



UNIVERSITY OF GOTHENBURG

# **Culture and Design in Web-Communication**

**A cross-cultural study of Iranian and Swedish  
websites**

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# Culture and Design in Web- Communication

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## Abstract

Nowadays, e-marketing through websites is one of the most essential factors in presenting new products to the consumers and potential buyers. So an effective website should consider understanding of interconnected business environment and intercultural or cross-cultural differences while it is presenting a product to the globalized marketing atmosphere.

The purpose of this study is to identify the cultural similarities and differences between Iran and Sweden in web design.

In order to accomplish this goal, the writer used qualitative descriptive comparative inductive method through content analysis as primary and literature review as secondary data collection. As theoretical framework, the study is presented some definitions of Hofstede and Hall's cultural dimensions. Besides, it defines some features of web design and the interrelation of cultural markers and web design's features based on previous studies.

The research is conducted through comparing websites related to the food industry from Iran and Sweden. The writer selects two beverage companies and two mineral water firms as the most common products in both countries. The results revealed that the websites manifest some similarities in using images and colors as well as lay out presentation. They show many differences in corporate information, communication and language usage in their websites.

The author believes in some limitations of the study such as lack of study in LTO dimension in Iran and lack of communication between the writer and either the selected websites' web designers or customers which might affect the outcomes of the exploration. She trusts having the users and web designers as well as marketers' perspectives will improve the result of the study.

This study can be useful for both small and big companies to increase the public awareness of their existence in the recent world globalized marketing atmosphere.

Moreover, suggestions are given for future studies considering marketers, customers and web designer's point of views to investigate in what extent the result will be different from the presented study.

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## Chapter 1: Introduction

*This chapter will afford a wide view on the topic of the study in background. Further, delineate problem discussion and purpose of presented research and its research question.*

### 1.1 The purpose and the scope of the study

The purpose of this study is to shed light on the cultural similarities and differences in web design by comparing websites from Iran and Sweden. Using both Hofstede and Hall's cultural dimensions as framework of the study and comparing and analyzing four websites in food industry( two mineral water companies and two beverage firms) from both countries as data collection, the author tries to explore what are the cultural differences and similarities, if there are any, in web design in both countries.

This investigation can be deliberated as one of the outcomes of interdisciplinary researches in communication and human-computer interaction (HCI) which is took place in the department of Applied Information Technology (Applied IT) in IT faculty at University of Gothenburg in 2012. This exploration can be considered as one of the outcomes of similar researches in comparable investigations about intercultural education.

Referring to the rapid worldwide growth of technology, it is a fact that in the recent decades, there are a lot of firms and different marketers who try to catch the potential customers' attentions in order to sell their products or services. Reaching to this goal, they need to compete with each other for choosing the best way of communication and contacting with people for introducing themselves to the marketing atmosphere.

Nowadays, web-based communication with clients by marketers can be considered as the largest and the most wide-spread network that covers world-wide groups of people. Through this, individuals, companies and organizations belong to different cultures not only can have contact and communicate with each other but also share their ideas, experiences, values, services and products. This capacity has created the valuable opportunity for economic growth and development of firms, companies and organizations.

Despite of this valuable opportunity, the new challenge for the companies is creating the best and successful websites in a way that the users feel satisfy during interaction with it.

Besides, the term 'globalization' is a familiar concept in our daily life. We read it in newspapers, magazines and books or we hear it from television or radios. Within the international integration, the connection between people is improved and it leads to increasing of human connectivity in a way that people can share and exchange their ideas, products and even their values from different cultures.

In addition, information technology (IT) is spreading globally and national borders have not been able to hinder its growth (Ahangar, 2009). The internet has a global nature itself so it increases the cross national and cross cultural accessibility of users which leads to higher attraction of customers by the firms. This is one of the reasons why the companies should overcome the cultural barriers by concentrating on their websites' improvement if they want to extend their business in globalized market sphere. Website as a sample of modern technology has a mutual interaction with culture. It influences local cultures around the world.

During two years study in Sweden, the author has been faced with different communicational strategies by marketers in communicating with the potential users which they were different from her home country in many ways. The researcher was so curious about the cultural differences and similarities between her home country Iran and the host culture i.e. Sweden. Referring to the author's previous job in Iran as a medium in marketing, she specially was so interested in communication between marketers and their end-users through websites because of its common use by customers in recent globalized world. Thus, the writer decides to have an investigation about the similarities and differences in web design among Iran and Sweden focusing on the cultural differences.

Searching in different literatures and articles, the author finds some previous related investigations about Iranian and Swedish websites which are mostly about educational (universities) websites especially in Iran. So she notices that there is a gap of study in food industry websites.

Hence, the investigator looks curiously in the internet to find food products to be investigated. Searching in the internet, she faces with some news that declare the consumption of bottled mineral water in Iran is increasing rapidly and it is due to inadequate safe drinking water in

distribution network. So, Iranians change their consuming preference from tap water to healthier options like bottled water.

Referring to the mbanews, Iran with 62 percent of bottled mineral water consumption takes the place of 14 in the bottled water consumption table in the world (mbanews). Connectedly, Iranian Ministry of Health and Medical Education states, about four million bottles of mineral water is consuming by Iranian people per day. Accordingly 400 million liter of bottled water is producing by Iranian companies each day. ( Khorasannews).

After reviewing the news and because the researcher is from Iran and knows about the increasing demand of Iranians for mineral water consumption, finally she decides to study mineral water and beverage firms' websites design as two commonly used products by the people in both countries.

Considering the aforementioned issues, the study focuses on analyzing and comparing of Iranian and Swedish web design as one of the best communicational tools for connecting to the clients. Callahan(2006) cited: " several studies( Dormann & chisaltia,2002; Marcus & Gould,2000; Robbins & Stylianou, 2002) have tried to explain cultural differences in Web site design through the works of Geert Hofstede( Hofstede, 1980,1991, 2001, 2002)" (Callahan, 2006,P: 242). Moreover Würtz (2006) and Ahanagar (2009) and some other scholars applied Hall's theory in their exploration. Correlating to earlier researches, as the most recent studies in Iranian websites covers educational websites design and there is a gap in food industry web design, the author decides to use the same frameworks for the presented investigation. This paper will find and analyze the cultural similarities and differences in designing the web and represent the information regarding cultural influences in web designing.

## 1.2 Research question & objectives of the study

As I stated in the previous part, the aim of this study is to explore the cultural differences and similarities in web design between Iran and Sweden and answers to the following question:

What are the cultural similarities and differences in web design between Iran and Sweden?

The question will be answered by comparing the parameters of four websites design (two mineral water corporates and two beverage firms) from two countries i.e. Iran and Sweden. In



order to find the cultural similarities and differences between those two countries, the researcher applies Geert Hofstede and Edward Hall's cultural dimensions to those parameters and examine to what extent they are applicable in these two countries' websites design.

### 1.3 Dispositions

*The presented exploration consists of six chapters which will be reported as following:*

#### Chapter1: *Introduction*

This chapter begins with the aim of the study and an introduction to the subject matters and is followed by the research question of the study. The chapter ends with the outline of the thesis.

#### Chapter2: Theoretical Framework

It starts with describing secondary related data including relevant literature reviews which explore the elements of web design and its importance in e-marketing and the impacts of culture on it. Then it introduces Hofstede and Hall's cultural dimensions. Next, it moves on to explaining Iranian and Swedish cultural values and web features based on those dimensions.

#### Chapter3: Methodology

This chapter provides some information about the methodology used in this study. It offers the study's approach and strategy, methods of collecting the primary and secondary data and an overall view of data analysis and evaluation and the study limitations.

#### Chapter4: Result

In this chapter, the primary data will be reported based on a descriptive comparative data collection through four websites from two countries (Iranian and Swedish).

#### Chapter 5: Discussion

In this chapter the presented results will be discussed. By the help of possible interpretation and using other relevant data and the main concepts in the theoretical framework, the author tries to generate a broader view of the result.

#### Chapter 6: Conclusions

As the last chapter, it reflects the final conclusions based on analysis and discussion of the results of the collected data. It answers to the study question and the objectives of the thesis in order to fulfill the purpose of the investigation. It also mentions some opportunities for future studies.

## Chapter 2: Theoretical framework

*In this chapter, the author outlines an overview of literature review in order to clarify concepts and theories which will be used in this study. First a concise description of the web design, its importance in the globalized market atmosphere and cultural impacts on it will be presented. Next, brief explanation of both Hofstede and Hall's cultural dimensions will be provided. Then, this section will be continued by comparing Iran and Sweden using those aforementioned cultural dimensions. Further, some Iranian and Swedish values will be indicated and the last part leads to the summary of findings of the previous researchers regarding Iranian and Swedish web design.*

### 2.1. Web design and cultural differences in market place

Regarding the improvement of today's economy, the global market is increasingly integrated. Thus, the firms from the largest international or multinational to the smallest should find the best way of communication in market niche for competing in the recent globalized market atmosphere. In order to be survived in the market atmosphere, the enterprises should find the ways to communicate and meet the needs of their target groups (Raab et al, 2008).

In addition, most firms and organizations try to be more customer oriented rather than product oriented. In order to reach this goal they attempt to find new methods of attracting more clients and build close relationship with the consumers (Finnegan et al., 2007).

Connectedly, according to the Nordic research, a highly empirical, conceptual and quantitative research conducted in Northern Europe regarding marketing within the area of industrial and services marketing, researchers believe that marketers seek for customers' relations which meeting this goal is through various kinds of exchanges to maintain communicational relationships with the clients. Having long term interactions with the potential customers is costly and time-consuming (Grönroos, 1989, pp: 54-56). In order to build Communicational relationship with customers, the companies should provide as much as information is needed to gain the customers trust and loyalty.

Nowadays, e-marketing is globally used by many marketing experts to create a communicational bridge between marketers and the end-users. Web and Web-based applications as one of the most effecting tools of inter-communal interaction and communication currently should have

culture and its differences into consideration (Eristi, 2005). Kennedy mentions that web covers lots of information while is low on generating an emotional response as well as limited value on reinforcing existing behavior. He emphasizes that unlike other forms of advertising, websites tend to be more informative (Kennedy, 2000). As websites are known as an important tool for education, marketing and sales (Mousavi & Marthandan, 2012) so they lead to global introduction and distribution of products and services through internet (Marcus & Gould, 2000). Online purchasing is increasing and building trust as well as customer loyalty is one of the most important issues in electronic marketplace (Cyr et al, 2004). Pruthi et al. cited that Achille (2008) indicated "European online shoppers are heavy Internet user" (Pruthi et.al, 2012, p: 243)

Moreover, web sites generate a unique opening for companies to advertise themselves in a way that they can be accessed instantly by worldwide end-users, thus many firms consider their homepages as a virtual gate away to the world (Callahan, 2006).

With increasing demands of competition in web design in recent years, many researches have been conducted by scholars focusing on mutual interaction of technology and cultures. World Wide Web as a modern communicational tool in e-commerce and e-marketing has been influenced by local cultures which lead to more clients' attraction through trust building, knowledge sharing and better communication that result in more success in globalized market places (Mousavi et al, 2012). Connectedly, Barber and Badre (2001) define "culturability" by merging culture and usability of a website and declared that there is a direct correlation between the effect of a culture on web design and the way a user interacts with the site.

Dotan and Zaphiris (2010) mention many researchers such as Barber and Badre, 1998; Hogan, 2006; Pfeil et al, 2006; Sacher et al., 2001; Syarief et al., 2003; Yunker, 2003, who investigate in HCI issues and indicate that many factors in web design like recognition, information architecture, communication styles, use of imagery, use of colors, user preferences and priorities are influenced by culture in many aspects.

Moreover, Mousavi et al. (2012) refers to many researchers who have explored cultural impact on various features of web design such as colors, picture, lay out, information organization and navigation. She indicates that researchers such as Nantel, 2008; Van Iwaarden et al., 2004; Lodge, 2007; Callahan; 2006; Marcus, 2000; Alostath & Khalfan, 2007 emphasize on a link

between different design features and the cultural characteristics of different countries and ``suggested that creating a compatible website with the cultural characteristics of the target users facilitates and improves effective communication with the website. `` (Mousavi et al., 2012, p:362).

Each webpage can be designed through some common features that most websites designers take them into considerations. After reading many articles covering website design and the related issues such as Callahan, 2006; Cyr et al., 2004; Marcus & Gould, 2000; Cook & Finlayson, 2005; Würtz, 2006; Flavian et al, 2009; Simin et al, 2011 and many others the following elements are focused as the most significant characteristics of the website:

**-Content of information:** As it is cited by Robbins and Stylianou (2003) the information content includes the succeeding elements that help a corporation to create its public image and build a strong relationship with the users:

*Corporate information:* The general information of the company including its people and its background.

*Communication/ customer support:* It refers to the ways clients can contact with the company. It consists of email and mail address, chat room or the corporate's phone and fax number. Within this section the stakeholders and clients can keep in touch and ask their questions from the firm.

*Currency:* It links to the currency of the data in the site and how often they are updated.

*Financial information:* It gives the information of interest to investors or clients.

*Employment opportunities:* Consists of the list of jobs and employments available within the corporation.

*Social issues:* Links different topics by use of cookies to social responsibility issues such as supporting worthy causes like charities.

As adapted Table from Resnik and Stren(1977) and Cheng and Schweitzer (1996) that is cited by Okazaki and Rivas(2002) proposes, the information content consists of price or values, quality, performance, special offers, taste, nutrition, packaging, guarantees and warranties, safety, researches and new ideas. Besides, cultural value in a website indicates beauty, collectivism,

individualism, family, health, nature, neatness, respect for elders, safety, social statues, tradition, uniqueness, wealth, wisdom, work and youth.

Robbins et al. (2003) defines how these features are designed in the website. Table 1 shows these representations.

Table 1: Global web site content and design features by Robbins et al. (2003)

Content features	Design features
Corporate information	Presentation
Biographical sketches	Animation
History	Frames
Message from CEO	Graphics
Mission statement	Sound
Organizational charts	Video
Press releases	Navigation
Vision statement	Hyperlinks to other sites
Communication/customer support	Protected contents
Corporate phone number	Search engine
E-mail opportunity	Site/map/index
Frequently asked questions	Security
Headquarters address	Secure access
On-line chat with an expert	Speed
Currency	Download time of home page
Current content	Download time between pages
Last updated indicator	Tracking
Financial information	Use of cookies
Annual report	
Financial highlights	
Employment opportunities	
Employment overview	
Job openings	
Social issues	
Cookie disclosure	
Cultural sensitivity	
Language translation	
Privacy issues	

**-Organization:** It refers to the organization of information mostly in homepages based on either its division to many independent spaces or its lay out that is arranged around a focal point of the page. These lay outs can be different according to cultural differences and information storage

display. Moreover they can be distinguished grounded on their visual (based on graphics) or index (linked-based) appearances (Callahan, 2006; Schmid-Isler, 2000).

**-Page layout:** It is how the visual elements like background color, white space, horizontal or vertical scrolling, font size and color will be presented in the web page (Becker & Mottay, 2001).

**- Colors:** color choice for websites is a critical point in any web design. It involves decisions regarding color usage for fonts, back ground and images. Some researchers discussed color preferences in HCI discipline in different cultures. For example, as Callahan (2006) cited, Del Galdo, 1990 and Russo and Boor, 1993 mentions color symbolism or Barber and Badre, (2001) refer to using of the colors of national flags by governmental sites. Moreover Duncker, Theng and Mohd-Nasir (2000) conducted a study about color choices in websites that were created by students from different cultures. The result illustrated English students liked to use pastel or gray colors while Scandinavian students were willing to use of dark hues. European and U.S. students tended to apply bright background and Scandinavians favored dark blue as their website color.

Furthermore, Badre refers to the users' expectations about the color preference for navigation, links and content. He uses an American bank website as an example and mentions `` an American bank using web site to promote services for French investors may want to avoid the use of color green, which some French may associate with criminality. On the other hand, the American bank may want to use green to attract Egyptian and Middle-East investors, as green have a positive connotation for them `` (Badre, 2000, p: 3).

Besides, Walker reports colors mean differently in various cultures. As an illustration, this researcher names blue, green and purple colors as the most popular and bright orange and sulfuric yellow as the least favorite colors in U.S. Likewise, green is associated with sickness in Asia, red is not tolerated in some parts of Africa and both black in India and White in China are the mourning colors (Walker, 2002, p: 3).

Additionally, as it is emphasized by scholars some countries like Japan tend to use the same base colors for every page except the homepage while some other countries like U.S. and U.K. use the same color for all pages in the website. (Lin, 2003; Callahan, 2006) Equally important, according to Marcus and Gould (2000) Judeo-Christian west prefer red, blue, white and gold that are different from Buddhist saffron yellow or Islamic green.

**-Image Modality:** It denotes the willingness of website in practicing different colors in the images as well as their high quality and saturation. Rajkumar's study (2003) shows Indian university web site's images were washed out and low color saturation in contrast to United States website images that had high saturation of colors and high quality.

**-Appearance:** Includes visualization tools, Images, Graphics, Icons and animations (Flavian et al., 2009).

**-Navigation:** Refers to the sitemaps, backward button and search engine as well as horizontal vs. vertical page design (Flavian et al., 2009; Simin et al., 2011).

**-Language:** Language consideration is one of the most critical elements in web design because a user will interact with the site when he/she understands the content of it. In this regard, Badre (2000) emphasizes that websites differ due to their web design, content and language which directly influences the way a customer interact with the website. Moreover, language learning happens in a social context, so language is influenced by culture (Hillier, 2003). Connectedly, many researchers find out that language and culture are the reasons for major differences in web design and its content.

Although there are many websites that consider culture, language consideration is not a common practice (Singh & Matsuo, 2004; Choi & Geistfeld, 2004; Nantel & Glaser, 2008).

Nantel and Glaser suggest that in order to have a successful corporate in reaching to the global audiences, companies should adapt their websites' elements particularly language to their target end-users which leads to a greater ease of navigation and more positive attitude towards the site (Nantel & Glaser, 2008). Similarly, Walker cites `` Forrester research reports that shoppers are three times more likely to buy products from websites in their primary language while two-third of online shoppers will click away from a site in another language`` (Walker, 2002, p:13).

In recent decades, English as a lingua franca in business has been widely used in most countries and it is the only language of most sites (Walker, 2002; Fletcher, 2006; Nantel & Glaser, 2008).

Hillier categorizes website and mentions ``multilingual web site is one that is presented in more than one language (to be precise, multilingual means more than two languages while exactly two means bilingual) `` (Hillier, 2003, p: 3). Similarly important, Badre classifies web sites based on

their language in *Deep vs. Shallow*. Deep websites refers to sites in native language of the country that links to other native language websites. In contrast Shallow sites are in secondary language that links to other secondary language websites (Badre, 2000).

Further, localization means considering end-users cultural markers as well as language in web design (Franteral & Tisi, 2008). Sun suggests that localization is more than translation and modifying the information in the web is carried out on two sub levels. The surface level through `` translation, punctuation, date, weights, measurements, addresses, currency`` and the cultural level means `` images, colure, logic, functionality and communicational patterns`` (Sun, 2001, pp: 95-96).

He continues in a successful localized web site, texts and images are integrated seamlessly and there is consistency and coordination between local and global web pages (Sun, 2001).

Translation may not be enough for having a successful multilingual web site but improves its usability. Translation is costly and time consuming but in order to have an effective multilingual web site the companies should apply translation and back translation to check if the meaning is not changed ( Walker, 2000; Nantel& Glaser, 2008).

As this study tends to investigate all above mentioned features of web design based on cultural factors, so the succeeding parts will present Hall and Hofstede's cultural frame work.

## 2.2. Edward T.Hall's cultural parameters

Edward T.Hall was an American anthropologist who proposed a popular cultural framework that is used by many scholars in their studies. As Würtz mentions `` Hall (1976, 2000) stated that all cultures can be situated in relation to one another through the styles in which they communicate`` (Würtz, 2006, p: 274).

He introduced *high context/low content (HC) vs. low context/high content (LC)* cultures. He believed that for having a better insight in communication we should consider meaning and context (individual, situation and environment) together with the word themselves (Hall, 2000 as cited in Würtz, 2006).



Some cultures like Scandinavian countries that use explicit statements in their text and speech are known as *low context culture*. The people in these countries are direct, open and have true intentions. They stress logic and rationality as their patterns of thought and emphasize that the truth can be reached through linear processes of discovery. Moreover, messages are not only fast but also quickly and easily decoded which consists of headlines, TV commercials and prose (Hall, 1976; Hall and Hall, 1990; Würtz, 2006).

But in *high context* societies like Japan or China transferring the messages are through both verbal and body language, use of silence and paraverbal cues. Regarding their pattern of thought they believe that truth can be manifest through non-linear discovery process and without any rationality. In *HC cultures* the communication tends to be more complex, indirect and ambiguous. Messages are slow and take more effort to be decoded and include books, TV documentaries and poetry. (Hall, 1976; Hall and Hall, 1990; Würtz, 2006)

The second cultural feature presented by Hall is *Monochronic vs. Polychronic culture*. It refers to the differences between countries based on their perception of time and time management.

People in *monochronic cultures* can do one thing at a time and will work on it until it is finished. They plan their work by making list and tracking activities in a predefined timetable. They will not move to the other task until finishing the first one. LC cultures are monochronic as well. In contrast, people belong to *polychronic cultures* are multitasking. In these countries that are HC societies, time is continuous and has no particular structure. People are willing to have their own time planning and meet deadlines in their own way. (Hall, 1976; Würtz, 2006)

In order to investigate cultural aspect in web design Sun 2001, Walker 2002 and Fletcher 2006 implemented Halls' HC and LC indexes in web design and resulted that HC cultures use attractive colours, more pictures and visuals related to local cultures while LC societies prefer hierarchical, logical and structured page layout and expect the links in the navigation bar with alphabetical arrangement and emphasize in written text interpretation.

In the same way, applying Hall's cultural parameters in web design, Würtz investigated a cross-cultural qualitative analysis of websites from HC countries like Japan, China and Korea vs. LC countries such as Germany, Denmark, Sweden, Norway, Finland and US. This investigation which is conducted in 2003, focused on visual communication, products and websites' features and navigations. She found the following results:

- HC cultures' websites use more imagery and nontextual forms of communication like animations, flashes and interactive elements. They prefer slow message speed and using of symbols. Taking parallel thinking pattern, they would use more complex and less discernible navigation. Aesthetic aspect is a priority in HC web design (Würtz, 2006).
- LC cultures' websites use more text, lesser animations and heavy images or other form of effects. Having logical and linear pattern of thought, they imply linear navigation throughout the site with a consistent layout throughout the pages. Informative function is more prioritized (Würtz, 2006).

### 2.3. Geert Hofstede's cultural dimensions:

Geert Hofstede is a Dutch social psychologist who directed an influential research in organizational studies. He is a famed pioneer in cross-cultural studies who works on national and organizational cultures (Hofstede, 1991) and his study is often cited by many researchers exploring cultural issues on web design (Dotan & Zaphiris, 2010).

According to Hofstede, the database study for IBM research "compiled paper-and-pencil survey results collected within subsidiaries of one large multinational business organization (IBM) in 72 countries" (Hofstede, 2001, p: xix).

The survey is conducted twice, first around 1968 and later around 1972. He sent 116,000 questionnaires about values to the employees of IBM organizations who were matched according to the age, gender and job level. Five cultural dimensions were identified that they are used widely by many scholars in their researches. Hofstede's cultural dimensions are: *Power distance, Collectivistic/ individualistic cultures, feminine/ masculine countries, uncertainty avoidance and long term orientation*. (Hofstede, 2001, p: xix) the three first dimensions refer to social behaviors of the members in the society while two last one refer to human's pursuit for truth (Ghauri & Usunier, 2003, p: 141).

As it is cited by Dotan and Zaphiris, Hofstede's cultural dimensions have been widely used by the HCI researchers to investigate the cross-cultural web design explorations (e.g. Callahan, 2005; Marcus & Gould, 2000; Pfeil et al., 2006; Sheridan, 2001; Singh & Baak, 2004; Singh et al., 2005). Dotan et al. continue these researchers applied quantitative analysis for highlighting

the correlation between cultural values and web content features in their studies (Dotan & Zaphiris, 2010).

Although Hofstede's work is broadly used, it has some limitations and weaknesses. Different researchers criticized his work in many ways. Gould (2005) declares Hofstede conducted his research in IBM employees and these cultural dimensions cannot be applied for national cultures because both IBM employees and cultures are not stable and change over time. Another critic is that his study is conducted in English and the IBM companies were in Europe or United states. Hofstede rejected these claims. He believes that IBM employees share many things and differences root in cultural differences. The main claim against Hofstede's study asserts that it cannot be applicable in cultural studies because the culture consists of people belong to various groups that are differ based on ethnic, linguistics and religion. Hofstede mentions that although nations are not the best unit for studying, they are the best available opportunity to be studied.

As the current study aims to use Hofstede's research as the framework of the investigation, the following part will explain an overview of the named cultural categorization.

### *2.3.1. Power distance (PDI):*

PDI refers to the extent a less powerful member of a society or organization accepts the inequality (more vs. less) of the power distribution. It is defined from below to above. This dimension offers power inequality exists in any country and it is a basic fact in any society. The difference is which country shows more inequality among others. The important factor is that how much the followers endorse unequally among themselves (Ghauri & Usunier, 2003, p: 140).

This dimension is reflected in Power Distance Index (PDI). There is a direct correlation between this index and power distance in society which means the higher PDI value, the larger power distance among the members of society.

A *high PDI* culture shows more hierarchical level and the expectation of inequality which is affiliated with *HC* cultures. In opposite, a *low PDI* culture has flat organization and the exception of egalitarianism that correlate with *LC* cultures (Würtz, 2006).

### 2.3.2. Individualism vs. Collectivism (IDV)

This dimension explores in which extent an individual is integrated into the group of society. As Hofstede describes in *individualistic* cultures the ties between members of society are loose and if we consider the family as a group of society, each person is responsible to look after herself/himself and her/his family. Their self-image is defined as 'I' and individuals prefer self-interest and competitive manners to achieve more benefit. The values of these cultures consist of personal time, freedom and challenge (Ghauri & Usunier, 2003; Würtz, 2006). In contrast in *collectivistic* countries that manifest *HC* features, the members are assimilated in the group and ties and communication between members is strong and cohesive. In collectivistic cultures members identify themselves as 'we'. Regarding family, each individual is responsible for both herself/himself and all members of the family including extended family like grandmother or grandfather and they have high loyalty toward them. Values in collectivistic cultures include training, physical condition and the use of skills (Ghauri & Usunier, 2003, p: 140; Würtz, 2006).

This dimension echoes Individualistic Index (IDV) that has negative correlation with PDI. The large IDV scores, the less PDI in the society which means people in Individualistic cultures tend to have less power distance.

### 2.3.3. Masculinity vs. Femininity(MAS):

Masculine dimension (MAS) states that there is a competition and strong desire for being succeeded among other members of the society. In addition it shows the emotional roles of the genders. In feminine countries the most obvious value is "caring for others and quality of life" (Hofstede, 2001).

According to Ghauri et al. "women's values differ less among societies than men's values" (Ghauri & Usunier, 2003, p: 140). Ghauri et al. continue that men's values vary more country to country and they encompass either assertive as well as competitive which are different from women's or the modest and caring that are similar to women's values. So, Hofstede names "the assertive pole "masculine" and the modest caring pole "feminine"" (Ghauri & Usunier, 2003, p: 140).

Connectedly, in the feminine countries, men and women show modest and caring values while in masculine societies, women are assertive and competitive even though not as much as men. In masculine countries there is a gap between these groups' values (Ghauri & Usunier, 2003, p: 140).

#### *2.3.4. Uncertainty Avoidance (UAI):*

Uncertainty avoidance Index (UAI) designates how much the culture is willing to avoid the unstructured, unknown, surprising and uncomfortable situations. Preventing to this situations, societies establish the rules and regulation for more security and safety. People belong to uncertainty avoidance cultures are more emotional and less tolerant, they motivate themselves by inner energy (Ghauri & Usunier, 2003).

In contrast, those individuals who live in the countries that accept the uncertain situations are more tolerant toward the opposite opinions and behaviors and they have fewer rules and restrictions. The people are more meditative and unemotional within such societies ( Ghauri & Usunier, 2003, p: 140).

#### *2.3.5. Long- vs. short-term orientation (LTO):*

The fifth dimension is independent of IBM study by Hofstede. It is invented by Michael Harris Bond in 1985. He used the values offered by Chinese scholars. This dimension is strongly related to the economic growth and because Hofstede's four cultural dimensions were not linked to economic progress, he get Bond's permission to add Long- vs. Short orientation to the four as the fifth dimension (Hofstede & Bond, 1988).

The values for Long term orientation (High LTO) culture are persistence, thrift and adapting to changing situations. The relationship between people is by status combined with a sense of shame. In contrast, short- term orientation (Low LTO) value include sharing and fulfilling social commitment, national pride, respect for tradition, face preservation and personal steadiness and stability (Ghauri & Usunier, 2003).

## 2.4. Cultural dimensions in web design

As it is explained earlier about the cultural impact on web design and following Hofstede's theory which many scholars in web design implemented it in their explorations, the subsequent results is found by the author:

*High PD* countries' websites are symmetric, highly structured and organized, and there is more accessibility to information. They designed the websites in a vertical or tall hierarchical order without attention to the importance of the information. They emphasize on social and national order in their symbols and display frequency of logos and give prominence to their leaders. In opposite, *low PD* countries' websites are less structured and there are both accessibility and visibility of information to all users, less emphasize on hierarchies and lesser focus on expertise (Marcus & Guld, 2000; Marcus, 2002; Callahan, 2006). Moreover, the presence of organizational charts, the leader's bio-sketches and messages of managers can be seen more in high PD countries (Robbins & Stylianuo, 2003).

Eristi (2005) asserts that *high PD* web sites are clearly classified. But *low PD* web designs are improved by options such as open access and multiple choices. Interactions are informative and leading and there are guidelines for supporting mistakes and errors in these webs. Further, the activities of daily life, popular images, symbols, page settings or colors are preferable.

*Low IDV* countries offers sociopolitical achievements and focus on expertise, tradition and history more than *high IDV* cultures that show more images of their success, products or landmarks rather than people and represents the change, progress and personal information in their websites ( Marcus & Gould,2000). Frequent use of pictures of individuals is another aspect of these websites (Rajkumar.2003). Connectedly, site registration requirements, security necessities and privacy policy statements are represent Individualism/ collectivism feature. (Robbins & Stylianou, 2003) In addition, Rajkumar (2003) found that direct addressing and using of "you" in contrast to " we", expression of private opinions as well as individual success stories indicate individualistic features of the web sites while collectivistic cultures' webs display group pictures and declare opinions of group behaviors, uses of formal speech and few references to tradition ( Rajkumar,2003).

In *Masculine* countries tasks and efficiency are centered. Interactive elements like games and animations are frequent in their websites. In picture usage, images with masculinity dominance like competition, sport and meeting are more observable. But, in *Feminine* cultures de-emphasizing of male and female stereotyping is important and visual aesthetics (images of family, shopping, female) and support of cooperating in information exchanges is concentrated (Marcus & Gould, 2000; Eristi, 2005). Additionally, annual and financial reports in the site are representative of Masculinity/ Femininity on that site (Robbins & Stylianou, 2003). Feminine web designs show more images of people than in masculine countries' websites but the images of building is more observable in masculine cultures' websites than in feminine (Callahan, 2006). Besides, organizing information based on social structure more than business oriented tasks show femininity aspect of web design (Marcus, 2002).

In *high UA* cultures' websites, interaction is simple and easy with restricted amount of data and limited choices of alternatives. They use of vertical design rather than horizontal. In these websites less number of people's images and more pictures of buildings are observable. Websites provide more color codes and dedicated fonts in order to reduce ambiguity. Besides, there are simple navigation tools providing clear feedbacks, help and the sitemap in these web sites. Formality and rules are centered in these webpages too. In contrast, in *low UA* countries, web sites are more complex and options and content are maximized. There is less control of navigation which means the links may open new windows leading away from the original location. Likewise, these sites prefer to use of coding of color, typography and sound to maximize information (Marcus & Guld, 2000; Marcus, 2002; Callahan, 2006). In addition, listing of career opportunities are presented more in high UA countries' websites (Robbins & Stylianou, 2003).

In the high UA websites, messages, content and visuals are clear and direct meanings are commonly used. Less mistakes or failures are acceptable by the potential users. In opposite, more general, more symbolic and less detailed messages and visuals are the indicators of less UA webs (Eristi, 2005).

*Short term oriented* countries design their web sites in a way that users can accomplish their tasks very quickly. They expect immediate results from their actions. Besides, they like rules as a basis for credibility (Marcus & Gould, 2000). Moreover, having current news and events of the

firm and presenting clear strategic plans and step by step guides are other aspects of these websites (Rajkumar, 2003). Robbins and Stylianou (2003) indicate that lack of research engine, site map and history of the firm as well as FAQ in the site are some features of *Long term orientation* countries' web sites.

As a summary of findings, it would be worth to mention the Table 2 adapted from Eristi's research (2005, p: 123) here:

Table2: Criteria on cultural factors in Web design (evaluation form)  
Adapted from Eristi (2005-2009)

High	Cultural Factors	Low
<b>PD</b>		<b>PD</b>
<ul style="list-style-type: none"> <li>• More flashy</li> <li>• Formal layout</li> <li>• Limited access</li> <li>• Prominent choices on use</li> <li>• Interactions designated with strict and rigid rules</li> <li>• A look with visuals, logos, sounds, colors, slogans, regime, and page layout belonging to national culrue</li> </ul>	<ul style="list-style-type: none"> <li>• Less flashy</li> <li>• Informal layout</li> <li>• Clear access</li> <li>• Multiple-choices on use</li> <li>• Flexible interactions that guide in case of errors</li> <li>• A look with universally popular images, symbols, sounds, page layout, or colors</li> </ul>	
<b>IDV</b>		<b>IDV</b>
<ul style="list-style-type: none"> <li>• Individual success</li> <li>• Individual goals</li> </ul>	<ul style="list-style-type: none"> <li>• Institutional success</li> <li>• Institutional goals</li> </ul>	
<b>MAS</b>		<b>MAS</b>
<ul style="list-style-type: none"> <li>• Symbolic indicators of male roles</li> <li>• Visuals with male themes (contests, sports, soft colors)</li> <li>• Indicators of result and objective</li> <li>• Indicators in which elaborative and masculine choices prominent</li> </ul>	<ul style="list-style-type: none"> <li>• Symbolic indicators of female roles</li> <li>• Visuals with female themes (family, woman figure)</li> <li>• Vivid colors</li> <li>• Indicators of social activity, interaction, and process</li> <li>• Functionality and practicality</li> </ul>	
<b>UAI</b>		<b>UAI</b>
<ul style="list-style-type: none"> <li>• Messages, contents, and visuals with direct meanings</li> <li>• Simple, clear, prominent and limited choices</li> <li>• Use, interaction, and navigations stated with strict rules</li> <li>• Existence of indicators</li> </ul>	<ul style="list-style-type: none"> <li>• Messages, contents, and visuals with indirect meanings</li> <li>• Non-restrictive choices</li> <li>• Presenting original and extraordinary expectations</li> <li>• Interactions and navigations that present</li> </ul>	

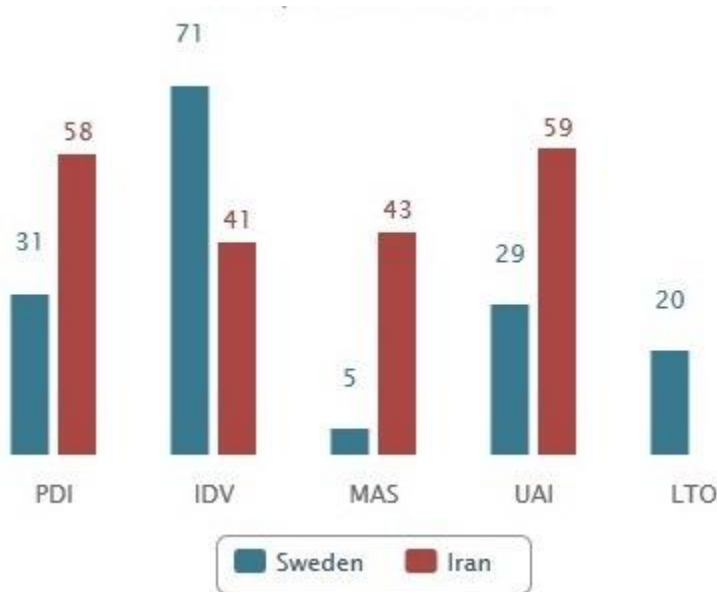


relating to the use of the site (site map, search engine, information navigations etc.) • Institutional calendar	varying and alternative choices to the user • Unexistence of indicators relating to the use of site (site map, search engine, information navigations, etc)
LTO	LTO
• Long-term vision and mission of the university • Long-term institutional goals	• Daily routine indicators of the university • Short-term institutional goals

## 2.5. Iran vs. Sweden in Hofstede’s research

In this part the author aims to compare Iran and Sweden based on Hofstede’s cultural dimensions.

Table3: Sweden vs. Iran based on Hofstede’s cultural dimensions cited by <http://geert-hofstede.com>



As it can be explored in Table 3, Iran has UAI and PDI as the highest scores among other dimensions with the ranking of 59 and 58 respectively. It reflects the hierarchical order of communication between people in workplaces and large inequality of power distribution and more rules and regulations for avoiding unexpected situations among Iranian people.

MAS and IDV are two next dimensions with the scores 43 and 41. They mirror medium level of collectivistic as well as masculinity features of Iranian people.

Regarding to the fifth dimension( LTO) no score is found by Hofstede's study. As it is asserted by Mousavi et al. (2012) these dimensions are ranked in middle and referring to Hofstede's theory, Iran is relatively high uncertainty avoidance and power distance as well as some collectivistic and medium masculinity/ femininity culture.

Incompare, Sweden has IDV and PDI with ranking of 71 and 31 as the highest scores in the Table. They demonstrate the high tendency of Swedish individualistic feature and a relatively power decentralization of Sweden. UAI and LTO are two next with the scores of 29 and 20. They refelect the lower acceptance of rules and regulations and expectaions of quick result and respect for tradition of Swedish people. MAS index is the lowest cutural parameter of Sweden with the ranking of 5 that manifests the feminin characteristic of Swedish people.

## 2.6. Iranian vs. Swedish websites

During the recent years researchers have conducted many researches about both Iranian and Swedish webdesign. This study found many investigations about Iranian universities' websites that were done by scholars. Despite many efforts, the writer could not find any exploration about Iranian websites that presents and sales products to the customer. That's why she reports findings about universities' websites. She belives although it may affect on the presented study, it can be considered as a base for having a general idea of Iranian websites.

### 2.6.1. Iranian websites

Mousavi et al. (2012) explore that Iranian universities' websites show more collectivistic and masculine features with higher power distance than what is investigated by Hofstede.

Regarding the *Content* of universities' homepages , Iranian universites' home pages have no differences with the westerns'. They provide the same content of information as the western's universities' home pages (Simin et al., 2011). Concerning *Color*, Simin et al. find blue, brown and orange as the most common colors in universities' websites. Considering symbolism, Simin et al. claim that Iranian web sites have no correlation with the colors of Iranian flag. She continues that for Iran ``the colors of the Iranian flag date from eighteenth century representing the Islamic religion( Green), Peace( White) and Courage( Red)`` ( Simin et al., 2011).

Simin et al. (2011) mentions in relation to *Navigation*, Iranian universities' websites tend to use of horizontal design. About *Images* these web sites have fewer photos and if they use images they will be in small sizes. She argues in Iranian religious cities, the universities' webpages prefer to include photos of faculty and less women images which it is a consequence of Muslim Cultural effects on webdesign. Ahangar (2009) claims that Iranian websites give priority to the image than the words in the web.

### 2.6.2. Swedish website

Marcus and Gould (2000) investigate cultural dimensions and their impact on user-interface global web design and compare many web pages belong to different countries as well as Sweden. They find that the Excite web site from Sweden makes no distinction in gender or age ( Marcus & Gould, 2000, p: 39).

Besides, Würtz (2006) investigates McDonald's website across cultures and explores that in Scandinavian countries such as Sweden (from LC culture) web sites are often completely static and there are no tendency toward using animations in European and Scandinavian web pages. She argues Scandinavian web sites are tabular and functional in navigation and ``tile information side by side on one page so that nothing covers anything else as a starting point`` (Würtz, 2006, p: 293). She continues Scandinavian web sites do not use of pop-up windows and links open pages in the same window.

Moreover, Callahan (2006) examines cultural indexes in universities' web pages among different countries such as Malaysia, Austria, U.S., Ecuador, Japan and Sweden. She identifies Swedish universities' web pages have at least one additional linguistic version and their English-language pages are usually different from the official home pages of the university. Regarding color, most Swedish universities display white background. As Callahan (2006) mentions the main characteristics of the Swedish sites was an absence of drawings. Color were used as a background for links. Blue and yellow the Swedish national colors are frequently used in addition to grey, purple, pink and dark red. Additionally, Swedish websites avoid symmetrical information organization. Regarding images, Sweden relies heavily on photos with high quality and high percentage of figurative images of portraits and individuals.

## 2.7. Iranian vs. Swedish values

### 2.7.1. Iranian values

Iran is a developing country that is located in Western Asia. It is part of the Middle East, although not an Arab country (O'Shea, 2003, p: 9). According to what is found from literatures, some Iranian values are as follows:

**-Religion:** Iran's main religion is Islam but there are Iranians who follow other religions like Christianity, Baha'i, Jews and Zoroastrians. Tradition is mostly based on religion and Iran is an Islamic country. Most Muslims believe that Islam is a body of values which shapes the communication among people in all the areas like personal, economic and politics. As Ali and Amirshahi claim "Islam asserts belonging, humility, simplicity, respect for elders and parents, the virtue of social achievement, work harmony, justice and equality in the work place" (Ali and Amirshahi, 2002). As they continue, asserting these principals in Iran is aimed to highlight the collective identity.

**Language:** Iran's contradictory geographical feature leads to diversity of nature and culture of Iranians (O'Shea, 2003). Although Iranian people speak the national language i.e. *Persian* or *Farsi*, there are many other languages like Turkish, Kordish, Lorish, Gilaki and Mazandarani that people speak in different provinces in Iran.

**Family:** Family in Iran is very important and a source of support and influence. Iranians show their private selves to their family especially close family and friends. Family is known as a place for comfort (O'Shea, 2003; Koutlaki, 2010). Family is so important in Iran that includes both close and extended family. Loyalty to family is the priority and comes before other social relationships which indicates the collectivistic features of Iranian culture. Iran has an adult oriented culture in a way that parents feel responsibility for their children in high extent and are involved in making major decisions for their children. Respect for elder people is a traditional value in Iranian culture (Koutlaki, 2010). The best place in a room is offered to them and all will listen when they are speaking.

**Gender role:** Iran is a relatively masculine country that for many of families, it is the father or husband who takes most responsibilities and decision making role in the family. Regarding the modernity and traditionalism, it is worth to be mentioned that in modern families the equality of

both genders is more obvious. Gender role at home is different among families according to their "social classes, level of education, individual personalities and families' attitudes" (O'Shea, 2003). Domestic tasks like cooking and cleaning are mostly done by women and men prefer to do shopping. For males in Iran domestic work is usually limited in company (O'Shea, 2003). Besides, in the recent years, with increasing number of the educated women in the Iranian society, they have been involved more in social activities like working in work places and doing sports, and they have been participated in decision making processes in variety of areas. But in general, the priority for females is marriage and childbearing (O'Shea, 2003; Koutlaki, 2010).

As Koutlaki points out, Iranian culture does not match with the Hofstede's MAS index. She mentions that many males in Iran may undertake some household work like child-nurturing, bathing children or putting them to bed as well as preparing herbs for cooking that traditionally may be seen as feminine (Koutlaki, 2010).

***Halal vs. Haram:*** Halal refers to foods that are accepted by Islamic rules. In Iran all the meats are Halal because they come from Islamically acceptable animals that are killed in Islamic manners. Pork is not Halal in Iran and it is considered as Haram which means using pork in Iran by people is forbidden. Besides, manufacturing, sale and consumption of alcoholic drinks is haram. Marketing or drinking alcoholic drinks have consequences and if the governments trace any of them there are serious punishments (O'Shea, 2003; Koutlaki, 2010).

**Communication:** In the companies, there is a hierarchical communication between employers and employees. There is centralization of power and decisions will be made by the boss or the top of the company (Ali and Amirshahi, 2002). Iranian managers are high on collectivism and low in individualism. The employers in large organizations are highly sociocentric (Ali and Amirshahi, 2002).

### 2.7.2. Swedish Values

According to Barinaga (1999) language can be a base for understanding the culture of any country. In this regard she mentions different Swedish words in her research and interpret them as Swedishness of this culture. She cites from Hendin (1964) who refers to *ensamhet* (solitude) as the inner peace, independency and personal strength of Swedes. This independency is equal to

maturity. Barinaga also mentions that Herlits (1991) interpret *att få vara i fred* (to be let in peace) as individualistic feature of Swedish culture which freedom has a significant importance. It means the beauty of both having time for oneself and attentive to others' need. Next she names Hampden, Turner and Trompenaars (1993) who indicated trust to others capacities and potentials is another cultural value. It affects the work related issues and managers in a way that they easily trust their subordinates.

Further, Barinaga labels *jämlikhet* (equality) as a reference of respect for others among Swedes and their attitude toward equality. This equality especially is obvious in gender role. For example fathers can leave their jobs for few months when they have had new born babies. This equality can be seen even in their communication styles. For instance, certain formal letters may start with *hej* but it does not mean lack of respect but shows equality and friendly communication.

*Konfliktundvikande* (avoiding conflict) links to Swedish value that they don't like conflict especially in public places. Loud voices and aggressive behaviour are not acceptable. Mutual understanding, collective consideration and compromising are favored (Barinaga 1999).

*Logom* (not too much, not too little, just right) shows a balance between the individuals and collectivity. It roots in Viking time and reflects the dilemma in many behavioral patterns such as personal freedom and social responsibility, formal and informal relationships, showing respect towards other, expressing emotions and avoiding open conflict (Barinaga, 1999).

Swedes prefer to separate their public and private time and work and individual relations. So, working time and family time are strictly separated and there is no involvement between friends and work-fellows (Barinaga, 1999).

Moreover, Azar et al. (2011) cites that Arnsberg (1989) points out Sweden has a complex culture that is interchangeable. Azar et al. (2011) also quotes that Daun (1998) indicates some other Swedish cultural factors such as punctuality, honesty, forward planning as a proof of effectiveness where no time is wasted. He mentions Swedes are well established stereotype. They are shy and introvert but these elements are not a problem or personality fault. In Sweden shyness is a sign of being a thinker. It is viewed as having philosophical approach and willing to listen to the others.

As Azar et al. emphasize Swedish people are associated with blue and yellow colors( symbol of Swedish flag) in their buying behaviores.They claim that using Dalecarlian horse in the logo of Lakansands Knächebröd shapes the company image as being Swedish. The other factor is the company name and its connection with the Swedish province “Dalarna” and the city “ Laksand” and the bread that is written in Swedish as “bröd”. (Azar et al., 2011)

Swedishness can be noticed through heritage, Swedish color and words that are used by the companies’ marketing startegies.

## Chapter 3: Methodology

*This chapter outlines information concerning data collection and data analysis methods used in this study. In the subsequent sections the choice of research approach and study design followed by discussion of the used methods will be presented.*

### 3.1: Research Approach

Research refers to the knowledge and undertakes any scientific and systematic investigation concerning a specific topic through potential data collection (Kothari, 2004).

There are many steps through conducting a scientific research. Selecting an appropriate research approach after choosing the research philosophy is an important step in any scientific researches. Two main research methods are known as qualitative and quantitative. Although choosing them is basically depends on the type of information in the research process but the differences between them is not clear-cut in many cases (Numan & Lawrence, 2003).

### 3.2. The distinguishing characteristics of Qualitative & Quantitative research method

Qualitative method which is mostly used by social scientists deals with why and how as well as what, where, and when (Suchman, 1994). As Shy mentions this method is most appropriate for a marketing research because it lets the researcher to reveal a number of different opinions and truth (Shy, 2001). Besides, Kotler et al. state that the qualitative method is suitable for identifying the needs of customers and the level of their satisfaction in order to gain a better knowledge of the existing market and marketing problem and generate the ideas that can be examined later by other scientists through quantitative research method (Kotler et al, 1995).

On the other hand, quantitative method concentrates on measuring a problem and explains about more or less, larger and smaller, often and seldom, similar and different (Thomas, 2003; Hennik, 2011).

As a result, bearing in mind the characteristics of both approaches and considering the research question of the study, qualitative research method has been used since the anticipated outcomes of the study will be accomplished by focusing on new pieces of information not on some quantifiable results. Moreover this approach provides more opportunity for collecting the



information from comparing the websites as a utilized tool in communication between customers and firms in the recent globalized marketplace

### 3.3. Inductive vs. Deductive reasoning

After identifying the research method, the next step is reasoning and building the theories. Two ways of reasoning are identified as inductive and deductive. In inductive approach which is commonly used in qualitative method, the data will be collected first and after analyzing it a general theory will be explored while deductive reasoning that is used in quantitative researches, moves from generalizations and draws conclusion from the existing knowledge and ends with a specific theory (Hyde, 2000; Ghauri and Gronhaug, 2005).

As this study is through qualitative method for identifying the possible similarities and differences of four selected websites between Iran and Sweden, the author moves from investigation of the websites and then continues toward theories. Therefore, inductive qualitative descriptive comparative research design seems to be the best for the study.

### 3.4: Data Collection

In order to gather the information, the researchers obtain their data through two main sources as primary and secondary sources.

#### 3.4.1: Primary data

Primary data are gathered by a scientist when he/she wants to study a specific problem or phenomena (Smith & Albaum, 2005). The researcher employs it when the secondary data are not available or helpful for finding the desired answers to the research question.

There are variety of methods for primary data collection in a survey as observation, questionnaires, sampling and interviews (Saunders et.al, 2009).

The main advantage of using primary data is that it tends to be specific in high extent. It means it will be carried out by the researcher whenever it is required and the other researchers cannot use it in their own research. In contrast, as a disadvantage we can refer to the time-consuming and costly features of primary data collection method (Mooi et al, 2011).

The author applies the primary data collection through comparing four food industry websites of two countries i.e. Iran and Sweden.

As it is mentioned in introduction section, the researcher was so interested in investigating the possible cultural similarities and differences of Iran vs. Sweden in e-marketing. After searching different literatures, she found that the previous researches in Iran are mainly about universities' web sites and there is a research gap in food industry in Iran. As she is from Iran, so she decides to compare two beverages' web design (Zamzam and Spendrups) and two mineral waters' websites (Damavand and Ramlösa) as the most commonly used products by people from these two countries. All the data is collected during March 2013. In the following sections the author introduces those aforementioned corporations to the reader.

#### *3.4.1.1. Iranian Beverage Company: Zamzam Company*

Zamzam Corporation started its marketing 49 years ago and is the biggest Iranian beverage company which produces more than 65 types of products. The company's main goals are producing the goods in a high quality as well as marketing and distributing them with lower prices which allow more customers to buy and use of the products. Its annual production is about 5/2 milliard bottle in different sizes. Achieving to its missions such as producing high quality products, customer satisfaction and high standardized production, Zamzam Company was succeeding in receiving the international standard certificates like HACCP, ISO 14000 and ISO 9002. The company's brands are Zamzam, Vita, Tarmita, Star, Iso Tonic, Classic, Coulamod, Energy, and Aras. Its merchandises are as follows:

- 1- Non-alcoholic beverage with different tastes like cola, lemon and orange
- 2- Water
- 3- Yogurt
- 4- Barley water(ماء الشعير)

These goods are used commonly by all Iranian people. Zamzam Company exports its products to many other countries such as England, Netherland, Switzerland, Italy, Germany, Saudi Arabia, UAE, Oman, Qatar, Bahrain and many other Middle East countries (zamzamgroup website).

#### *3.4.1.2. Swedish Beverage Company: Spendrups*

Spendrups is a family brewery company which founded in 1897 in Dalarna County. The company has 1000 employees and total sales SEK 3,1 bn. and its strong traditions is innovations. It brews a total of approximately 500 million liters of beer annually in its four breweries. Spendrups' beverages include beer, cider, soft drinks, juice, water, wine, spirits and coffee.

The company's brands consist of Spendrups, Norrlands, Mariestads, Heineken, Loka, Schweppes, El Coto, Gallo and Bregstrands Coffee.

This firm defines its vision as to be the best in this industry and a leader in sustainability. It mentions that they are ready for competing in the global market place in many aspects from commerce and financial markets to natural resources and human interaction. They emphasize that the company takes three dimensions i.e. sustainability- environment, society and economy into consideration. They believe leadership entails responsibility which means although they seek for increasing the attractiveness of their products, they adhere to ethical business practices. They never try to find their target groups for alcoholic drinks among young people under 25 years old. The company feels responsibility toward promoting a healthy alcoholic culture by supporting initiatives that aim to prevent harmful effects.

They have commitment to have safe and natural products. Besides, their approach to health and safety, equality and diversity and being against discrimination and harassment make this company successful (Spendrups web site).

#### *3.4.1.3. Iranian Water Company: Damavand*

According to what Damavand Company's website mentions after years of research on Iranian mineral water sources, an European company approved the unique characteristics of Damavand Mountain water in 1973. The company started its production in 1977 under the name of "Cheshmeh". In 1988 the company was re-launched in the name of "Damavand". Now Damavand is the biggest natural mineral water company in Iran with 370 employees that produces mineral water in different sizes with highest and modern technologies.

The origins of Damavand natural water rooted in thousands of years to Damavand mountain foundation. The essence of purity, being untouched by man and free from pollutions are the features that leads Damavand water to be one of the best and high quality natural mineral water in Iran. In order to covering the increasing demand of bottled water in market place, the company installed the most modern production line in Iran and Middle East with 36000 bottles per hour Kronos line. This line in addition to the previous lines 20000 and 6000 bottles per hour Sidel, makes this company the most modern and high tech producer of bottled water in Iran (Damavand Website).

#### *3.4.1.4. Swedish Water Company: Ramlösa*

Ramlösa Spa, the Swedish mineral water company, officially started in 1707 by John Jacob Döbelius. During his visit from Frameless Valley, he had been told that the water that is flowed out of the sandstone cliff made people healthier there which lead him to get the license to operate the health Spa.

In 1708 Döbelius published and distributed a brochure about how healthy the Ramlösa is. It was his first attempt for marketing and advertising his company's products.

In 1800s, when a team was drilling for coal in Brunssparken found a quantities water by chance. A few years later, in 1895, they faced with a problem related to scale in their boilers and so they needed better water. Then they tried for improving the water's quality by retrieving it from the borehole. The result was a better and more qualified water i.e. more pure and more rich in mineral.

In 1908, an enterprising pharmacist signed a contract and committed to selling 35000 litters annually for pharmacy using. In 1912, the first factory was in the starting point which allowed mineral water distribution in all Sweden and around the world up to 20 countries (no information about the countries in the website!).

The first water factory was very small and in the following years, its board reported the successes in export and need for expansion. Nowadays, Ramlösa is one of the famous drinking waters companies in the world (Ramlösa website).

### 3.4.2: Secondary data

In contrast to primary data which is collected by the researcher for a specific purpose, secondary data is collected by other scientists for other relevant purposes. Thus, a primary data can be a secondary if it is re-used by another researcher for another research question (Mooi et al., 2011).

Saving both time and expenses are the main advantages of the secondary data in a study (Aakert et al., 2003).

Mooi asserts that secondary data can be classified as internal or external or a mix of them. That information provided by the firm or organization such as customers' related data, internal reports for sales and products, catalogues or brochures etc. can be categorized as internal secondary data (Mooi et al., 2011). In contrast, external data includes all those relevant published books, articles, reviews and reports that a researcher can refer to them for solving the study at hand's problem (Ghuri & Gronhaug, 2005). Based on described various data collection design, the source of presented research is external secondary as follows:

- The published books from 1980 onward about research methodology, Hofstede and Hall's cultural theory and web design
- The most recently published articles (from 2000 onward) related to the web and its importance in marketing and cultural influences on it as well as some previous researches focusing on Iranian and Swedish values and their websites' features using Hofstede's dimensions and Hall's parameters. All these articles are retrieved from databases as Emerald, Journal of Computer-Mediated Communication, International Journal of business and social science, Asian journal of management research, Information management and business review, CLCWEB, S.A.M. Advanced management Journal, Journal of theoretical and applied information technology, Journal of business ethics and some online websites like kwintessential.com, iranchamber.com, Google books and Google scholars.

To sum up, referring to the research question, the writer as an international student from Iran who is studying in Sweden for almost two years was so curious about the ways of communication between the customers and marketers in Sweden and its similarities and differences with Iran. Referring to her previous job in Iran as a medium in marketing, especially she was so interested in different channels of marketing as well as communication between firms and clients. Considering all aforementioned reasons and the websites' potential in conveying

communicational bridge with consumers in a lower costs and shorter time the author prefers to conduct the study in websites.

Thus, after reviewing the research questions and identifying what information are required, to accomplish the objective of the study, some recent published reviews, articles and books were selected to identify the applicable cultural theories and frameworks, web sites' features and cultural impact on web design as well as Iranian and Swedish values and web design characteristics based on the cultural differences between Iran and Sweden.

The literature review is done in two parts. Since a lot of related articles and books have been read by the researcher, a massive amount of information is gathered. Thus, the most important and significant data are listed in order to reduce the collected information and accessing to the most applicable factors in the presented study.

### 3.5. Data analysis

After collecting data, analyzing them is the next step in a research. As it is mentioned earlier, this study is based on qualitative descriptive comparative approach through primary and secondary data research design that a large amount of data are obtained by the researcher. As Willson declared in qualitative data analysis the scientists gather a huge amount of data that they may do not know what to conclude or discard from them. So, they use of some activities like data reduction, data display and conclusion (Willson, 2010).

In the presented study, the process of data analysis starts by extracting data from companies' web sites and literature reviews.

The author compared both the starting pages (as the first gate for communicating with customers), and the home pages (as the most essential factor for attracting clients) of four websites (Zamzam, Spendrups, Damavand and Ramlösa) from both countries Iran and Sweden during March 2013.

During the investigation of the websites, it is found out that only the beverages companies have the starting pages. So the data presentation Tables are defined for starting pages and the main pages differently in order to explain the information in a best way for the readers. The researcher outlines the starting pages based on the beverages companies' use of color, Animation and flashes, lay out, navigation, currency, content of information and language. The framework of presenting data for the main pages is divided in two parts.

In the first part the information related to the content of webpages is manifested. This part is divided into some sections named corporate information, communication and language which they have some sub- sections in turn too.

In the second part the design elements of the websites are compared based on their organization and navigation system. The organization means lay out, animation and flashes, images and color and navigation refers to the simplicity of the web site and hyperlink to other sites, site map and search engine.

In the next step, the results are described and discussed through descriptive research design and comparative analysis based on Hofstede and Hall's theoretical framework and using previous studies.

The subsequent parts will discuss the research quality and its limitations.

### 3.6: Research quality and the limitations

Different selected methods and research designs have been argued in previous parts of this study. As it is presented earlier, the researcher decides to do the research based on qualitative research method through descriptive comparative research design using different categories of literature reviews as secondary data collection.

But it should be considered that in any qualitative study gathering the qualified data which increase the research's validity and conformity is crucial.

### 3.7. Validity and Confirmity of the study

Validity is very critical in qualitative studies. It can be applied in any stages of the research since the inaccuracies may happen (Kumar, 2005).

In the presented investigation, in order to increase the validity of the undertaken study, the investigator tried her best to achieve the best quality. Reaching to this purpose, she has read the most relevant literatures that are published in recent years (2000 onward). Besides, referring to the objective of the study which is the cultural similarities and differences between Iran and Sweden in web design, she categorized the literatures in different areas as web features, importance of websites in marketing, the impact of culture on the web design and the published articles related to the Iranian and Swedish values and websites.

Moreover, when the author was searching in different articles about Iranian web design, she faced with many articles about Iranian universities' websites. Hence, the researcher found a research gap in Iranian food industry. So she looked for many appropriate food websites to be investigated and finally she decided to conduct the study in food industrial products that are used in the daily life. Thus, drinking companies that produce beverages and water as a common used product in both countries was selected to be compared.

Connectedly, confirmability of the study means in what extent a qualitative exploration remains neutral. This means the scientists personal point of views, interests and motivations should not interfere in the study (Lincoln and Guba, 1985). Consequently, the interpretation of the collected data should be in a logical manner and the author should keep his/her values and beliefs aside (Riege, 2003).

Following all features mentioned for confirmability of a study, the author of this study tires her best to be assure that none of her personal values or belief linking to the personal judgments affect in any stages of this investigation. In addition, the writer makes great efforts to provide the extensive data for the readers that enable them to evaluate the conducted research.

Although the researcher put a high attempt for the quality of the study, she believes there are some limitations in her research as well. So the following part will present the limitation of the study.

### 3.8. Limitation

Despite of the great efforts of the author in minimizing the inaccuracy of the study, she is willing to refer to some limitation of the study. She believes the study could have better outcomes by using some interviews or questionnaires in order to find the customers' perspectives about the web design as a complementary element of the study. But limitation of the time of the study in addition to inaccessibility of the author to Iranian consumers while she is in Sweden leads to neglecting interviews or questionnaires.

It is worth to be mentioned that the writer has faith that contacting with the web designers of the selected websites for having their point of views could help with better and high qualified out comes of the study. But regardless of her many attempts in contacting with the responsible persons in companies, she failed and it may influence the results.



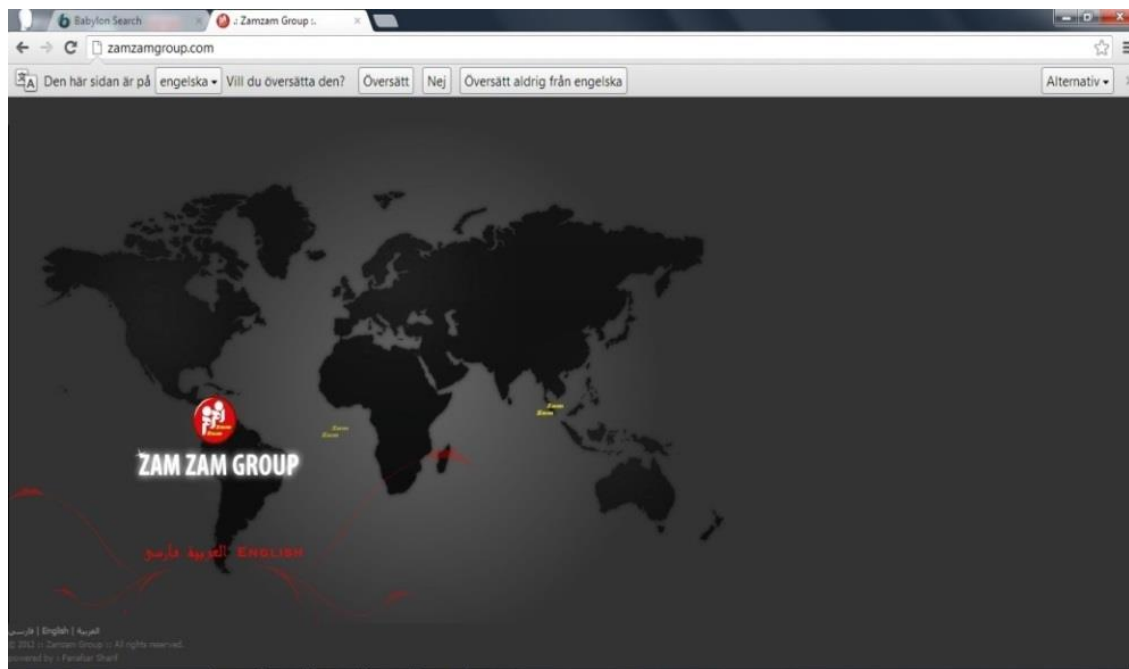
Additionally, the researcher would like to point out that there is lack of investigation in Long vs. short term orientation (LTO) index of Hofstede's cultural markers in Iran which can be considered as the limitation of study when the investigator wants to discuss the result based on Hofstede's cultural dimensions.

## **Chapter 4: Result**

*This chapter provides a sketchy summary of what the researcher finds through comparing the starting and main pages of four selected websites i.e Zamzam vs. Spendrups (Iranian vs. Swedish beverages companies) and Damavand vs. Ramlösa( Iranian vs. Swedish mineral water companies). The writer tries her best to describe both Iranian and Swedish websites as clearly as possible. She tries to explain what she finds without any judgment or personal opinion. It starts with investigation of Iranian and Swedish Beverage websites and then moves on to Mineral Water webpages of those countries.*

## 4.1: The Beverage Companies' websites: Iranian vs. Swedish Companies

### 4.1.1. The starting page



Picture1: Starting Page of Zamzam's website, the Iranian beverage company



Picture2: Starting page of Spendrups’ website, the Swedish beverage company

Looking at Zamzam and Spendrups’s starting webpages in March 2013, the investigator finds the following results that will be presented as Table 4 below as a summary of findings:

Table4: Summary of result for Swedish and Iranian beverages’ starting page

Categories	Websites/Countries	
	Zamzam/ Iran <a href="http://www.zamzangroup.com/">http://www.zamzangroup.com/</a>	Spendrups/ Sweden <a href="http://spendrups.se/">http://spendrups.se/</a>
color	Background: Dark gray, Fonts: Red, white and yellow	Back ground: White Fonts: Dark blue, fade yellow, black
Animation/Flashes And Sound	The sequential scenes flashes as follows: 1- Some bobbles flashes from the middle to the left 2- The name of Zamzam group appears in the left bottom of the page 3- Zamzam logo appears 4- Three languages options display as Persian, Arabic and English A glob appers and opens as a map and the name of Zamzam flashes around 5- There is sound effects when the page starts and by clicking on options	No Flash  No sound effect
Lay out	Symmetric from left to right	Central focal point
Navigation	Simple, the new page will be open in the same page	Simple, the new page will be open in the same page
Currency	Not up to date, the last updating was 2012	No information about currency is available
Content of information	Limited information such as currency	1-There is a short written text welcoming the visitor and warning about the age limitation for visiting the website 2- phone number and visiting address of the company
Language option	Three languages options: Persian, Arabic and English. The Arabic and English version do not work at the time of the study	The information is presented in two Swedish and English languages

**Color:** Comparing color usage in webpages, Iranian company uses dark gray as background and red, white and yellow colors for fonts while Swedish webpage chooses white as background, dark blue, fade yellow and black for fonts.

**Animation, Flashes and Sound:** As it is obvious in Table 4, the Iranian company uses sequential scenes of flashes and sound but there is no flash, animation and sound in Swedish website.

**Lay out:** Iranian web site displays a symmetric layout from left to right unlike the Swedish web lay out which is designed in a central focal point of the page.

**Navigation:** Both Zamzam and Spendrups's starting page use simple navigation. It means when the user tries to search for more and new information, the new page will be opened in the same page.

**Currency:** The last update in Zamzam Company is 2012 which shows it is not updated up to the time of the study. Spendrups's starting page does not present any information about the currency of the site.

**Content of Information:** In Iranian starting page no information is observable except some options about selecting languages and information about currency of the page. In opposite, Swedish website manifests a short written text for welcoming the users and warning them about the age limitation for viewing the website. The company's phone number and visiting address is available for the viewer too.

**Language:** Although there are three languages options as Persian, Arabic and English in Zamzam's starting web page, Arabic and English languages are not working at the time of study. In Spendrups's webpage there is no option for language selection and information is presented in both Swedish and English languages. The result shows that both websites consider language in their web design but Iranian one is not successful in this regard.

## 4.1.2: The main page

جستجو

انتخاب زبان هیل سرور آمار سایت سئو سایت

صفحه اصلی | درباره ما | محصولات | شرکت های تابعه | اخبار زرمزم | ارتباط با مشتری | نشانه های تجاری | امکانات | تماس با ما

نوشابه | آب | آبمیوه | انرژی زا | دوع | ما:التعشیر | نوشابه سلامت | ورزشی

**آخرین اخبار**

راه اندازی فروشگاه بزرگ عرضه مستقیم کالا در زرمزم تهران  
 سمینار مدیریت ارتباط با مشتری در زرمزم ایران  
 نکته بر توان کارشناسان داخلی ، گامی در جهت مقاله با تجربیا  
 قرعه کشی جوایز بزرگ زرمزم اصفهان  
 نازدید مدیرکل کار و رفاه گنستان از زرمزم گرگان

اولین مرحله قرعه کشی جوایز بزرگ شرکت زرمزم اصفهان برگزار شد.به گزارش روابط عمومی و امور بن الملل شرکت مادر تخصصی زرمزم ایران، اولین مرحله قرعه کشی جوایز بزرگ شرکت زرمزم اصفهان در آبانماه سال جاری با حضور نمایندگان خراسان و بازرسی بنیاد مستضعفان ، نماینده اداره کل فرهنگ و ارشاد اسلامی استان اصفهان ، مدیر عامل ، مدیران و جمعی از مسئولین شرکت زرمزم اصفهان در محل هتل آسمان برگزار گردید .بنا بر این گزارش در این قرعه کشی آقای بهار شهسوارزای به عنوان برنده خوش شانس یک دستگاه خودروی پژو 206 انتخاب گردید . همچنین تعداد 20 نفر دیگر از شرکت کنندگان به قید قرعه برنده نیم سکه بهار آزادی گردیدند .

ادامه مطلب

تیزر تبلیغاتی 7

طراحی توسط : فنی افراز  
 کلمه جادوی این وب سایت منطبق به گروه زرمزم می باشد  
 Transferring data from www.zamzangroup.com...

Picture3: The main page of Zamzam's website



Picture4: The main page of Spondrups's website

As it is explained in the previous chapter website's main page is the most important part in building effective communication in web communication. So, the investigator investigates both Iranian and Swedish beverages' main pages which the summary of results will be explained in two separate parts i.e. Content and Design. Tables 5 and 6 display the findings very briefly. Table 5 calls the content of the websites while Table 6 defines the design features of the sites.

#### 4.1.2.1: Content of Beverage Companies

Table 5 describes a brief description of findings related to the content of Iranian (Zamzam) and Swedish (Spondrups) beverage companies.

Table 5: Summary of results associated with the content in Swedish and Iranian beverages' main pages

	Component	Countries /Website	
		Iran <a href="http://www.zamzangroup.com">http://www.zamzangroup.com</a>	Sweden <a href="http://spendrups.se/">http://spendrups.se/</a>
Corporate Information	Honors	One long page with images of different certificates or standards as well as some received awards by the leaders	_____
	History	One page history including a small image of its products	One paragraph history including a link for more reading which will be opened in the same page. The new page has long text-based description without any picture
	Message from CEO	There is two paragraph message from CEO signed by his name and one image of him	_____
	Mission Statment	One page mission statement with a picture of many glob with the name of company on it placed in a map	_____
	Press release	There is one tab named Zamzam news which has 3 sub-sections as The current news, New products and Exhibitions. BY clicking on each, the new contents will be open in the same page; each news has option for more reading. The news are not updated	One page of different updated news
	Vision Statement	One page vision statement with a picture on one of the products	One page text with an image of different beverages in back that are fade in blue color with a white written text ( Our vision) in front
Communication	Corporate phone, Fax& Email	Is provided	One page including detailed description about how customers can contact with different sections of the company
	FAQ	_____	There is a classified FAQ section regarding different products in om oss tab
	Headquarter address	Is provided	Is provided
	Last update indicator	2012	2013 in press release section
	Current content	Is not provided	2013
	Annual report	Is not provided	Provided as different pdf files from the year 1996 to 2011
	Financial highlites	Some limited information in History section	Provided as different pdf files from the year 2000 to 2009
	Employment overview	Is not provided	One full text page
	Job oppenings	Is not provided	Updated pages
Language	Language translation	The Arabic and English version of the site are not working in the time of the study	English and Swedish



**Corporate Information:** By comparing the components of corporate information between Iran and Sweden, it is obvious that Swedish web site has no willing to share its honors, mission statements or message from CEO in a separate section as Iranian website has. Instead, Sweden offers more detailed history of its company by separate links to the visitors. The interesting point is that both countries display their vision statements in a similar manner i.e. one page text including a picture of their own products.

**Communication:** Zamzam does not try to update the current content and news and shows no tendency towards annual reports and even job related issues. But Spendrups provides updated information in those aforementioned categories. Besides, Spendrups tries more for building closer communication with its customers through giving detailed categorized information about contact data for different sections of the company, annual reports and even job openings. Spendrups provides a classified FAQ section while Zamzam does not.

**Language:** Zamzam tries to design its corporate website in three languages i.e. Arabic, English and Persian. But as it is stated in starting page part, Arabic and English versions are not working at the time of the study. In compare, Spendrups activates both Swedish and English languages in its website. It is worth to be mentioned that the English version of the site is pretty similar to the Swedish one in design. But the noticeable point is that when the viewer clicks on the “English” the page turns to “About Us” section with some translated sub-tabs designed in the left side of the page. The other tabs such as “Dryck” and “WEBBUTIK” and so on are not available in English language.

#### 4.1.2.2: Design of Beverage Companies

Table 6 presents the summary of findings about the design features in Iranian and Swedish beverage companies.

Table 6: Summary of result for Design in Swedish and Iranian beverages’ main pages

Category	Component	Website/Countries	
		Zamzam/Iran <a href="http://www.zamzangroup.com/">http://www.zamzangroup.com/</a>	Spendrups/Sweden <a href="http://spendrups.se/">http://spendrups.se/</a>
Presentation/Organization	Lay out	Structured symmetrical and long Vertical	Structured Symmetrical Vertical
	Animation/ flashes and sound	There are some bobles and round line moving around the	—



		Zamzam logo on the top of the page without any sound	
	Image	Images are located in two rows: 1- some big motion pictures of different products in the top of the page 2- categorized small pictures of products in the middle of the page	Categorized big pictures of different products as well as logos of different beverages without any texts
	Color	White background with red colored on the top which fades to the middle of the page	White background with a narrow rectangles dark hues colored on the top
Navigation	Hyperlinks to other sites	Many	Many
	Simplicity	Simple with limited amount of data	More complex
	Search engine	Provided	Provided
	Site map/index	Clear site map	Provided

**Lay out:** Both companies use symmetrical structured vertical lay out in their web design.

**Animation/ Flashes and Sound:** Similar to the findings in the starting page of the companies, Zamzam uses flashing and moving pictures for catching the viewer's eyes and attention. The difference is that there is no sound in the main page. In contrast to Zamzam, Spendrups remains static and does not use of any animation, flashes or sound similar to its starting page.

**Images:** Looking at Iranian main page, the viewer can find a combination of images and text usage in the webpage while in Swedish website the visitor will face with the images of different products without any text. These images are in the middle or right side of the page while logos of different Spendrups' beverages are arranged in the left. By clicking on the tabs of the Spendrups main page, it turns to other pages with textual description of the selected options.

Comparing images of both websites, the following similarities and differences are noticed:

- a. Iranian images are colorful. All of them are images of products and no individual is included except one that shows a man at the background playing billiard and the image of an energy drink in front. This specific photo shows energy drink as one of Zamzam's products. Other pictures consist of either the picture of product itself or the product and one of the sports objects like dambel or ski facilities. These pictures are big and motion in the main page.
- b. The smaller photos in Iranian web site are just images of the products. By clicking on the products tab of Zamzam's main page, a page full of different pictures of the company's

various products will appear. All of them are colorful and there is no individual in the photos.

- c. Visiting Spendrups's main page, the viewer finds a page with various images in a structured manner without any text. The sizes are big with white background except one that has red color. Similar to Iranian images, there are not any people in the photos.
- d. By clicking on Dryck tab of Spendrups's site, the new page offers categorized drink menu in the left side of the page in a hierarchical manner. Selecting each drink leads to a new page with different small images of the selected product including text based description. All the images show the specific products except water sub-tab. By pointing on the water sub-tab the new page appears with text and a small image of two women enjoying drinking water in the nature.

As an overview, both Iranian and Swedish firms choose the same manner in selecting the images of their products.

**Color:** Both websites use white color as their background. The difference is the top of these two webpages. The Iranian webpage uses red color that fades to the middle of the page in white color. But Swedish website has two narrow rectangles on the top. The upper one is dark hues colored and the other one is in black with white colored font which is used for navigation in the site.

The interesting point is that both webpages use different colors for fonts as a means of navigation in the sites. Zamzam applies white, yellow and red but Spedrups practices white.

**Navigation:** Considering navigation both sites provide search engine and site map. The difference is their simplicity. Zamzam arranges its navigation bar in a way that when the user points to any tabs, many sub-tabs will be appeared and the visitor can select the specific information he/she is looking for. But in Spendrups, the visitor will face with different sub-categories only when he/she clicks on the main tab and open the new page. It seems Spendrups has a simpler navigation system than Zazam with offering limited data and sub-tabs in the main page.

The second difference is their hyperlink to other sites. Iranian web site has no hyperlink while Swedish one provides many hyperlinks to other sites.

## 4.2. The Mineral Water Companies

Searching in Iranian and Swedish mineral waters' websites, it is found that unlike beverages companies, the mineral water firms have not any starting pages. So, all the observations are through investigations in the main pages of those corporations.



Picture5: The main page of Damavand's website



Picture6: The main page of Ramlösa's website

By comparing two mineral waters companies i.e. Damavand the Iranian company and Ramlösa the Swedish firm Table 7 as a summary of result for content of webpages and Table 8 for conveying investigation on design elements of those websites are designed that will be presented as succeeding sectors.

#### 4.2.1: Content of Mineral water's websites

Table 7 manifests the outcomes of findings by the investigator through comparing the content of main pages of Damavand and Ramlösa's websites.

Table 7: Summary of result for Content in Swedish and Iranian Mineral Water companies' main pages

	Component	Website/Countries	
		Damavand/Iran <a href="http://www.damavandmineralwater.ir/main/">http://www.damavandmineralwater.ir/main/</a>	Ramlösa/Sweden <a href="http://www.ramlosa.se/">http://www.ramlosa.se/</a>
Corporate Information	Honors	One page description about some honors and standards that company is received	_____
	History	One page without image	One page without image
	Message from CEO	_____	_____
	Mission Statment	_____	_____
	Press release	One page full of text and news but it is not updated within the past year	_____
	Vision Statement	_____	_____
Communication	Corporate phone, Fax& Email	Provided. Beside sending online email within the website is available	Provided. Beside sending online email within the website is available
	FAQ	One page is provided	_____
	Headquarter address	Provided	Provided
	Last update indicator	2013	No information
	Current content	2013	No information
	Annual report	_____	_____
	Financial highlites	_____	_____
	Employment overview	_____	_____
	Job openings	_____	_____
Language	Language translation	English and Persian	Swedish

**Corporate information:** Looking at corporate information of main pages, some similarities between beverages and mineral water companies' main pages are found. Similar to the content of beverages companies, Damavand (Iranian mineral water Co) has one separate page for its honors but Ramlösa (the Swedish Co) has not. Both Damavand and Ramlösa have one page history without any images and they have not any messages from CEO, mission and vision statements as a separate part in their websites. So, Swedish mineral water firm acts the same as the Swedish beverage main page regarding neglecting message from CEO and mission and vision statements in their web design.

**Communication:** Corporate's contact details are provided by both websites. Contrasting findings in Swedish Beverage Company, there is limited information for contacting with company in this section. Besides, there is no FAQ section in Ramlösa website but surprisingly, Damavand website adds this category to its website dissimilar to Zamzam website. Different from Spendrups, Ramlösa has no updated indicator in the website as well as annual reports, financial highlights and job related sections. It seems both Iranian and Swedish mineral waters companies are in the same level of building communication with their customers.

**Language:** Damavand website is available in both English and Persian languages in compare with Ramlösa which is only in Swedish language. By paralleling English and Persian version of Damavand website, the subsequent facts are investigated:

- a. All the tabs are translated in both languages.
- b. The web designer notices the page alignments. It means, as Persian language is written from right to left, so the designer designed the tabs and sub-tabs in the Persian version from right to left. But in English version, all the tabs are from left to right as English written texts are.
- c. The background, colors and navigation has no difference in both versions.
- d. Damavand in English language uses many hyperlinks to other English links in its website.

#### 4.2.2: Design of Mineral water's websites

Table 8 offers a short overview of results found by the researcher:

Table 8: Summary of results for Design in Swedish and Iranian Mineral Water companies' main pages

Category	Component	Website/Countries	
		Damavand/Iran <a href="http://www.damavandmineralwater.ir/main/">http://www.damavandmineralwater.ir/main/</a>	Ramlösa/Sweden <a href="http://www.ramlosa.se">http://www.ramlosa.se</a>
Presentation/Organization	Lay out	Vertical	Vertical
	Animation /flashes and sound	Three sequential flashes at the starting point: first company's logo, next a drop of water and the last the moto of the company	_____
	Image	Big & high quality images of nature and a sunny day as background and small images of products	Big & high quality images of nature and a rainy day as background and small images of products
	Color	Because the background of the page is a meadow landscape with mountain in the back, green & blue, the colors of the nature and sky, are the dominant colures of the page	As the background of the page shows a rainy day, so the main colors are green, blue, white
Navigation	Hyperlinks to other sites	Many	Many
	Simplicity	Simple with limited amount of data	simple
	Search engine	Provided	Provided
	Site map/index	_____	_____

**Lay out:** The findings indicate that both firms use symmetrical vertical lay out in their design. Thus, the main pages' lay out of mineral water and beverage companies are similar.

**Animation/ flashes and sound:** Again, all discoveries are similar to beverage companies' main pages. Damavand practices flashes without any sound while Ramlösa has a static website.

**Image:** Like the beverage companies all the images are photos of products that are bottles of water in mineral water companies. No people or individuals are presented in the pictures. Both countries' websites, use the images of nature as their background which it shows their respect toward nature as a reflection of their values. Besides it reflects the origin of mineral water that is from the nature.

**Color:** Colors are mostly green, blue and white that echoes the colors of nature. As mineral water is nature-based and both countries show respect toward nature, using these colors represent this feature of the websites.

**Navigation:** Both web pages have hyperlinks to many other sites. Additionally they have search engine but have not site map in their web design. Comparing navigation between Iranian websites, Zamzam and Damavand are similar in design except Damavand is simpler than Zamzam. In contrast, in Swedish websites, Ramlösa is simpler in navigation than Spendrups main page.



## Chapter 5: Discussion

*This chapter consists of analyzing and discussing the result of the study considering presented data in chapter 2 as literature reviews. Within this chapter, the researcher makes efforts to find answer for the research question.*

In chapter 4, the writer tries to find and describe the information through comparing two beverages companies and two mineral water firms from Iran and Sweden. She emphasizes for explaining the data without any personal idea and judgment. In this chapter the researcher will discuss these data by applying what other scholars found in their researches through the theoretical framework of Hofstede and Hall's cultural markers. The findings of the study are built on comparing the websites in different segments. In the beverages firms the starting pages are compared base on using color, animation and flashes, lay out, navigation, currency, content of information and Language. But as the mineral water corporations have not starting page, therefore, the main pages are equated.

All the main pages of the four websites from both countries i.e. Iran and Sweden are described based on corporate information, communication and language components (the content feature) as well as lay out, animation and flashes and navigation factors (the design feature). In the succeeding parts the aforementioned aspects will be discussed in turn.

### 5.1. Zamzam and Spendrups' Starting page

**Color:** The findings indicate Spendrups use white color as the background and red, white and yellow for the font but Zamzam practice dark gray as background and dark blue, fade yellow and black for font. Referring to what is found by Callahan (2006) about choosing white color background in universities' websites and blue and yellow, the Swedish national colors as a frequent theme in Swedish websites, as well as Ducker, Theng and Mohd-Nasir (2000) who mention that Scandinavian and European students were willing to use of bright background and dark hues in their website, findings of this study seems compatible and confirm previous researches. In compare, Iranian company shows no correlation with what Simin et al. (2011) found about using blue, brown and orange as the most common colors in Iranian universities' websites. But, it confirms Simin et al. (2011) result that color choice in Iranian websites has no relation with Iranian national flag and symbolism.

**Animation, Flashes and Sound:** According to the result, Zamzam uses sequential scenes of flashes in the starting page but Spendrups is static. It correlates with the research conducted by Würtz (2006) that HC cultures like Iran uses more animation and flashes in their sites than LC cultures like Sweden. In addition, it proves what is suggested by Würtz (2006) about the static



feature of Swedish websites. The Swedish websites has no tendency toward using animation in their webs. Moreover, Marcus and Gould (2000) and Eristi (2005) declare that in masculine countries (here means Iran which shows a respectively masculine feature) interactive elements like animation are frequent in their website.

**Lay out:** Zamzam has a symmetrical layout in opposite to Spendrups that have central focal point lay out. It confirms findings by Marcus and Gould 2000; Marcus 2002 and Callahan 2006 who emphasize high power countries tend to have symmetric lay out in their web sites. Furthermore, Callahan (2006) indicates that Swedish websites avoid symmetrical information organization. In the same way, according to what is mentioned in Table 2, Eristi (2005-2009) asserts low power distance societies tend to use of informal lay out in their websites that is correlated to Swedish lay out design which is in focal central point of page in an informal way.

**Navigation:** Both websites use simple navigation system. Iran is a HC and high UAI culture and Sweden represents LC and Low UAI features.

According to Marcus and Gould (2000), Marcus (2002) and Callahan (2006) high UAI websites have simple navigation tools while in low UAI websites there is less control of navigation and links may open new windows leading away from the original location. Denoting to the finding of this study, Zamzam web site supports the simplicity of navigation in HC cultures while Spendrups rejects the finding about LC websites.

Besides, Würtz(2006) mentions that HC sites opens new browser windows for each new page while LC webpages opens the side bar in the same browser window. Referring to finding of this study, Zamzam web site is in opposite of findings of Würtz (2006) while Spendrups support this result.

**Currency:** Zamzam does not update its website information since 2012 and there is no information about Swedish website currency in its starting page. The currency of web page is due to Short term orientation dimension of Hofstede's indexes. Sweden is a short term orientation country that according to Rajkumar (2003) should display current news and events of the firm. But, Sweden has no currency of information in the starting page. Regarding Iran, there is no investigation by Hofstede in this dimension and as it is explained in chapter 3, it can be considered as one of the limitations of the study.

**Content of Information:** Iranian starting page does not display so much information except language selection options and corporate's contact information but there is a short written text

about welcoming the user and informing them about the age limitation for visiting the website as well as firm's contact information in Swedish website. As Würtz (2006) states LC websites use more text and HC cultures have more imagery and nontextual form of communication like flashes and animations. As Iran is a HC culture and Sweden is belong to LC countries, so the findings of this study in starting pages of both countries support Würtz (2006) results. In the same manner, Eristi (2005) offers that in high UA (Iranian) webpages the messages, content and visuals are clear and direct meanings are commonly used and it is exactly what happens in Zamzam website. The writer believes that the message in Swedish starting page is direct and clear to the viewer in despite of the fact that Sweden is belong to low UA countries. So, this dimension seems is not so compatible with the previous studies.

**Language:** Zamzam has three languages i.e. English, Persian and Arabic as its language options but Persian is the only language which works in the time of the study. Spendrups presents its information in two languages of Swedish and English in starting page but there is no option for language selection. The result shows that both websites consider language in their web design but Iranian one is not successful in this regard.

## 5.2. The main page

### 5.2.1. Content of main pages

**Corporate Information:** As it is mentioned in chapter 4 in opposite to Zamzam, Spendrups has no tendency to share its honors, mission statement and message from CEO and offers more detailed history of the company and its vision statement. In addition both Ramlösa and Damavand have one page history but no message from CEO and mission and vision statements. Unlike to Damavand, Ramlösa has no separate page for its honors. Referring to the literature, it should be mentioned that according to Marcus and Gould (2000) low IDV countries focus on tradition and history more than high IDV cultures. In this study, Iranian website as a low IDV culture presents a brief history of the company while Swedish firm as a high IDV culture suggests more detailed and focused information. So, the findings reject what Mracus and Guld (2000) indicate in their study.

On the other hand, as it is declared by many scholars such as Robbins and Stylianou (2003) and Callahan (2006) message from CEO indicates PD features. It means high PD countries prefer to have a separate part for introducing their CEO and announcing their messages to the customers.

Accordingly more emphasize in mission statements and message from CEO in separate sections of the Iranian beverage site proves its high PD feature as so lack of these indicators in Swedish beverage website reflects its low PD dimension. On the other hand, looking at mineral water companies, both countries neglected message from CEO and mission and vision statement. So, it rejects the findings of previous studies.

**Communication:** opposite to Zamzam, Spendrups has updated information and gives good detailed and categorized contact information as well as annual reports, job openings and classified FAQ. Dissimilar to beverages companies, in mineral water companies, Damavand has updated information and FAQ section while Ramlösa has not. Both corporates are not willing to present data in annual reports, job opportunities, and financial highlights. As it is discussed earlier in the starting page, the currency of website is due to the short term orientation dimension of Hofstede's indexes. As Rajkumar (2003) states, short term orientation sites (here Spendeups) offers current news and events of the firm. In contrast to Spendrups' starting page, in the main page, the Swedish Co gives updated information to its visitors and it supports Rajkumar's findings. On the other hand, Ramlösa fails in this dimension. It may occurs because either the Ramlösa's web designer neglects the currency of the website or considering LTO index in the currency of the web site cannot be enough and some other interrelated components should be explored by the scholars in the future studies.

Moreover, as Robbins and Stylianou (2003) and Callahan (2006) suggest listing of job opportunities represents UAI index, annual reports and financial high lights shows MAS features and FAQ is related to LTO dimension of the site. Connectedly, Iranian websites with higher UAI than Swedish should have job opening component but they have not. So, Iranian websites fail in the correlation between UAI and job opening factors while Sweden with low UAI is successful in designing this component in its website. Further, Iran is a relatively masculine country, so annual reports and financial highlights should be more obvious in both Zamzam and Damavand sites than in Swedish Spendrups and Ramlösa companies. Similarly to the UAI dimension, Iranian websites are unsuccessful in this MAS indicator again. FAQ is due to LTO index. Spendrups with a low LTO is provided this section while Ramlösa does not. As there is no investigation about Iran's ranking in this cultural marker, the writer cannot have any comparison in this respect and it is one of limitations of the study.

**Language:** Zamzam offers three languages options that only Persian language is activated in the website at the time of study. Although Spendrups is presented its data in two Swedish and English languages, there are many parts in the website that remain untranslated and are available only in Swedish. In contrast, Damavand offers the information in two Iranian and English version and all the details are both translated and back translated properly while Ramlösa website is only in Swedish.

According to Nantel and Glaser (2008) language adaptation in web communication is a key factor in a good communication with the clients and the success of any global corporates. In addition, using English as a lingua franca in most sites will improve the successful interaction between firms and the customers (Walker, 2002; Fletcher, 2006; Nantel & Glaser, 2008). Thus, it seems that Zamzam cannot be considered as a successful firm in reaching out-sider audiences and Spendrups is more successful than Zamzam in this regard. It seems Damavand the Iranian mineral water company is the most successful and Ramlösa the Swedish one is the least effective company among the four corporations.

One remarkable point observed by the author is that Spendrups has many links to other local websites while Zamzam has not. Additionally, Damavand's English version has many links to other secondary language links and Ramlösa uses many hyperlinks to other Swedish language sites. Referring to Badre (2000) findings about Deep vs. Shallow sites, Spendrups and Ramlösa can be considered as Deep sites because of their hyperlinks to the other native language websites. Moreover, Damavand is a shallow website as it uses many links to other secondary languages web sites from its secondary webpage.

### 5.2.2. Design of the main pages

**Lay out:** All four websites use symmetrical structured vertical lay out. According to Marcus and Gould (2000), Marcus (2002), Robbins and Stylianou (2003), Cook and Finlyson (2005), Fletcher (2006) and Mousavi and Khajeian (2012) high PD and high UA countries (Iran in this study) prefer to design their websites in vertical, highly structured and tall hierarchical mental models with symmetrical complex design while low PD and low UA countries (here Sweden) like to have less structured and shallow hierarchical mental models web design. As it is found in this study all four countries use structured symmetrical vertical lay out similarly which is in contrast to former scholars findings. The only difference is that, Zamzam uses longer vertical

hierarchical lay out than Spendrups that reflects highly structured and tall hierarchical mental model of high PD feature of Iranian Company and it proves what scholars found before.

**Animation/ Flashes and Sound:** Based on what is found in the study, both Iranian companies (Zamzam and Damavand) use flashes in their main pages and both Swedish firms (Spendrups and Ramlösa) are static. By refer to Sun (2001), Walker (2002), Fletcher (2006) and Würtz (2006) the HC cultures' web page (Iranian in presented study) use more pictures and animation as well as non-textual communication elements like flashes. Besides, LC web pages (like Swedish) are willing to lower use of animation and more text. In addition, Würtz (2006) states that Swedish web sites are completely static. The findings of the study emphasize that result of the study is compatible with the previous investigations.

**Images:** Zamzam uses colorful images and texts in the main page while Spendrups have photos without any text. Both Damavand and Ramlösa practice pictures of the nature as the background in their main pages. The similar point for all the four websites is that all of them use the image of the products itself without any individual. There are two exceptions. The first is the picture in Zamzam website that advertises an energy drink and shows a man playing billiard in the back and the image of the drink in front. The second picture is in Spedrups's website showing two happy women drinking mineral water in the nature.

As an overview, both Iranian and Swedish firms choose the same manner in selecting images in their sites. Using Würtz (2006) findings, it is expected that Iranian web sites as a HC culture use the images of people and families that reflects the collectivistic feature of the country but both Zamzam and Damavand do not. Accordingly, Würtz (2006) mentions in LC cultures (as Sweden) images portrays the life style of individuals which is enjoying the nature and it is manifested in the small image of two women enjoying drinking water in the nature in a sunny day.

In addition, Marcus and Gould (2000), Robbins and Stylianou (2003) and Callahan (2006) believe high PD (Iran) sites use of the images of buildings and logos frequently while in low PD and low IDV (Sweden) websites images of elderly people or group achievements are emphasized. Referring to what is explained earlier it seems both websites reject previous researches in using images in their websites.

**Color:** Both Zamzam and Spendrups manifest white color as their back ground. Their difference is in their top of the page. Zamzam uses red color on the top that fades in the middle but

Spendrups applies two colored rectangles on the top. The first is in dark hues and the second is black. In the black rectangle there are different options for navigation in the webpage.

Damavand and Ramlösa have green, blue and white as the most dominant color based on the nature-based features of their sites as their background.

All the four websites use different colors for their font as a means of navigation for the users. These findings support what is found and mentioned earlier in the starting page of those companies.

**Navigation:** Both Zamzam and Spenrups have site map and search engine in their main page. Pointing to any tabs in Zamzam will appear many sub-tabs in opposite to Spendrups that the sub-options will be found in the new page only when the user clicks on the tab in the main page. Additionally, both Damavand and Ramlösa have search engine without site map in their main page.

Looking at literatures, according to many scholars such as Robbins and Stylianou (2003) and Callahan (2006) high UA and MAS cultures (Iranian) use navigation with strong and clear site map while low MAS and UA sites (Swedish) use more complex and maximal content in their navigations. So, the findings of the study confirm aforementioned explorations

## **Chapter 6: Conclusion and Further Studies**

*This chapter will provide a short summary of the presented study and answerers the stated research question. Then it will offer some suggestions for further studies.*

### **6.1. Conclusion**

Nowadays the world is encountered with the rapid growth of internet users all around the world which leads to considering the internet as the most effective and wide-spread network that covers a wide range of people belong to different cultures across the world. World-wide people share their ideas, beliefs, values and cultures through interaction via internet. They can find information in variety of areas such as political, governmental, social, medical as well as marketing data through websites. Using internet is a two-way communication tool. It means the sender like policy maker, health care centers or marketers will provide the data in the websites and the receivers such as users, clients and customers receive the information.

In this way, web-based communication is pondered by many scholars as a powerful means of communication between companies or organizations and clients or customers which give them the opportunity for economic growth and development in the recent decades.

Although internet gives this opportunity in the recent globalized world, the big challenge for the marketers is to create the most effective and successful websites that satisfy users during interaction with the webpages. Reaching to this goal e-marketers should provide as much as information is needed and consider the needs of their target groups from various cultures.

For this reason and with increasing demand of competition among web designers in creating the best websites, many explorations are conducted by scholars related to the mutual interaction between technology and culture. Culturability is a term defined by Barber and Badre (2001) that shows merging usability of the websites and culture and the direct correlation between them. Moreover many scientists applied Hofstede and Hall's cultural markers in their investigations in order to find the importance of culture on the web design for attracting the end-users.

Connectedly, the presented study tends to investigate cultural influences on web-communication as one of the most effective means of interaction between marketers and customers in the market niche. This exploration is a cross-cultural study between Iran and Sweden which is conducted through qualitative comparative inductive method to examine the cultural similarities and differences in website design among four websites i.e. two beverages companies ( Zamzam and Spendrups) and two mineral water firms (Damavand and Ramlösa). As the investigator of this

study is an Iranian student in Sweden, she was curious about the cultural similarities and differences in web design between Iran and Sweden.

The author tries her best to compare these websites without any personal judgment and ideas and discusses the result by the help of previous studies using Hofstede and Hall's cultural frameworks. Reaching to the best, the writer compares the starting pages and main pages of the aforementioned websites as the most effective gate of building web-communication between companies and clients. So, the writer equates the starting pages of beverages companies based on color, animations, lay out, navigation, currency, content of information and language features of the web design. As the mineral water firms have not any starting page, the author parallels the main pages of the four abovementioned websites centered in two separate sections as web content and web design features. Web content consists of corporate information, communication and language while web design contains presentation (lay out, animation, image, and color) and navigation (hyperlinks, simplicity, search engine and site map).

Tables 9 and 10 will identifies a summary of findings of four websites according to the criteria explained earlier.

Table9: Summary of findings of content in beverage and mineral water's websites

	Component/ Related cultural markers	Website/ Countries			
		Beverages Companies		Mineral waters Companies	
		Iran <a href="http://www.zamzangroup.com">http://www.zamzangroup.com</a>	Sweden <a href="http://spendrups.se/">http://spendrups.se/</a>	Damavand/Iran <a href="http://www.damavandmineralwater.ir/main/">http://www.damavandmineralwater.ir/main/</a>	Ramlösa/Sweden <a href="http://www.ramlosa.se/">http://www.ramlosa.se/</a>
Corporate Informatio n	Honors/PDI	One long page with images of different certificates or standards as well as some received awards by the leaders	_____	One page description about some honors and standards that company is received	_____
	History/IDV	One page history including a small image of its products	One paragraph history including a link for more reading which will open in the same page. The new page has long text-based description without any picture	One page without image	One page without image
	Message from CEO/PDI	There is two paragraph message from CEO signed by his name and one image of him	_____	_____	_____
	Mission Statement/PDI	One page mission statement with a picture of many glob with the name of company on it placed in a map	_____	_____	_____
	Press release/PDI	There is One tab named Zamzam news which has 3 sub-sections as The current news, New products and Exhibitions. BY clicking on each, the new contents will be open in the same	One page of different updated news	One page full text news but it is not updated within the past year	_____



		page; each news has option for more reading. The news are not updated			
	Vision Statement/PDI	One page vision statement with a picture on one of the products	One page text with an image of different beverages in back that are fade in blue color with a white written text( Our vision) in front	_____	_____
Communication	Corporate phone, Fax& Email	Is provided	One page including detailed description about how customers can contact with different sections of the company	Provided. Beside sending online email within the website is available	Provided. Beside sending online email within the website is available
	FAQ	_____	There is a classified FAQ section regarding different products in om oss tab	One page is provided	_____
	Headquarter address	Is provided	Is provided	Provided	Provided
	Last update indicator	2012	2013 in press release section	2013	No information
	Current content	Is not provided	2013	2013	No information
	Annual report	Is not provided	Provided as different pdf files from the year 1996 to 2011	_____	_____
	Financial highlites	Some limited information in History section	Provided as different pdf files from the year 2000 to 2009	_____	_____
	Employment overview	Is not provided	One page full text	_____	_____
Job oppenings	Is not provided	Updated pages	_____	_____	
Language	Language translation	The Arabic and English version of the site's language are not working in the time of the study	English and Swedish	English and Persian	Swedish

Table10: Summary of findings of design in beverage and mineral water's websites

Category	Component	Website/Countries			
		Beverage Companies		Mineral water companies	
		Zamzam/Iran <a href="http://www.zamzamgroup.com/">http://www.zamzamgroup.com/</a>	Spendrups/Sweden <a href="http://spendrups.se/">http://spendrups.se/</a>	Damavand/Iran <a href="http://www.damavandmineralwater.ir/main/">http://www.damavandmineralwater.ir/main/</a>	Ramlösa/Sweden <a href="http://www.ramlosa.se">http://www.ramlosa.se</a>
Presentation/ Organization	Lay out	Structured symmetrical and long Vertical	Structured Symmetrical Vertical	Vertical	Vertical
	Animation/ flashes And sound	There are some bobles and round line moving around the Zamzam logo on the top of the page without any sound	_____	Three sequential flashes at the starting point: first company's logo, next a drop of water and the last the moto of the company	_____
	Image	Images in two rows: 1- some big motion pictures of different products in the top of the page 2- categorized small pictures of products in the	Categorized big pictures of different products as well as logos of different beverages without any texts	Big & high quality images of nature and a sunny day as background and small images of products	Big & high quality images of nature and a rainy day as background and small images of products

		middle of the page			
	Color	White background with red colored on the top which fades to the middle of the page	White background with a narrow rectangle dark hues colored on the top	Because the background of the page is a meadow landscape with mountain in the back, green & blue, colors of the nature and sky, are the dominant colors of the page	As the background of the page shows a rainy day, so the main colors are green, blue, white
Navigation	Hyperlinks to other sites	Many	Many	Many	Many
	Simplicity	Simple with limited amount of data	More complex	Simple with limited amount of data	Simple
	Search engine	Provided	Provided	Provided	Provided
	Site map/index	Clear site map	Provided	_____	_____

As it is discussed in chapter 5, the interrelation of Hofstede and Hall's cultural marker with the elements of web-communication through designing an effective website has been examined by many researchers.

Looking at Tables 4, 9 and 10 of the study, the writer concludes that Iranian and Swedish webpages shows similarities and differences. All of them use symmetrical vertical layout and color code for navigation. They utilize the images of products without any people and both mineral water companies from Iran and Sweden have the images of nature as their background because of their nature-based production of mineral water.

These websites have some differences as well. The Swedish web site is static while the Iranian web sites practice animation, flashes and sound or motion pictures.

Regarding the cultural markers, the findings emphasizes that although Hofstede and Hall's cultural indexes are applicable in web design in some extent, it fails in many features in this study. For example, message from CEO that is a feature of high PD countries, is neglected in Iranian mineral water Company as a high PD culture. Another example is giving information about the job opportunities that is related to the UAI dimension. The Swedish beverage website is the only company that offers this option and three others ignore this section in their web sites.

Language adaptation is the most important feature of any web site which cause a user remains in the web page or click away. Iranian Mineral Water Company (Damavand) is the best in this respect because it has a complete version of translated and back translation of the web site in Persian and English languages. The other websites are either in one language like Ramlösa or not working in other languages properly like Spendrups and Zamzam.

## 6.2. Further Studies

Since there is a gap of research in Iranian food industry and web- communication, the writer suggests future studies in this area by paying more attention in either users or web designer's perspectives. The researchers can interview with them about the influence of culture in web design and culturability of the web sites.

The other studies can investigate the marketers' point of views about the necessity of cultural adaptation on web-communication considering the target groups cultural markers.

## References

- Aaker, D.A, Kumar, V. & Day, G.S. (2003) *Marketing research*, USA. Willey & Sons Inc.
- Ahanagar, R. GH. (2009) Aspect of internet advertising in relation to cross-cultural issues Iran vs. USA. *African Journal of Marketing Management*, Vol. 1(8) pp.190-210
- Ali, A.J., & Amirshahi, M. (2002) The Iranian Manager: Work values and Orientations, *Journal of Business Ethics*, Vol 40, pp: 133-143
- Azar, E., Hedvall, R., & Larsson, M. (2011). *What is Swedishness? A qualitative research from the customer- and organizational perspective*. Bachelor Thesis within Business Administration. Jönköping University.
- Badre, A.N. (2000) The effect of cross cultural interface design orientation on worldwide web user performance, *GVE Research Technical Reports*, pp. 1-30
- Barber, W., & Badre, A.N. (2001). Culturability: The meaning of culture and usability. 4<sup>th</sup> *Conference on Human Factors and the Web*. Basking Ridge, New Jersey, USA Conference Proceedings
- Barinaga, E. (1999) Swedishness through Logom, can words tell us anything about a culture?, Research papers series, Centre for Advanced studies in leadership, pp. 1-15
- Becker, Sh.A. & Mottay. F.E. (2001) A Global Perspective on Website Usability, *IEEE Software*, Vol: 18, Issue: 1, pp: 54-61
- Callahan, E. (2006) Cultural Similarities and Differences in the Design of University websites, *Journal of Computer-Mediated Communication* 11.pp. 239-273
- Choi, J. & Geistfeld, L.V. (2004) A cross-cultural investigation of consumer e-shopping adaptation, *ELSEVIER: Journal of Economic Psychology*, Vol. 25, pp. 821- 838
- Cook, J., & Finlayson, M. (2005) The Impact of Cultural Diversity on Web Site Design, *S.A.M. Advanced management Journal*. pp. 15-24
- Cyre, D., et al. (2004). Website design and Culture: An Empirical Investigation. *Sixth International Workshop on Internationalization of Products and systems (IWIPS)*
- Dotan, A., & Zaphiris, P.(2010) A Cross-Cultural analysis of Flickr users from Peru, Israel, Iran, Taiwan and the UK. *Int. J. Web Based Communities*, Vol.6, No.3. pp. 284-302
- Dunker, E., Theng, Y-L., & Mohd-Nasir, N. (2000) Cultural usability in digital libraries, *ASIS Bulletin*, Vol.26, Issue: 4, pp: 21-22

Eristi, S.D.B., (2005) Cultural factors in we design, *Journal of Theoretical and Applied Information Technology*, pp. 117-132

Finnegan, D.J., & Wiicocks, L.P.(2007) *Implementing CRM: From technology to knowledge*. US: John Willey & sons

Flavian, C,Gurrea, R. & Orus,C.(2009) Web design: a key factor for the website success. *Journal of System and Information Technology*, Vol.11 Iss: 2 pp. 168-184

Fletcher, R. (2006) The impact of culture on web site content, design, and structure an international and a multicultural perspective, *Emerald: Journal of Communication and Management*, Vol. 10, No.3, pp. 259-273

Fraternali, P., & Tisi, M. (2008) Identifying Cultural Markers for Web Application Design Targeted to a Multi-cultural Audience, *IEEE Computer Society*, pp.231-239

Ghauri, P., & Gronhaug, K. (2005) *Research Methods in Business studies: A Practical Guide*( 3<sup>rd</sup> ed.) UK: Prentice Hall

Ghauri, P.N, & Usunier, J. (2003) *International Business negotiations*, UK:ELSEVIER Ltd

Gould, W.E. (2005) *Synthesizing the literature on cultural values*, in N. Aykia (ED.) *Usability and internationalization of information technology*, N.J: Lawrence Erlbaum Associates

Grönroos,C. (1989) Defining Marketing: A Market-Oriented Approach. *European Journal of Marketing*, Vol. 23 Iss: 1, pp.52 – 60

Hall, E.T. (1976) *Beyond Culture*, New York: Doubleday,

Hall, E.T., & Hall, M. (1990) *Understanding cultural differences*, USA: Intercultural Press

Hennink, M., Hutter, I. and Bailey, A. (2011) *Qualitative research methods*, SAGE publications Hillier, M. (2003) The role of cultural context in multilingual website usability, *ELSEVIER: Electronic Commerce Research and Application*, pp. 2-14

Hillier, M. (2003) The role of cultural context in multilingual website usability. *ELSEVIER: Electronic Commerce Research and applications*. Vol 2, pp. 2-14

Hofstede, Geert. (2001). *Culture's consequences: comparing values, behaviors, institutions, and organizations across nations*. Sage Publication

Hofstede,G & Bond, M.H.(1988). *The Confucius connection: from cultural roots to economic growth*. *Organizational Dynamics*, 16, 4-21.

Hyde, K.F. (2000) Recognizing deductive processes in qualitative research, *Qualitative Market Research: An international Journal*, 3(2), 82-89

- Kennedy, R. (2000) The forms that www ads take, paper presented at Australia, New Zealand, *Marketing Academy Annual Conference, visionary marketing for the 21<sup>st</sup> century*, Griffith University, Gold Coast
- Kothari, C.R. (2004) *Research Methodology*. Delhi: New Age International Ltd.
- Kolter, P., & Fox, K.F.A. (1995). *Strategic Marketing for Educational Institutions* ( 2nd ed.) New Jersey: Prentice Hall.
- Koutlaki, S. (2010) *AMONG THE IRANIANS A Guide to Iran's Culture and Customs*.US, Nicholas Brealey Publishing.
- Krumar.R. (2005) *Research methodology: a step- by- step guide for beginners* (2<sup>nd</sup>Ed) London: SAGE publication
- Larsson, A.O. (2011) Interactive to me- Interactive to you? A study of use and appreciation of interactivity on Swedish newspaper websites, *SAGE: New media & society*, Vol 13, Issue 7, pp. 1180-1197
- Lin, S.L. (2003) Website design of internet banks in U.S., U.K and Japan unpublished manuscript, *School of Library and Information Science*, Indiana University Bloomington
- Lincoln, Y.S. & Guba, E.G. (1985) *Naturalistic Inquiry*, London: SAGE
- Marcus, A. (2002) Mapping User-Interface Design to Culture Dimensions. *Workshop of CHI, SIGCHI Annual Conference*, 21-24, Minneapolis, USA
- Marcus, A., Baumgartner, & V., Chen, E. (2003) User- Interface design and culture, *LEA*, pp. 153-157
- Marcus, A., & Gould, E.W. (2000) Crosscurrents: Cultural Dimensions and Global Web User-Interface design. *William Whitehurst, The Stock Market*. pp. 32-46
- Mooi, E, & Sarstedt, M. (2011) *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics*. Germany: springer
- Mousavi,M., & Khajeheian, D. (2012) Assessing the Consistency of the Design of Iranian Websites with Cultural Characteristics of their Target Users: An Investigation of Hofstede Model. *Information management and Business review*. Vol.4 No.6, pp. 362-369
- Mousavi, M., & Marthandan, G.(2012) Global website usability guideline versus the perception of Iranian users, *Asian Journal of Management Research*. Vol.2, Issue2, pp.782-791
- Nantel, J., & Glaser, E. (2008) The impact of language and culture on perceived web site usability, *ELSVIER: Journal of engineering and technology management Jet-M*. pp. 112-122
- Newman, W. & Lawrence, A. (2003) *Social Research Methods, Qualitative and Quantitative Research Approaches* (5th ed.) Essex, UK: Pearson Education Limited

- Okazaki, Sh., & Rivas, J.A. (2002) A content analysis of multinationals' web communication strategies: Cross-cultural research framework and pre-testing, *Emerald: Internet Research*, Vol.2, Issue: 5, pp: 380-390
- O'Shea, M. (2003) *Culture Shock! Iran: A Guide to Customs and Etiquette*, Portland: Graphic Art Center Publishing Company
- Pruthi, J. & Kumar, E. (2012) From SEO to SEM- A new area for information system research, *IJM: International Journal of management*, Vol.3, Issue.2, pp. 242-249
- Rajkumar, S. (2003) *University websites: Design differences and reflections of culture*, Unpublished manuscript, school of Library and Information Science, Indiana University, Bloomington
- Raab, D., Ajami., R. A., Gargeya. V.B. & Goddard., G.J. (2008). *Customer Relationship Management: A Global Perspective*. England: Gower Publishing Ltd.
- Riege, A.M. (2003). Validity and reliability tests in case study research: a literature review with "hands-on" applications of each research phase. *Qualitative Market Research: An international Journal*, 6(2), 75-86
- Robbins,S.S.,& Stylianou, A.C. (2003) Global corporate web site: an empirical investigation of content and design. *Elsevier Information & Management*, 40, pp: 205-212
- Saunders, M., Lewis P. & Thornhillm A. (2009) *Research Methods for Business Students* ( 5<sup>th</sup> ed. ). Harlow: Prentice Hall.
- Schmid-Isler, S. (2000) The Language of Digital Genres: A Semiotic Investigation of Style and Iconology on the World Wide Web, *Proceedings of the 33<sup>rd</sup> Hawaii International Conference on System Sciences*. pp. 1-9
- Shay, S. (2001) *Qualitative Methods for marketplace research*. USA: Saga Publication Ltd.
- Simin, Sh., Tavangar, M., & Pinna, A. (2011) CLCWEB: Comparative Literature and Culture. *Purdue University Press*.vol13,Issue 4, pp: 1-10
- Singh, N., & Matsuo, H. (2004) Measuring cultural adaptation o the web: a content analytic study of U.S. and Japanese web sites. *ELSEVIER: Journal of business Research*, pp.864-872
- Smith, S.M. & Albaum, G.S. (2005) *Fundamentals of marketing research*. USA: Sage publications Inc.
- Suchman, Lucy A. (1994) *Plans and situated actions: the problem of human-machine communication*. New York: Cambridge University Press
- Sun, H. (2001) Building a culturally-component corporate web site: An exploratory study of cultural markers in multilingual web design, *SIGDOC*, pp. 95-102
- Thomas,R.M. ( 2003) *Blending qualitative & quantitative research methods in theses and dissertations* [e-book] Caifornia: Corwin Press, Inc
- Walker, H. (2002) If you build it, will they come? Barriers to international e- Marketing, *Journal of Marketing theory and Practice*, 10, 2, pp. 12-21

Willson, J. (2010) *Essentials of business research, A Guide To Do Your Research Project*. SAGE Publication.

.Würtz, E. (2006) Intercultural Communication on Web sites: A cross-Cultural Analysis of Web sites from High-Context Cultures and Low- Context Cultures. *Journal of Computer-Mediated Communication* 11.pp. 274-299

### **Websites:**

Damavand website, Retrieved March 2013 from <http://www.damavandmineralwater.ir/main/>

Hofstede website-Iran, Retrieved March 2013 from <http://geert-hofstede.com/iran.html>

Hofstede website-Sweden, Retrieved March 2013 from <http://geert-hofstede.com/sweden.html>

Khorasannews website, Retrieved Jun 2013 from <http://www.khorasannews.com/News.aspx?type=1&year=1391&month=5&day=3&id=4375836>

mbanews website, Retrieved Jun2013 from <http://www.mbanews.ir/news2/index.php?newsid=176>

Ramlösa website, Retrieved March 2013 from <http://www.ramlosa.se/index.html>

Spendrups website, Retrieved March 2013 from <http://spendrups.se/lib/SubPage.aspx?id=334>

Zamzam website, Retrieved March 2013 from <http://www.zamzamgroup.com/>