The Relationship Communication Structure - Uncertainty Avoidance Reflected in Romanian Websites Design

Doru Pleşa\textsuperscript{1*}, Rodica Pamfilie\textsuperscript{2} and Irina Maiorescu\textsuperscript{3}
\textsuperscript{1,2,3} Academy of Economic Studies, Bucharest, Romania

Abstract
As today’s society heads towards digitalization, the virtual environment gains a growing importance. Shaping the e-environment in accordance to the real environment in order to favour the activities and processes going to take place there requires a thorough design. However, cultural attributes of reflected inherently by design play a core part in how the information displayed on websites is perceived. The present paper aims to bring a perspective about transposing the proper communication structure into the website design, from the cultural point of view and from genders point of view, as it resulted from a research of Romanian students from Bucharest Academy of Economic Studies.

Keywords: cultural differences, website design, communication structure, gender cognitive differences, consumer

JEL Classification: M16

Introduction
One of the most popular theories in what regards the differences among cultures belongs to Edward Hall, his analysis leading him towards the conclusion that cultures differ one from another mostly by the way they structure their communication and how they perceive time. Referring to communication, he classified the cultures in High Context cultures and Low Context cultures (Hall and Hall, 1990).

Another approach of this subject brings into discussion the cultural dimensions resulted from an extensive research of thinking patterns performed by Geert Hofstede. The five dimensions which Hofstede considered important to be taken into account when analyzing to a certain culture are the following: Power-distance, Individualism, Masculinity, Uncertainty Avoidance, Long Term Orientation (Hofstede, 1997).

A research performed on students enrolled in the bachelor programs of Bucharest Academy of Economic Studies in 2010 and 2011 showed a common line among these two theories, the structure of communication being connected with Uncertainty Avoidance and Power Distance dimensions.

* Corresponding author, Doru Pleşea - pleseadoru@gmail.com
1. Communication structure

Referring to the particularities of the communication structure specific to nations across the world, Hall considers that in High Context cultures the body language, proximity and symbols are very important, the message being fully understood through the whole context the transmitter uses (Hall and Hall, 1990). In Low Context cultures, the sender of the message relies mostly on words, used as clearly as possible, without hidden meanings.

The indirect nature of High-Context communication is expressed in website design through images, symbols and animations – much of it being focused on people and their behaviour, while Low-Context websites contain more text information and less images and motion (Würtz, 2005).

In the same time, High Context cultures prefer taking small pieces of information at a time, while Low Context cultures would rather take the whole amount of the required information at once, efficiently.

It is acknowledged that the two genders show differences in their neurological structure of the brains, the cortex being specialized differently for some of the cognitive processes.

Biologically speaking, human brain is divided into two hemispheres, each of them having well defined functions. Research and experiments have proven that the left hemisphere deals mostly with the cognitive processes related to logical and sequential analysis and communication, while the right hemisphere is specialized in spatial perception and holistic approach.

Also, it has been found out that the two hemispheres have a rather integrated manner of functioning in women’s brain and a more specialized one in men’s brain. Thus, men process the information sequential, piece by piece, while women often show a holistic, integrated approach of the information perceived.

Hence, men would likely appreciate that the needed information to be placed in one spot, concentrated. Women can deal better with multiple sources of information, as its integration into a unitary message or idea it’s easier for them.

Men will therefore rather look for the fundamental elements, for the pattern or scheme, while women tend to detail the message (McCormick and Whittington, 2000).

2. Uncertainty avoidance

Hofstede considers that cultures accept uncertainty and unpredictable events in different ways. Thus, cultures have created various rituals for approaching the situations they are not familiar with.

High uncertainty avoidance means that ambiguous situations are disliked and, generally, clear structures in the organizations, institutions and relationships will keep unpredictable events under control, as what is different and unknown may be regarded as a threat.

A website designed for such cultures should be simple, with clear and structured information. Often, predictability of the content following a link is expected to be met in the structure of the website.
Low uncertainty avoidance cultures tend to be less openly anxious, unexpected events being regarded as curious or interesting. The structure of information in websites can show more complexity, without limiting strictly the content. Links to pages that open outside the website may be used as they prove to offer useful and interesting information.

3. Romanian cultural dimensions

Romanian culture was not included in the analysis of both Hall and Hofstede, but it was subject to extrapolation based on cultural affinities to other nations. Referring to communication structure, Pleșea et al. (2010) deduced, based on a compared analysis of five Latin countries websites design, that Romanian people are a slightly High Context culture.

Due to the fact that the research of Hofstede was deployed during the years the communist regime was ruling Romania, the real information for his research was not available. Later on, another research performed in Romania by Interact (2005), following a similar methodology, proved however that some indexes were wrong estimated by Hofstede. In table no. 1 are shown the estimated values of Hofstede indexes and also the calculated ones by Interact in two different surveys.

<table>
<thead>
<tr>
<th>Country</th>
<th>Power Distance</th>
<th>Individualism</th>
<th>Masculinity</th>
<th>Uncertainty Avoidance</th>
<th>Long term orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROMANIA – 1st survey INTERACT 2005</td>
<td>29</td>
<td>49</td>
<td>39</td>
<td>61</td>
<td>42</td>
</tr>
<tr>
<td>ROMANIA – 2nd survey INTERACT 2005</td>
<td>33</td>
<td>49</td>
<td>39</td>
<td>61</td>
<td>42</td>
</tr>
<tr>
<td>ROMANIA – Geert Hofstede estimation</td>
<td>90</td>
<td>30</td>
<td>42</td>
<td>90</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Luca, 2005

4. Objectives and methods of investigation

The present paper aims to identify the relationship between communication structure and Uncertainty Avoidance expressed in the design of an e-learning website created for Romanian students.

Similarly, the paper seeks to evaluate whether Romanian are prone to a very high Uncertainty Avoidance behaviour (as estimated by Hofstede) or to a more moderate one (as resulted from Interact surveys in 2005); also it seeks to find out if communication structure is different for the two genders, regardless of the common culture students share – Romanian.
The study is based on the analysis of the responses obtained from an online survey conducted on students enrolled in the various years of university bachelor programs from Bucharest Academy of Economic Studies in 2010 and 2011.

The sample size has been calculated in order to fulfill the criteria of significance. The sample resulted in a minimum of 375 respondents at a confidence level of 95% according to formula (1):

\[ n = \frac{N \times Z^2 \times p(1-p)}{d^2 \times (N - 1) + (Z^2 \times 0.25)} \]

where,

- \( n \) – sample size
- \( N \) – total population (in Bucharest Academy of Economic Studies – the number of students enrolled in bachelor regular programs in 2010–2011 academic year, \( N = 14910 \) students)
- \( d \) – margin of accuracy (5%, or 0.05)
- \( Z \) – 1.96 for a confidence level of 95%
- \( p = 0.5 \)

In order to determine whether there is a certain preference of students for the structure of the information communicated through website, two different versions of the same e-learning website, presenting courses (figure no. 1 and 2) were shown to the students. They were asked to choose the preferred version.

Both the name of the training provider, the logos and information used are fictional; the website does not exist in reality as it was especially designed for the research purpose.

There were 439 valid responses, fulfilling thus the criteria of significance of the sample.

5. Results of the research

Romania is a country with a very high index of Uncertainty Avoidance according to Hofstede and a quite moderate one according to the surveys of Interact. The reflection of high Uncertainty Avoidance in websites design is expressed through clear and simple structures and not so much information.

Analyzing the answers received from the students, it can be noticed a clear preference of both genders for the vertical and simpler structure of information, as 73.46% of respondents indicated this version of website.
This high percentage of responses indicating a visible inclination for the vertical structure of information confirms the rather High Context communication structure Romanian have, as this kind of design offers small amounts of information at a time and not so much text.

Also, this proves the not so high Uncertainty Avoidance behaviour. Both versions of websites have clear and structured information, but the horizontal structure one offers more detailed text about the courses content.

Though the programs of study suggested in these two websites belong to Business and Economics zone, some of them are not comprised in the curricula of the Bucharest Academy of Economic Studies and, therefore, not familiar to the respondents. If Romanian students have been characterized by a very high Uncertainty Avoidance behaviour, it would have been expected that the version with horizontal structure of information to be more preferred.

However, comparing the distribution of answers respective to genders, it was remarked a slightly increased preference for the vertical structure of the feminine respondents; the horizontal structure of information version of website was preferred in a greater amount by masculine respondents.
This finding can be explained by the neurological structure of brain different to the two genders. As the horizontal structure version contains more concentrated information about each course, men preferred in a larger percentage than women this type of communicating the information. The vertical structure contains less information about each course (as a matter of fact there are displayed as links only the names of the courses, without any additional information in the page about their content) and it is preferred in a larger amount by women, as their exploring behaviour is more accentuated.

Still, the vertical structure is more preferred, meaning that culture prevails over gender differences in perceiving and communicating the information.

6. Limitations of the research

Bucharest Academy of Economic Studies is the largest economic university in Romania, its graduated students applying their skills in all areas of business activity. However, the results of the present study – though significant for the group of age between 19 – 26 years and for Romania, have to pondered carefully when extending them to other cultures and other age categories.
Conclusions

Nowadays, companies rely more and more on virtual environment in their efforts to communicate with consumers. The website of the company is the place where the products and services are presented, promoted and also the place that often gives identity to the organization. It is vital that the website is not just a collection of text, images, interactive features, animation and sounds, but a place carefully designed to fulfil clients’ requirements and expectations.

Culture is essential for understanding the patterns of thinking and communication specific to both organization and its clients. The structure of communication is part of the cultural heritage of the individual and so is the behaviour resulting from Uncertainty Avoidance. Romanian culture is characterized by a quite oriented High Context communication structure and also by a medium - high Uncertainty Avoidance attitude. These two dimensions have a similar reflection in websites’ design as the structure of information shows it.

Though consumers show differences in the way information is best transmitted and perceived because of the specific gender’s cognitive structures, culture proves to have even a stronger influence on their behaviour.

References


