Influence of national culture on website characteristics in international business

Elżbieta Wąsowicz-Zaborek
Warsaw School of Economics, Poland, ewasowi@sgh.waw.pl

Abstract
Cultural diversity is an important factor influencing the effectiveness of communication tools, including websites, on international markets. The aim of the article is to make an inventory of the current scholarly knowledge on cultural differences and what they recommend for adapting websites to different cultural factors on foreign markets. The review of the literature presented in the article indicates a variety of approaches by different authors and varying scopes of their work. This article proffers its own guidelines for website design, which, in contrast to previous studies, usually focused on selected areas, offers a comprehensive view dedicated to cultural clusters identified within the framework of the GLOBE project. A broad overview of models of cultural dimensions, presented in the first part of the article, was the starting point for classifying existing studies on adapting websites to cultural factors. It also informed a description of differences in the behavior, preferences and attitudes of consumers residing in different parts of the world, which may affect their actions on the Internet.

Keywords: cross-cultural differences; national cultures dimensions; websites design; cultural adaptation of websites

JEL codes: M16, M31
INTRODUCTION

Ongoing internationalization and globalization of the economy affect the growth of international expansion of enterprises. The presence on the international market, often in several countries, forces constant observation of the economic, political, legal, technological, demographical and socio-cultural factors in the countries of expansion. Different conditions in the environment frequently propel firms to employ diversified tactics to create and manufacture new products, as well as organize sales and communicate with the market.

A term that is associated with internationalization of companies is "distance". It is interpreted not only as a geo-distance, but also more broadly in terms of factors differentiating the home market from expansion markets. One classification of the distance dimensions was carried out by Ghemawat in its CAGE model (Ghemawat, 2001). The name of model is an acronym of the English words that refer to the dimensions of distance: cultural, administrative, geographic, economic. The research on distance as well as attempts at its modeling and measuring was also conducted by Johanson and Vahlne (1977), Barkema et al. (1996), Dow and Karunaratana (2006), Brewer (2007), Palmero et al. (2013), Zhang (2014), Przybylska (2016), Niedzielska (2014 a, b), Daszkiewicz (2016), Danik (2014) and Rozkwitalska (2011).

Technological progress, in particular in communication and transport, combined with the liberalization of economies and political and administrative integration, has a significant impact on reducing gaps between countries. Friedman sees the sources of distance minimization in the development of the Internet, changes in the configuration of value chains (outsourcing, offshoring, supply-chaining) and new forms of workflow management (Friedman 2006).

It would seem that enterprises, when making decisions on expansion into foreign markets, often choose those with the smallest distance, which means that they are economically, administratively and culturally similar and geographically close. It should be stressed that in making decisions about internationalization, it is not so much the geographical distance that matters as the mental distance. The level of perceived differences results from uncertainty, ignorance and lack of experience on foreign markets, not from the actual situation. The research on mental distance was conducted by Sousa and Bradley (2005), Niedzielska (2014b), and Wąsowska, et al. (2016).

Out of all dimensions of distance in the CAGE model, the cultural one is the greatest challenge for doing business internationally. In the case of administrative, geographical and economic distance, the ease of acquiring knowledge is much greater. Cultural factors and differences are much more difficult to observed and the process of recognizing and understanding them is longer. The socio-cultural environment has a very broad impact on the activities of companies. This applies to industries offering goods on both the consumer and institutional markets. These factors have a significant influence on buying behavior and should be considered in selection and development of marketing tools (Duliniec 2007).

Conducting international business using modern Internet technologies also requires consideration of the variability of the cultural environment. Despite the fact that the Internet is treated as a global medium, its users differ in social and cultural terms depending on continents, countries, regions and often even within the same countries. The use of strategies based on the standardization of activities in the belief of cultural prox-
imity and lack of distance, can lead to adverse effects. This lack of cultural sensitivity can also lead to an inappropriate implementation of Internet tools.

THE CONCEPT OF CULTURE

International research has consequently suggested that culture is reflected in marketing communications (e.g., Tse, Belk and Zhou, 1989, Albers-Miller and Gelb, 1996, House et al., 2004, Dudziak, 2012). Moreover, the more a marketing message is adapted to the local culture, the more effective it will be. (Luna, Peracchio and de Juan, 2002; Singh, Zhao, Hu, 2003; Baack and Singh, 2007).

Culture is an interdisciplinary concept, analyzed by representatives of many disciplines of science, including philosophy, archaeology, anthropology, ethnography, sociology, psychology, cultural studies, history, economy and management (cf. Włodarczyk 2003 and Hańderek 2015). Since Hofstede’s first study on the relationship between national and organizational culture in the 1960s, the interest in this topic has stayed high (Danik and Duliniec 2014).

According to A. Kroeber (1989), culture is "a customary way of acting, feeling and thinking chosen by society from an infinite number and variety of possible ways of being". Hofstede defines culture as “the collective programming of minds that distinguishes members of one group or category from members of another group or category" (Hofstede 2007, p. 17). When it comes to communicating culture, he uses the onion analogy, where its component layers are (from the middle out):

− values - invisible at first glance, often hidden - determine behavior and decisions,
− rituals - activities perceived by the community as necessary in official and private situations, such as meals, greetings, celebrations, religious ceremonies,
− heroes - characters, mythical, historical and present, important for the community,
− symbols - words, gestures, images, objects, colors - can be unique and only understandable to members of a given community/population, but also common to a wider group, even to the whole of humanity.

External layers (rituals, heroes and symbols) are interpreted in the same way and are known to members of the community. Although they are visible to the outside observer, they may not be understood by him (Hofstede, 2000, pp. 43-44).

Institutional components of culture include social and religious structures, intellectual and artistic expressions and political life (Duliniec 2007).

Many academics have been involved in investigating national cultures and determining their dimensions. A summary of what the author considers the most influential theories is presented in Table 1.

The theories listed in the table are based on the belief that there are differences between national cultures. Both in the literature (Friedman, 2006) and in everyday opinions, one can notice more and more frequent voices about the ongoing unification of cultures and the disappearance of contrasts. In many places around the world it is possible to observe how some cultural patterns spread out, norms and preferences permeate each other, and behavior becomes more universal. This phenomenon is called cultural diffusion. This is due to a strong spread of a given culture and its elements being taken over by others. Diffusion is driven by factors such as globalization, access to international and global media, spread of fashion (mu-
sic, pop culture, art, clothing), development of international tourism and a growing knowledge of English (Krawuczka, 2014; Duliniec, 2007). Apart from diffusion, the phenomenon of convergence may also influence the unification of cultures. It consists in the development of similar cultural patterns as a result of similar conditions, e.g. climatic, geographical or even legal. For example, common environmental regulations imposed in the European Union countries may have an impact on shaping similar environmental behaviors and attitudes.

Table 1. Cultural dimensions models

<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Cultural dimensions</th>
</tr>
</thead>
</table>
| 1. | Hall (1959) | context (high / low)  
attitude to time (monochronism / polychronism)  
personal / social, public space |
| 2. | Kluckhohn i Strodtbeck (1961) | attitude to the environment,  
attitude to time,  
the essence of human nature,  
attitude to action,  
stressing responsibility,  
understanding of space |
| 3. | Hofstede, Bond (1983; 1988) | power distance (large / small)  
collectivism - individualism  
masculinity - femininity  
uncertainty avoidance (strong / weak)  
orientation (long / short-term) |
hierarchical (formal) – egalitarian (informal)  
time and scheduling  
expressive - reserved |
individualism - communitarianism  
specific - diffuse  
reserved - emotional  
achievement - ascription  
sequential time - synchronous time  
internal direction - external direction |
(Hofstede, Dimensionalizing Cultures: The Hofstede Model in Context, 2011)(2004) | power distance  
uncertainty avoidance  
humane orientation  
collectivism i: (institutional)  
collectivism ii: (in-group)  
assertiveness  
gender egalitarianism  
results (or task) orientation  
future orientation: performance orientation |
attitude to human activity and results  
perception of the universe  
place and role of an individual in society  
way of organizing the society |

Source: Adapted from Danik, Duliniec (2014), Hills (2002), Simpson (2012).
Duliniec (2007) notes that, from the perspective of an international enterprise, cultural factors, in contrast to economic and technological ones, have been the slowest to unify. Ethnocentrism (belief in the superiority of one's own culture, one's own products, one's own experiences) and nationalism may be limiting factors in the process of cultural unification. Religious considerations also continue to have a very strong impact. Bartosik-Purgat (2011) notes that the homogenization of culture takes place only in superficial layers, but deeper values of a national culture remain largely unchanged.

**CONCEPTS OF CULTURAL DIMENSIONS**

The concepts presented in Table 2 allow for operationalization and better understanding of the nature of differences in national cultures and classification of countries into categories according to the dimensions of cultures. The indicated taxonomies do not constitute separate sets, but often overlap, permeate and supplement each other. Therefore, researchers usually choose to work with only one of the classifications or combine non-contradictory elements from distinct taxonomies into their own system. The most widely recognized and used in research is the classification by Hofstede. In Google Scholar, the keyword "Hofstede dimensions" gives about 100,000 entries.

Various forms of the concept of cultural dimensions have been employed in research on cultural differences affecting the use of media and Internet tools, which will be discussed in section 4. Each model of cultural dimensions from Table 1 is briefly presented next.

**Cultural dimensions – Hall**

Hall (1978), analyzing the approach to time, introduced the concept of monochronicity to describe the cultures whose members are characterized by linearity. At any given moment, they focus only on one task and only after its completion they move on to the next one. Such an approach is often represented by residents of northern countries, e.g. Scandinavians. In contrast, there is a tendency for polychronism, or performing many tasks simultaneously and to switch smoothly between them, often without completing the current task (e.g. Spain and Italy). Hall also dealt with the issue of space by defining distances (spaces) which are accepted in different situations. In some countries, smaller physical distances are often accepted (e.g. Japan, India), while in others people need more physical space to feel comfortable (US, Western Europe). This is reflected in gestures of greeting, tendency to hug and cuddle, but also in the need to have larger houses, cars, offices, etc. These differences may be caused by demographic factors, e.g. population size and generally available living space. The need for greater distance is also related to a tendency to establish boundaries of one's own territory and a greater concern for property and security. In countries with lower territoriality (i.e. lower need for space), due to smaller attachment to property, the feeling of threat from theft is lower. This may be driven by historical facts - in countries with a higher territoriality index, wars have often been fought in the past, often changing state borders.

Based on many distinct cultural dimensions or factors Hall (1959) developed what could be considered the meta-dimension of context. Accordingly, he divided national cultures into high and low context groups.
Table 2. High and low-context cultures

<table>
<thead>
<tr>
<th>Cultural factors/dimensions</th>
<th>Low-context cultures</th>
<th>High-context cultures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential values and attitudes</td>
<td>Independence and a sense of influence on one's own fate, openness over conflicts, egalitarianism, challenge towards power,</td>
<td>Social position and status are very important, hierarchy and respect for authorities and superiors, harmony and consensus, different gender roles</td>
</tr>
<tr>
<td>Negotiations, discussions and business practices</td>
<td>Focus on quick and efficient handling of matters, social connections of little importance, achievements are rewarded and mistakes are tolerated, rivalry is accepted</td>
<td>Long-lasting, celebrated negotiations, parties need to get to know each other, high value of personal contacts, seniority and experience is rewarded, competition is not appreciated, responsibility for mistakes is assumed</td>
</tr>
<tr>
<td>Communication</td>
<td>Messages are clear, precise and unambiguous, usually leaving little margin for interpretation</td>
<td>Messages are full of ambiguities; the form of expression is courteous, but cautious, the main message is usually hidden</td>
</tr>
<tr>
<td>Approach to time</td>
<td>Linearity: one thing at a time, important punctuality</td>
<td>“There is time for everything”, low punctuality and high flexibility</td>
</tr>
<tr>
<td>Approach to cooperation</td>
<td>Preference to work individually, individualism</td>
<td>Preference to cooperate, collectivism</td>
</tr>
<tr>
<td>Meals</td>
<td>Meals are eaten quickly and eating is often considered a necessity.</td>
<td>Meals are a social event and an opportunity to get to know each other better.</td>
</tr>
<tr>
<td>Meeting people and business partners</td>
<td>Relationships are established quickly, they are superficial but to-the-point, less formalization</td>
<td>Ritualization of interpersonal relations, getting to know one’s business partner takes a long time, but it is much deeper, though formalized Close familiarity with a partner facilitates cooperation, many issues become obvious and don’t need explanations</td>
</tr>
<tr>
<td>Arrangements and agreements</td>
<td>Binding contracts and agreements are made in writing, oral agreements are usually not sufficient</td>
<td>Agreements are oral rather than written, and a written contract does not necessarily mean that negotiations are closed and that there is a willingness to implement the negotiated arrangement.</td>
</tr>
<tr>
<td>Personal space</td>
<td>Usually longer distance from other people, informal handshakes,</td>
<td>Short distance to others, touching, hugging, bowing, handshaking and hugging,</td>
</tr>
<tr>
<td>Attitude towards the environment</td>
<td>Insignificant environment and context, ignoring non-verbal behavior.</td>
<td>Importance attached to environment, context of the situation, allusions or veiled messages, and gestures</td>
</tr>
<tr>
<td>Attitude towards age</td>
<td>Youth is valued</td>
<td>Respect for the elderly</td>
</tr>
<tr>
<td>Countries</td>
<td>USA, Western Europe, Northern Europe</td>
<td>Japan, China, Arab countries</td>
</tr>
</tbody>
</table>


Cultural dimensions – Kulckhohn and Strodtbeck

One of cultural dimensions investigated by Kulckhohn and Strodtbeck is the attitude towards the environment. In some societies (e.g. cultures originating from Judeo-
Christianism) there is a belief that man dominates over nature and all his activities aim at its ordering. The opposite attitude is typical for the peoples of the Far East, who give the superior role to nature and destiny. Human life is to a large extent subordinate to external factors and one can have little influence on one’s fate. A middle-of-the-road attitude shows a desire for harmony with nature (Scandinavian countries).

Unlike Hall, who distinguished between polychronicty and monochronicty, Kluckhohn and Strodtheck tend to focus on the past, present or future. These attitudes are best illustrated by the planning approach and the tendency to punctuality and scheduling. In Western cultures (concentration on the present or future) a lot of attention is usually paid to time and punctuality. The future is not known, so you can influence it. The representatives of societies that are focused on the past are inhabitants of Central Africa, where decisions are made with consideration of previous experiences, often those of others, which are part of tradition.

The approach to human nature has identified cultures in which people are assumed to be bad and dishonest, and those in which people are considered good and sincere. In the first case, the tendency for autocratic governance prevails. The second is dominated by a more democratic approach. One can also distinguish mixed cultures, where it is assumed that people can be both good and bad and they can change their attitudes under the influence of other people or situations. The criterion concerning the attitude to action allowed to distinguish cultures focused on action, existence and development (Hills, 2002). Communities focused on action and achievements find external motivation in their surroundings, its members are willing to work hard to achieve their goals and expect an appreciation of others (Anglo-Saxon cultures).

For groups focused on existence, it is most important to realize one’s own pleasures. The opinion of others is of little importance, a hedonistic attitude prevails (Latin America, some African countries). Many actions are taken under the influence of emotions. The focus on development and control is manifested in a particular focus on pragmatism and rational action. The main motive is personal development and self-fulfillment.

In social relations, attitude to responsibility manifests itself as a hierarchical, collectivist or individualistic approach. Hierarchical cultures (e.g. France) are characterized by an importance attributed to a place and position in society, group or community. Decisions should be taken by those at the top of the hierarchy. In a collective approach, the most important thing is cooperation and harmony within the group. All members of the group shall be involved in decision-making. Collectivism is a common attitude in developing countries such as Guatemala, Colombia, Pakistan and Ecuador. Individualistic cultures (e.g. Anglo-Saxon, Scandinavian) are characterized by the belief in the importance of the individual, whose traits and achievements are the most important.

Cultural dimensions – Hofstede

Hofstede conducting a behavior study at the IBM corporation initially identified four dimensions of culture (Hofstede, 1983):

- individualism - collectivism
- power distance
- uncertainty avoidance
- masculinity - femininity
As a result of further research (Hofstede and Bond, 1988), another dimension was added: long-term orientation - short-term orientation.

Hofstede states that in individualistic societies, individuals are given great freedom to decide about themselves, but at the same time they should take care of their needs by themselves. The ties between individuals are relatively loose. In individualistic cultures, management by objectives is effective. The employee is left with the freedom choosing the way of attaining the objective, as well as the freedom to divide time between work and rest, and the result is measured in relation to the achieved outcome. Individualistic cultures can be found in the USA, Scandinavian countries, the Netherlands, but also in Italy.

In collectivist countries, the ability to cooperate and collaborate in a group is considered most desirable. Collectivist cultures are represented by Latin America, Korea, Thailand, Malaysia, China, Central and Eastern European countries, Portugal and Greece.

Power distance is interpreted by Hofstede (2000) as the extent to which less powerful members of a culture accept inequality and hierarchy in society and organizations. One external manifestation of a high level of power distance is respect shown to supervisors and those performing higher-level functions, as well as the importance attached to university degrees, titles and positions. Examples of countries classified as long power distance cultures are Malaysia, Slovakia, Guatemala, Panama, the Philippines, Russia, Arab countries, India, China, and Poland. Countries with a short power distance include New Zealand, Australia, Scandinavia and Israel.

Uncertainty avoidance should not be confused with risk avoidance (Hofstede, 2011), uncertainty is vague and defies calculation, while risk is quantifiable and, thus, can be considered more consciously. In Hofstede’s framework, uncertainty avoidance is defined as a society’s tolerance for ambiguity; when uncertainty avoidance is high, a culture relies heavily on stiff codes of behavior, laws and guidelines. Scoring high on this dimension are Greece, Portugal, Guatemala, Uruguay, Belgium, Russia, Poland and Japan. Countries such as Singapore, Jamaica, Denmark, Sweden, Hong Kong, Vietnam, China, Ireland and the UK have low uncertainty avoidance indices.

The dimension of masculinity and femininity in national cultures is related to the division of societies into those where a clear distinction is identified and adopted between gender roles and those where both women and men can perform the same roles. In highly male-dominated cultures, communities are characterized by high competition, assertiveness, materialism, striving for power and ambition (Ireland, Great Britain, South Africa, the USA, Australia, Slovakia, Hungary, Austria, Italy, Germany, Poland, Japan, China, the Philippines). In female-dominated cultures, there is a tendency to equalize the roles of both genders. Both women and men can perform similar professional and social functions (Sweden, Norway, Denmark, Portugal, Spain, France, Latvia, Slovenia, Lithuania, Estonia, Thailand, South Korea, Vietnam) (Hofstede, 2011).

Short- and long-term orientation indicate differences in perceptions of the future and in the way of defining personal goals and benefits in future periods. In cultures with a long-term orientation, planning, adaptation and prevention are very important characteristics. They are manifested, among other things, in savings, rational resource management, but also in persistence, systematism and pragmatism (Japan, South Korea, China, Ukraine, Germany, Estonia, Belgium, Lithuania, Russia). Cultures focused on the present and the past attach importance to tradition, patriotism and tend to be more...
fundamentalist. Rapid results and gratifications are expected (Ghana, Egypt, Nigeria, Colombia, Iran, Morocco, Zimbabwe, Venezuela, Georgia, Finland, Israel and Poland).

**Cultural dimensions – Gesteland**

Analysis of Gesteland’s cultural dimensions brings to mind many associations with the previously discussed high and low-context cultures. For example, partner cultures, just like high context cultures, are relationship-oriented. Great importance is attached to the way that relations are maintained. In contrast, pro-transactional cultures are oriented at achieving predefined goals. In negotiations, representatives of this type of culture in order to maximize their outcome can behave in that way that may be perceived as cold, self-confident or even aggressive.

In non-ceremonial cultures, hierarchy, conventions and rituals are of little importance. In contrast, casual behavior and lack of respect for hierarchies can be considered insulting in ceremonial cultures.

Expressiveness and restraint can describe both verbal and non-verbal ways of communication. Restrained cultures are characterized by a greater distance, avoidance of eye contact, sparse gesticulation and usually a quieter way of speaking. The expressiveness often found in southern countries is manifested in a loud, sometimes even noisy way of talking, with emphatic gesticulation and very intense facial expressions.

**Cultural dimensions - Trompenaars, Hampden-Turner**

Trompenaars and Hampden-Turner conducted questionnaire surveys with managers in the UK, France, Germany, the Netherlands, Sweden, the United States and Japan. They analyzed cultures using a seven-part model of dimensions of cultures (Trompenaars and Hampden-Turner, 2002) (see Tab. 2).

Many dimensions that they used mirror earlier research and models, such as individualism-collectivism, sequencing-synchronism (cf. polychronism - monochronism). The interpretation of internal and external control is similar to that of the Kluckhohn-Strodtbeck model. In internal-control cultures, the prevailing belief is that the human being decides his/her own fate, and the environment - although important - does not exert a decisive influence on the actions of the individual. In external-control cultures everything depends on the environment, force majeure, and surroundings.

Equality and hierarchy are dimensions close to power distance levels described in the Hofstede framework (Simson, 2012).

In cultures with a high level of universalism, people attach great importance to rights, principles, values and responsibilities. Relationship development is also subordinated to this. Cultures with high degrees of particularism demonstrate the belief that circumstances and relationships dictate the rules of behavior. Attitudes, views and actions may be changed according to the circumstances and needs of the current situation.

In societies that are individualized, people separate work and personal life. Relations are considered to have little impact on work performance, and although they should be good, their absence does not constitute an obstacle to cooperation. Cultures with a holistic approach see an overlap between work and personal life. They believe that good relationships are essential to achieve business goals and that relationships with others will be the same, whether at work or in social situations. Hence, people spend their time with co-workers and customers outside working hours (Trompenaars and Hanodeb-Turner, 1997).
Achievement-aspiration dimension is similar to the one defined in the Kluckhohn and Strodtbeck concepts as an attitude to action. Achievement societies believe that you are what you are doing, and that is a source of self-esteem. These cultures value productivity first and foremost. Everybody, no matter who they are, can achieve success. Where an aspiration orientation dominates, people believe that an individual should be valued for who he or she is. Status, title and position are important, and societal roles determine behavior.

**Cultural dimensions - Project GLOBE**

The GLOBE project is a study that extended Hofstede's cultural dimensions to the following nine categories (Mayfield and Mayfield, 2012), (Komor, 2011), (Minkov and Blagoev, 2012) (Minkov and Blagoev, 2012):

- gender egalitarianism - to what extent gender equality is supported
- assertiveness - a way of articulating needs and opinions, both in relations with individuals and in relation to society; the degree of being confrontational;
- power distance - interpreted similarly to the Hofstede model;
- uncertainty avoidance - ways of avoiding uncertainty - regulations, procedures, directives, formal structures, etc.;
- group collectivism - loyalty to a family and friends and an employer or a direct superior, mutual support in need;
- institutional collectivism - or subordination to societal institutions (in which the government can potentially offer economic incentives, social support), assessment of the division of common resources,
- humane orientation - the extent to which the state awards individuals for altruistic behavior,
- results (or task) orientation - the degree to which society values the efforts and results of an individual’s work.
- future orientation - focus on planning, creating scenarios for the future, today's activities subordinated to the future.

The GLOBE researchers focused on cultural differences, but disregarding administrative boundaries and country borders. They examined, inter alia, regional and transnational diversity. In some countries they have identified several sub-cultures, e.g. in Germany they found dissimilarities between East and West Germany, in South Africa they distinguished between white and indigenous societies, in Switzerland they identified French-speaking and German-speaking communities (Komor, 2011).

Most of the classification schemes reviewed in this manuscript centered on the concept of differences between national cultures. The assumptions of the GLOBE project enhanced that approach by searching for similarities. Multinational corporations and multinational entrepreneurs may find it less risky and more cost-effective to extend their activities to more similar cultures than those that are clearly different (Gupta et al., 2002). Based on a study carried out in 61 countries and taking into account factors such as common language, geographical location, religion and historical background, the GLOBE researchers created the list of 10 cultural clusters (Gupta et al., 2002).
Table 3. Cultural clusters in Project GLOBE

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo Cultures</td>
<td>England, Australia, South Africa (White Sample), Canada, New Zeland, Irland, USA</td>
</tr>
<tr>
<td>Latin Europe</td>
<td>Israel, Italy, Portugal, Spain, France, Switzerland (French Speaking)</td>
</tr>
<tr>
<td>Nordic Europe</td>
<td>Finland, Sweden, Denmark</td>
</tr>
<tr>
<td>Germanic Europe</td>
<td>Austria, Switzerland, The Netherlands, Germany</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>Hungary, Russia, Kazakhstan, Albania, Poland, Greece, Slovenia</td>
</tr>
<tr>
<td>Latin America</td>
<td>Costa Rica, Venezuela, Ecuador, Mexico, El Salvador, Colombia, Guatemala, Bolivia, Brazil, Argentina</td>
</tr>
<tr>
<td>Sub-Sahara Africa</td>
<td>Namibia, Zambia, Zimbabwe, South Africa (Black Sample), Nigeria</td>
</tr>
<tr>
<td>Arab Cultures</td>
<td>Qatar, Morocco, Turkey, Egypt, Kuwait</td>
</tr>
<tr>
<td>Southern Asia</td>
<td>India, Indonesia, Philippines, Malaysia, Thailand, Iran</td>
</tr>
<tr>
<td>Confucian Asia</td>
<td>Taiwan, Singapore, Hong Kong, South Korea, China, Japan</td>
</tr>
</tbody>
</table>

Source: (Gupta et al., 2002).

Cultural dimensions - Varner, Beamer

Varner and Beamer (2010) believe that to understand outer layers of culture, it is necessary to analyze deeper layers that define them. In their research, they distinguished 5 dimensions of culture (Simpson, 2012):

- the way of thinking and organizing knowledge - where knowledge comes from (science and theory or the inside of a person), how it is acquired, the linear way of thinking (causation) or the conviction of dualism of all phenomena and elements that complement each other;
- attitude to human activity and achievement of results - assumptions similar to the dimension of relation to action, environment and time in the Kluckhohn and F. Strodtbeck models and to uncertainty avoidance in the Hofstede model;
- perception of the universe – man’s place in the universe, the meaning of God or a higher being, perception of time and its measurement, approach to change (as a positive or negative element), attitude to nature, perceiving death as the end or beginning of life;
- place and role of the individual in society – prioritizing the individual or the group, attitude to age, attitude to gender differences, attitude to obligations;
- the way of organizing the society - the nature and time of connecting the individual with the group, building relationships within the group, showing emotions or restraint, formal and informal behavior in the group, relationship between work and life, designing organizational structures (vertically or horizontally), access to power and people with a high social status, arousing feelings of guilt and shame or striving to preserve the face.

IMPACT OF CULTURAL FACTORS ON CONSUMER BEHAVIOR ON THE INTERNET AND DESIGNING WEB-PAGES

Consumer behavior in the Internet is a common topic in economic science and management research. Cheung et al. (2005) reviewed the theory and results of empirical research published between 1994 and 2002. They collated 355 articles which were published in scientific journals. Increasing globalization, competition and the development of Internet technologies prompts a growing interest in the issue of online behavior. The
keyword "consumer behavior on the Internet" in Google Scholar for the years 2002-2017 gives about 1,210,000 results (01.2018).

One of the issues often discussed is the geographical diversity of online shopping. According to the latest data, the average annual number of online purchases per person in 2017 in different regions of the world was: (The truth about online consumers. 2017 Global Online Consumer Report, 2017):

- 19 - North America;
- 9,2 - Latin America;
- 18,4 - Western Europe;
- 11,9 - Eastern Europe and Russia;
- 16,1 - Australia and New Zealand;
- 11 - Africa and the Middle East;
- 22,1 – Asia.

As the above list shows, most purchases are made via the Internet by residents of Asia, and the least by those of Latin America. Many times, the electronic channel is used to purchase goods from foreign countries. 50% of purchases made online in African countries in 2017 concerned foreign goods. The lowest level, i.e. 14%, was observed in North America. European countries are very diversified in this aspect. In Western Europe, the rate was 15%, while in Eastern Europe (including Russia) it was 43%. In other regions, foreign purchases made up 44% of the total purchases of Latin American, 21% Asian, 25% Australian and New Zealand internet users (The truth about online consumers. 2017 Global Online Consumer Report, 2017). The reasons for the high percentage of foreign goods can be associated with seeking of unique or specialized products unavailable or too expensive on the local market. On the other hand, low percentages may be the result of legal barriers to the purchase of foreign goods or high costs of delivery (transport, customs fees, etc.).

The inclination to buy a good from an electronic channel is influenced by many factors, such as the type of product (e.g. basic necessities, luxury products, etc.), customers’ familiarity with the product, previous consumer experience, brand perception, etc. Factors not directly related to the product itself include price (which can be increased by additional costs of delivery or insurance), lead time, convenience, comparability of options, additional information (seller advice, other users' recommendations), return and complaint policy, payment method and transaction security.

There are studies whose authors explored the differences in intercultural consumer behavior and attitudes in terms of online activities (cf. Lynch and Beck, 2001; Luna, Peracchio and de Juan, 2002; Cheol and Jun, 2003; Baack and Singh, 2007). Cross-cultural differences include reasons given by consumers from different regions of the world for making online purchases. (see Figure 1).

It seems that in regions where most countries are classified as high context, pro-partner and collectivist cultures (such as Asia), people pay more attention to recommendations on the Internet. Brands are most important in countries with a high uncertainty avoidance rate (Latin America). Countries with high rates of pro-transactionality and individualism are markets where product characteristics play an important role.

Consumers prefer to use and do their shopping on sites specifically designed for their location and local language (Singh and Pereira, 2005). Country-specific online content en-
hances the usability, coverage and interactivity of a site, leading to higher purchasing inten-
tions (Luna, Peracchio and de Juan, 2002; Junglas and Watson 2004; Singh et al. 2006).

Figure 1. Factors affecting online shopping by regions

Cultural factors are identified as one of valid considerations when creating interna-
tional websites (Steenkamp and Geyskens, 2006; Sia et al, 2009). Models of cultural di-
ensions have been used by many researchers to analyze the impact of cultures on the
creation of websites. The most commonly used models are those by Hofstede and Hall. The
literature also contains research based on the frameworks of Gesteland, Trompenaars and Hampden-Turner, and the GLOBE Project. The author of this paper has
not identified any research based explicitly on Kluckhohn and Strodtbeck’s model, as
well as Varner and Beamer’s. These concepts are mentioned only in literature studies
and pointed out as alternative approaches and operationalizations.

Table 4. Research on impact of cultural differences on website design

<table>
<thead>
<tr>
<th>No.</th>
<th>Cultural dimension model</th>
<th>Authors</th>
<th>Topic of the study</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hall</td>
<td>(Würtz, 2006)</td>
<td>McDonalds’ websites analysis in the context of communication in high and the low-context cultures</td>
</tr>
<tr>
<td>2.</td>
<td>Hofstede</td>
<td>(Fletcher, 2006)</td>
<td>Cultural sensitivity is a key factor in communication and should be taken into account in web design; analysis of the website of an Australian university in Chinese, Thai, Vietnamese, Japanese, Indonesian, Spanish and Portuguese.</td>
</tr>
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<td>---</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Elżbieta Wąsowicz-Zaborek</td>
<td>The role and impact of national culture on the use of social networking sites in different countries, while controlling for socio-economic factors, in particular willingness to work online, educational levels and mobile penetration. The study was based on secondary data from 36 countries.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Gorman, 2006)</td>
<td>Analysis of the congruence of web sites with Swedish and Japanese cultural profiles. Demonstration of the utility of the Hofstede model for a more effective website design.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Kim i Kuljis, 2010)</td>
<td>Comparison of South Korean and British charities’ websites. Identification of differences in the design of the websites regarding multimedia usage preferences and the ability of users to enter data.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Fletcher, 2006)</td>
<td>Cultural sensitivity is a key factor in communication and should be taken into account if a website is to be an effective tool in intercultural communication. Analysis of an Australian university website in Chinese, Thai, Vietnamese, Japanese, Indonesian, Spanish and Portuguese.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Cyr, 2008)</td>
<td>A study conducted in Canada, the United States, India, Germany, Japan, Mexico, Chile and China. Elements of the website (information, content, navigation, aesthetic layer) were analyzed, as well as elements influencing perception of transaction security and trust in websites.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Zhao, Massey, Murphy i Fang, 2003)</td>
<td>Analysis of American and Chinese websites for cultural differences. Classification of the websites into neutral, culture-specific and mixed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Kralisch, Eisend i Berendt, 2005)</td>
<td>Impact of cultural dimensions - long-term orientation, avoidance of uncertainty and mono- and polychronism - on users' behavior. Behavioral data were collected by retrieving navigation steps records in the logbook of the server of a large and multilingual website with visitors from many countries.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Calabrese, Capece, Corbo, Ghiron i Mauricci, 2012)</td>
<td>Using the models by Hall and Hofstede, the study determined guidelines for website design in Scandinavian countries and Malaysia.</td>
</tr>
</tbody>
</table>

Source: own elaboration.

To be effective in targeting consumers in different cultural segments, websites should be tailored to specific cultural aspects (not only language) of each location. Localized sites often relate in their appearance, content, layout and navigation to the cultural layers indicated by Hofstede (symbols, rituals, heroes and values - discussed in more detail in section 3) (Würtz, 2006; Fletcher, 2006; Perea, Monsuwé et al., 2004; Cyr, 2008).
Table 5. Recommendations and guidelines for developing websites adapted to cultural clusters

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Language</th>
<th>Content</th>
<th>Menu and navigation</th>
<th>Engagement and time</th>
<th>Layout and visual layers</th>
<th>Dialog and cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo Cultures</td>
<td>English</td>
<td>- Topics and themes reflecting individualism and self-fulfillment, material values, - Social class is important, desire for belonging to an exclusive group - web sites for selected few and not for all - Pragmatism: content should be useful above all</td>
<td>- Information set up in a linear order - Links indicating a clear hierarchical structure</td>
<td>- Fluid navigation and access to information is important, - Helpful tools - search boxes, - The website should load quickly and provide smooth transition.</td>
<td>- One well-ordered page to be displayed at one time. - Images are important, but they should have practical purpose</td>
<td>- Networking and exchange of opinions is not the most important; - Tools to present one's own achievements are more pertinent.</td>
</tr>
<tr>
<td>Latin Europe</td>
<td>National languages</td>
<td>- Topics and themes reflecting individualism and self-fulfillment, material values, - Also, content acknowledging appreciation for family values and being part of the local society. - Content related to national identity - Evoking feelings and emotions</td>
<td>- Freedom of navigation allowing to move easily between different parts of the webpage in a non-linear fashion - Links to different parts of the website</td>
<td>- The time factor is less important; - It is possible to use graphical elements requiring longer loading times</td>
<td>- Many pop-up windows and additional entertaining and functional elements - Visuals are very important - Warm colors preferable</td>
<td>- Comment and discussion opportunities, - Possibilities of networking with like-minded individuals. - Ease of contributing and sharing own content.</td>
</tr>
<tr>
<td>Nordic Europe</td>
<td>National languages, English</td>
<td>- Topics and themes reflecting individualism and self-fulfillment, material values, - Content addressing major social issues, - Gender equality</td>
<td>- Information set up in a linear order - Links indicating a clear hierarchical structure</td>
<td>- Fluid navigation and access to information is important, - Helpful tools - search boxes, - The website should load quickly and provide smooth transition.</td>
<td>- One well-ordered page to be displayed at one time. - Austere elegance, visuals are very important, but they should be used sparingly</td>
<td>- Networking and exchange of opinions is not the most important; - tools to present one's own achievements are more pertinent.</td>
</tr>
<tr>
<td>Region</td>
<td>Language</td>
<td>Topics and themes</td>
<td>Information set up</td>
<td>Fluid navigation and access to information is important</td>
<td>Links indicating a clear hierarchical structure</td>
<td>The website should load quickly and provide smooth transition.</td>
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<td>-----------------------------------------------------------------------------------</td>
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<td>--------------------------------------------------------</td>
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<td>---------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Germanic Europe | German, National languages | - reflecting individualism and self-fulfillment, material values   
- Precise and specific information | - in a linear order  
- Links indicating a clear hierarchical structure | - Important,  
- Helpfull tools - search boxes,  
- The website should load quickly and provide smooth transition. | | | | |
| Eastern Europe  | National languages | - reflecting individualism and self-fulfillment, material values   
- Also, content acknowledging appreciation for family values and being part of the local society | - in a linear order  
- Links indicating a clear hierarchical structure | - Important,  
- Helpfull tools - search boxes, The website should load quickly and provide smooth transition. | | | | |
| Latin America   | Spanish         | - indicating appreciation for family values and being part of the local society   
- Evoking feelings and emotions | - allowing to move easily between different parts of the webpage in a non-linear fashion  
- Links to different parts of the website | - Important,  
- It is possible to use graphical elements requiring longer loading times | | | | |
|                 |                 | - Freedom of navigation allowing to move easily between different parts of the webpage in a non-linear fashion  
- Links to different parts of the website | - The time factor is less important;  
- It is possible to use graphical elements requiring longer loading times | | | | | |
|                 |                 | - Many pop-up windows and additional entertaining and functional elements  
- Warm colors  
- Many graphics and pictures | - Comment and discussion opportunities,  
- Possibilities of networking with like-minded individuals | | | | |
<table>
<thead>
<tr>
<th>Region</th>
<th>Language</th>
<th>Topics and Themes</th>
<th>Information Structure</th>
<th>Time Factor</th>
<th>Additional Elements</th>
<th>Networking Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab Cultures</td>
<td>Arabic, English</td>
<td>Appreciation for family values and being part of the local society.</td>
<td>Information set up in a linear order</td>
<td>Differentiated approach to time, quick access to information is important, but loading of some attractive graphical elements can last longer.</td>
<td>Many pop-up windows and additional entertaining and functional elements</td>
<td>Comment and discussion opportunities, Possibilities of networking with like-minded individuals.</td>
</tr>
<tr>
<td>Southern Asia</td>
<td>National languages, English</td>
<td>Appreciation for family values and being part of the local society. Possible religious motives</td>
<td>Information set up in a linear order</td>
<td>The time factor is less important; It is possible to use graphical elements requiring longer loading times</td>
<td>Many pop-up windows and additional entertaining and functional elements</td>
<td>Wide range of colors recommended</td>
</tr>
<tr>
<td>Confucian Asia</td>
<td>National languages</td>
<td>Appreciation for family values and being part of the local society. Respect for tradition, Use of authority figures Due to a more holistic approach, the content can be very comprehensive and can cover a wide range of topics around the main subject</td>
<td>Freedom of navigation allowing to move easily between different parts of the webpage in a non-linear fashion</td>
<td>The time factor is less important; It is possible to use graphical elements requiring longer loading times</td>
<td>Many pop-up windows and additional entertaining and functional elements</td>
<td>Icons, pictures referring to Asian heritage, stylized shapes.</td>
</tr>
</tbody>
</table>

Source: own elaboration based on the literature review
Culturally adjusted websites can influence the usability of a website, inducing more positive attitudes towards the website and ultimately increase the willingness of consumers to make purchases. On the other hand, a fall in usability caused by cultural incompatibility may have a negative impact on purchase intents (Singh, Fassot, Chao, Hoffman, 2006, Luna, Perraccio, De Juan, 2002).

On the basis of the preceding literature review and own observations, the author assigned to cultural clusters of countries recommendations and guidelines, which can be useful in the process of developing websites. It should be stressed that the list is a simplification and can not account for all local differences that may occur between countries classified into the same clusters.

It is clear that representatives of different cultures exhibit different perceptions of websites and their various design aspects. The above table refers only to what the author views as key considerations in localizing websites. A very important element of a website, apart from content and navigation, is its aesthetics and visual appeal, especially colors and symbols. In this context, it is important to be mindful of signs and images that are negatively perceived in some cultures, such as the number 4 associated with bad luck in China, which is neutral in European countries. Another example is the swastika perceived as a symbol of Nazism in the West but in Asia it tends to be associated with happiness and prosperity.

**CONCLUSIONS**

In the paper, cultural factors were reviewed as one of key elements of the environment of an enterprise operating on international markets. The extant literature indicates that cultural differences have a significant impact on the way consumers use websites. It should be stressed that the 21st century is a time of turbulent developments and rapid technological progress. This has a critical bearing on the availability of goods and services, but also on access to information. Reduction of barriers to travel between countries and continents significantly affects perception and experience of different cultures. It increases openness and mutual understanding of existing differences, both in terms of private life and business activity. The Internet, treated as one of important drivers of globalization, is also not free from cultural diversity. Being aware of this, entrepreneurs and managers who use Internet tools on international markets should choose between localization and standardization of their web presence, carefully weighting up costs and benefits of both approaches on a case-by-case basis. They should factor in the specificity of their product, disposable resources, attributes of the consumer groups and knowledge about cultural dimensions in the target country. The guidelines for designing websites presented in the article have been developed through analysis of available secondary data, such as published research reports and scholarly papers. Further steps in the research process could involve empirical verification of the findings as well as extending and deepening of described cultural models.

**REFERENCES**


**Suggested citation:**