test specific aspects of web design, as well as the preferences of the users when using the web sites. For the purpose of this paper, only items that belong to a particular group will be discussed. Consequently, individual items are excluded in this analysis. As for the items in section 4, they all are integrated into a particular group, so they are all analysed. In terms of section 1, the biographical information section, the users' country and home language is specified.

4 Method of Analysis

The methodology in which the analysis was conducted is based on four steps:

1. The participant's country will first be determined in terms of culture context: high or low.
2. Each item of the survey is examined for each participant according to their culture context. Once it is known, if the country is a high- or low-context culture, the answer to each item is already anticipated. The majority of answers should lean towards one side of the scale (either "Agree" and "Strongly Agree" or "Disagree" and "Strongly Disagree").
3. The results of each item for each particular user are now recorded. The next step is to measure the items within their corresponding groups. Most of the groups will have at least three items within them. In some of the cases there are only two items in a group.
4. Based on the overall assessment of the items that represent a group, the tendency must be classified: high- or low-context. Additionally, the level of

support for this tendency must also be provided. The culture-context tendency of a group can be moderately or strongly supported.

It has to be noted that in the case where there was no answer for a particular item it was not included into the assessment of a group (if it belonged to a particular group). For a tendency to be strongly supported it is required that it meets at least 2/3 of the requirements for the culture-context group it represents. For example, in the case where a participant from a high-context culture is being assessed, at least two out of three items in a group should lean towards the high-context scale. Moderate support is used when a participant has 1/3 of the requirements but for the other two items the answer "Not Sure" was selected.

5 Participants in Low-Context Countries

The results from the five participants representing low-context countries will now be presented. The countries represented include:

- Germany (corresponds to row 4 of the results in Excel)
- Finland (corresponds to row 14 of the results in Excel)
- Finland (corresponds to row 16 of the results in Excel)
- France (corresponds to row 21 of the results in Excel)
- Scotland (corresponds to row 21 of the results in Excel)

Each participant has results included in three different tables. For each of those tables the specific user is identified by the number in the "User "column. This number corresponds to the same person in these tables. The results from the low-context participants will be discussed in the following order:

- Section 2 results (preferences in general web sites)
- Section 3 results (preferences in government web sites)
- Section 4 results (culture characteristics in society)

5.1 Section 2 Results

Table 3. Results on section 2 of survey for the low-context participants

User	Country	Home language	Cognitive groups	Culture-context tendencies	Level of support
1	Germany	German	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Strong

Table 3. (*Continued*)

			Amount of multimedia content and colour use	Low context	Strong
2	Finland	Finnish	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	Low context	Strong
3	Finland	Finnish	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Combination of high and low context	
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	Low context	Strong
4	France	English and French	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Combination of high and low context	
			Better understanding of content (multimedia or text)	Low context	Moderate
			Amount of multimedia content and colour use	Low context	Strong
5	Scotland	English	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Moderate
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	Low context	Strong

Overall, the results indicate that the low-context participants did prefer low-context features for their general Internet usage (this includes all types of web sites except for the government ones). The key points from Table 3 are the following:

- Participants 1, 2 and 5 demonstrated preferences towards low-context styles for three out of the four cognitive groups that were assessed.
- Participants 3 and 4 demonstrated preferences towards low-context styles for two out of the four cognitive groups that were assessed. For the third cognitive group, they preferred a combination of low- and high-context styles (finding information).
- All participants demonstrated preferences towards high-context styles for one group that was assessed (accomplishing objectives).
- Participants 2 and 3 were both from Finland. They had a different preference for one of the cognitive groups that was assessed (finding information). The one preferred a low-context style while the other preferred a combination of low- and high context styles.

5.2 Section 3 Results

Table 4. Results on section 3 of survey for the low-context participants

User	Country	Home language	Cognitive groups	Culture-context tendencies	Level of support
1	Germany	German	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	Low context	Strong
2	Finland	Finnish	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Moderate
			Amount of multimedia content and colour use	Low context	Strong
3	Finland	Finnish	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	Low context	Strong

Table 4. (*Continued*)

4	France	English and French	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Moderate
			Amount of multimedia content and colour use	Low context	Strong
5	Scotland	English	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Moderate
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	Low context	Strong

Overall, the results indicate that the low-context participants did prefer more low-context features on government web sites than they did for their general Internet usage. The key points from Table 4 are the following:

- Participants 1, 3, 4 and 5 demonstrated preferences towards low-context styles for three out of the four cognitive groups that were assessed.
- Participant 2 demonstrated preferences towards low-context styles for all of the four cognitive groups that were assessed.
- Participants 1, 3, 4 and 5 demonstrated preferences towards high-context styles for one group that was assessed (accomplishing objectives).
- Participants 2 and 3 were both from Finland. They had a different preference for one of the cognitive groups that was assessed (accomplishing objectives). The one preferred a low-context style while the other preferred a high-context style.

5.3 Section 4 Results

Table 5. Results on section 4 of survey for the low-context participants

User	Country	Home language	Cognitive groups	Culture-context tendencies	Level of support
1	Germany	German	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	High context (long term)	Strong

Table 5. (*Continued*)

			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	Low context	Moderate
2	Finland	Finnish	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	High context (long term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	High context	Moderate
3	Finland	Finnish	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	Low context (short term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	Low context	Strong
4	France	English and French	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	High context (long term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	High context	Strong
5	Scotland	English	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	Low context (short term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	High context (collectivism)	Moderate
			Communication (high-context vs. low context)	High context	Strong

The results from Table 5 contradict the literature which is really sustainable if one considers the number of participants who took part in this study. Overall, the results indicate that the low-context participants were more high-context in terms of their cultural characteristics within their society. The key points from Table 5 are the following:

- Participants 2, 4 and 5 demonstrated preferences towards low-context styles for one out of the four cognitive groups that were assessed.
- Participant 1demonstrated preferences towards low-context styles for two out of the four cognitive groups that were assessed.
- Participant 3 demonstrated preferences towards low-context styles for three out of the four cognitive groups that were assessed.
- Participants 2 and 3 were both from Finland. They had a different preference for two of the cognitive groups that was assessed (orientation and communication). The one preferred a low-context style for both groups while the other preferred high-context styles respectively.

6 Participants in High-Context Countries

The results from the five participants representing high-context countries will now be presented. The countries represented include:

- South Africa (corresponds to row 6 of the results in Excel)
- India (corresponds to row 5 of the results in Excel)
- China (corresponds to row 9 of the results in Excel)
- Zimbabwe (corresponds to row 11 of the results in Excel)
- South Africa (corresponds to row 7 of the results in Excel)

Each participant has results included in three different tables. For each of those tables the specific user is identified by the number in the "User "column. This number corresponds to the same person in these tables. The results from the high-context participants will be discussed in the following order:

- Section 2 results (preferences in general web sites)
- Section 3 results (preferences in government web sites)
- Section 4 results (culture characteristics in society)

6.1 Section 2 Results

Table 6. Results on section 2 of survey for the high-context participants

User	Country	Home language	Cognitive groups	Culture-context tendencies	Level of support
6	South Africa	Afrikaans	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	High context	Strong
			Better understanding of content (multimedia or text)	High context	Strong

Table 6. (*Continued*)

			Amount of multimedia content and colour use	Low context	Strong
7	India	Tamil	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	High context	Strong
			Better understanding of content (multimedia or text)	Low context	Strong
			Amount of multimedia content and colour use	High context	Strong
8	China	Chinese	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	Low context	Moderate
			Better understanding of content (multimedia or text)	High context	Moderate
			Amount of multimedia content and colour use	Low context	Strong
9	Zimbabwe	Ndebele	Accomplishing objectives (e.g. tasks)	Combination of high and low context	
			Finding information	Combination of high and low context	
			Better understanding of content (multimedia or text)	Combination of high and low context	
			Amount of multimedia content and colour use	High context	Strong
10	South Africa	Afrikaans	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	Low context	Moderate
			Amount of multimedia content and colour use	Combination of high and low context	

Overall, the results indicate that the high-context participants did have a slight preference towards more high-context features for their general Internet usage (this includes all types of web sites except for the government ones). The key points from Table 6 are the following:

- Participant 6 demonstrated preferences towards high-context styles for three out of the four cognitive groups that were assessed.
- Participant 7 demonstrated preferences towards high-context styles for two out of the four cognitive groups that were assessed.
- Participant 8 demonstrated preferences towards high-context styles for one of the four cognitive groups that were assessed.
- Participants 9 and 10 in general demonstrated preferences towards a combination of high-and low-context context styles for the four cognitive groups that were assessed.
- Participants 6 and 10 were both from South Africa. They had different preferences for three of the four cognitive groups that was assessed (finding information, better understanding of content and amount of multimedia content and colour use). Participant 6 preferred high-context styles for finding information and better understanding content. Participant 10 had opposite views, preferring low-context styles respectively. In terms of the cognitive group focusing on multimedia and colour use, participant 6 preferred low-context styles, while participant 10 preferred a combination of high- and low-context styles.

6.2 Section 3 Results

Table 7. Results on section 3 of survey for the high-context participants

User	Country	Home language	Cognitive groups	Culture-context tendencies	Level of support
6	South Africa	Afrikaans	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	High context	Moderate
			Amount of multimedia content and colour use	Low context	Moderate
7	India	Tamil	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	Combination of high and low context	
			Better understanding of content (multimedia or text)	Low context	Moderate

Table 7. (*Continued*)

			Amount of multimedia content and colour use	Combination of high and low context	
8	China	Chinese	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	Low context	Strong
			Better understanding of content (multimedia or text)	High context	Moderate
			Amount of multimedia content and colour use	Combination of high and low context	
9	Zimbabwe	Ndebele	Accomplishing objectives (e.g. tasks)	Low context	Strong
			Finding information	Combination of high and low context	
			Better understanding of content (multimedia or text)	Combination of high and low context	
			Amount of multimedia content and colour use	Low context	Strong
10	South Africa	Afrikaans	Accomplishing objectives (e.g. tasks)	High context	Strong
			Finding information	Low context	Moderate
			Better understanding of content (multimedia or text)	High context	Moderate
			Amount of multimedia content and colour use	Low context	Moderate

Overall, the results indicate that the high-context participants did prefer more low-context features on government web sites than they did for their general Internet usage. This contradicts the literature. The key points from Table 7 are the following:

- Participant 7 and 9 demonstrated preferences towards high-context styles for none of the four cognitive groups that were assessed. However, they each preferred a combination of high- and low-context styles for two of the groups respectively.
- Participants 6 and 8 demonstrated preferences towards high-context styles for one out of the four cognitive groups that were assessed.
- Participant 10 demonstrated preferences towards high-context styles for two out of the four cognitive groups that were assessed.

- Participants 6 and 10 were both from South Africa. They had different preferences for only one of the four cognitive groups that were assessed (accomplishing objectives). Participant 6 preferred a low-context style, while participant 10 preferred a high-context style.

6.3 Section 4 Results

Table 8. Results on section 4 of survey for the high-context participants

User	Country	Home language	Cognitive groups	Culture-context tendencies	Level of support
6	South Africa	Afrikaans	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	High context (long term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	High context	Strong
7	India	Tamil	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	Low context (short term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	High context (collectivism)	Strong
			Communication (high-context vs. low context)	Low context	Strong
8	China	Chinese	Time (polychronic vs. monochronic)	Low context (monochronic)	Strong
			Orientation (long term vs. short term)	Combination of high and low context	
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	High context	Strong

Table 8. (*Continued*)

9	Zimbabwe	Ndebele	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	High context (long term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	Low context	Moderate
10	South Africa	Afrikaans	Time (polychronic vs. monochronic)	High context (polychronic)	Strong
			Orientation (long term vs. short term)	Low context (short term)	Strong
			Role in society and predominant values (individualism vs. collectivism)	Low context (individualism)	Strong
			Communication (high-context vs. low context)	Low context	Strong

There is a contradiction of the literature once again for this section of results. Overall, the results indicate that the high-context participants did have a slight preference towards more low-context cultural characteristics within their society. The key points from Table 8 are the following:

- Participant 6 demonstrated preferences towards high-context styles for three out of the four cognitive groups that were assessed.
- Participants 7 and 9 demonstrated preferences towards high-context styles for two out of the four cognitive groups that were assessed.
- Participants 8 and 10 demonstrated preferences towards high-context styles for one out of the four cognitive groups that were assessed.
- Participants 6 and 10 were both from South Africa. They had different preferences for two of the four cognitive groups that were assessed (orientation and communication). Participant 6 preferred high-context styles for both, while participant 10 preferred low-context styles respectively.

7 Conclusion

A total of six tables (Tables 3 – 8) were used to display some of the results from the pilot study. Tables 3, 4 and 5 show the preferences of the low-context participants and

Tables 6, 7 and 8 those of the high-context participants. From the six tables, there were three that contradicted the literature:

- Table 3 focused on the low-context participants preferences' when using any type of web site except government ones. The results did not contradict the literature.
- Table 4 focused on the low-context participants preferences' when using government web sites. The results did not contradict the literature.
- Table 5 focused on the low-context participants' cultural behaviour within their society. The results did contradict the literature.
- Table 6 focused on the high-context participants preferences' when using any type of web site except government ones. The results did not contradict the literature.
- Table 7 focused on the high-context participants preferences' when using government web sites. The results did contradict the literature.
- Table 8 focused on the high-context participants' cultural behaviour within their society. The results did contradict the literature.

There are two interesting facts which arise from the initial results. The first is that the high-context participants changed their preferences when using government web sites. Although they preferred high-context styles for their general Internet usage, this was not the case for government web sites. In this environment they preferred more low-context styles. The second is that in terms of the participants cultural behaviours the opposite results of what was expected occurred. The high-context participants had characteristics which were more representative of low-context cultures and vice versa.

The results may have been impacted by the fact that most of the participants had IT related occupations. The other majority occupation was from the education sector. High-context styles tend to contradict the commonly accepted guidelines and principles for web design. These guidelines relate more to low-context preferences. Therefore, the high-context participants may have been influenced by these types of guidelines, thus, preferring low-context styles. In other words, the low-context styles might rather be what are expected of the high-context users to apply or expect on web sites and not actually what they would prefer. This can be observed from the results of the participants from India and China, two countries classified as one of the most high-context. They had preferences towards low-context styles in a number of cases which one would not expect. These results are pertinent for website developers to consider when designing the specific type of country's e-government websites.

In order to get more accurate results, the use of inferential statistics is necessary. This will assist in determining statistically and practically significant differences between the participants from the two types of cultures by making use of single sample t-tests, Pairwise t-tests and effect sizes. However, a much larger sample of participants will be required for each of the cultures: high- and low-context. Another factor is that the participants do not have a high-level of understanding regarding web design practices. As mentioned previously, this may impact the results of high-context participants, who are required to follow web design principles that are better suited to the preferences of low-context individuals.

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