

HF720: Localization and the Global Market

Assignment Three: The Interface

**Web-based Order Processing for Users in the UK,
the United States, and France.**

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Introduction

Over the past few years, there have been numerous news stories dedicated to shopping online, especially during the holidays. From topics about credit card security and personal privacy to speed, reliability and quality of service, issues surrounding e-commerce is almost as common as the sites selling products on the Internet today. Most recently, however, there appears to be a focus on usability and user interface design – e-business owners are starting to recognize that well designed sites are the only ones that will result in actual consumer purchases and return on investment (ROI).

Since e-commerce sites have no “local storefront” to speak of, it is interesting to think about how one might fare in the international consumer market. Will small, surface-level issues result in decreased sales, or will it be the deeper, interaction issues that will create challenges to doing business? This paper attempts to examine the surface-level and interaction localization issues for four screens within an e-commerce Web site that are part of the overall ordering process. Using the research available, this series of Web pages will be prototyped in HTML for the U.S. domestic, French, and United Kingdom (Wales, England, Scotland, and Northern Ireland) markets.

Interaction Localization Issues

This section contains a brief discussion about the top three interaction issues that influenced the development of screens in the prototype.

Uncertainty Avoidance

Uncertainty avoidance is an interaction issue that is extremely relevant to e-commerce sites, because shopping online is quite different from the real life experience. According to Samovar and his colleagues, the cultures of Great Britain, Ireland, and the United States are ones that generally do not feel uncomfortable with new experiences or ways of doing things. However, France is classified as a country with high uncertainty avoidance, meaning that they are more hesitant to make use of unstructured or informal mechanisms that may be different from those they may be accustomed to using (69-71). Based on this research, one might surmise that France would be much less likely to purchase items from an e-business than members of the other target cultures.

While uncertainty avoidance is a cultural factor that can influence Internet usage, it is clear that this is not the only issue at hand. Although this July saw the Internet population in the United Kingdom reaching 10 million, recent reports also indicate that Britons in particular feel that shopping online is not for them. One wonders why they cite the experience as “complicated” and “distant”, and more importantly, what can be done to build a relationship with users in all three countries to overcome these negative impressions (ZDNet UK).

High Context vs. Low Context Communication

A culture's preference for context can affect the amount of information (i.e. product descriptions, instructions, etc.) supplied within the Web-based order processing pages. Too much information in a high-context culture might be perceived as "clutter", while not enough information in a low-context culture may also drive potential customers away. As Bogo stated in his presentation, minimalism may not be appropriate around the world.

An individual's comfort level in making decisions (risk aversion) can be attributed in part to their knowledge of the product they are considering. For example, a clothing store provides customers with the opportunity to feel a shirt or pair of pants, which is not possible in an online environment. The only substitution for this activity would be a detailed description or comparison to a well-known fabric. It is fortunate that on Hall's Context Square, all three cultures are described as having a "mid-context" culture (del Galdo and Nielsen, 52). This would seem to indicate that a brief description of items or explanation of concepts would be acceptable to this international audience (and could constitute part of the global core).

Monochronic vs. Polychronic Time

Although it has not been discussed in detail, this author believes that Hall's international variable of time would play a role in the use of localized e-commerce sites. Cultures characterized as having polychronic time are used to multitasking, while those with monochronic time prefer sequential and linear experiences (del Galdo and Nielsen, 53). These differing concepts of time could potentially affect how shoppers will feel about the order-processing interface (overwhelming vs. overly simplistic), as well as how they would go about completing a purchase (linear vs. intermittent interaction).

Surface-Level Localization Issues

This section contains information about the surface-level localization issues that influenced the development of screens in the prototype.

Currency/Online Payment

Although many European countries (including France) joined the European Monetary Union (EMU) in January 1999, transition from a country's national currency is expected to last until the year 2002. While the UK has promised to take part in the Euro conversion (but will not begin to do so until 2002, after the first round of countries has implemented this new currency), Britain is one of the few countries that has the option to forfeit participation (Project Euro).

Based on this evidence, it is clear that localized e-commerce sites will require that both the national currency and the Euro be displayed. In the UK, the national currency is the pound sterling (similar to U.S. paper currency, noted by

the £ symbol) and pence (analogous to U.S. coins, noted by the lowercase letter “p”) ([USA Gateway to Great Britain](#)). In France, the national currencies are French francs (F or FF) and centimes (cts) ([Maison de la France](#)).

In addition to the currencies used to price items sold on an e-commerce site, it is important to consider that the preferred form of payment online is the credit card. Both the UK and France accept the same major credit cards as those used in the U.S. (Visa, MasterCard, etc.), but the minimum purchase requirements may be more strictly enforced.

Icons/Graphics

Web pages in this subset of the ordering process generally do not require extensive use of icons or graphics. However, almost all the major e-businesses on the Internet make use of a product image, a shopping cart/basket icon, and a pad lock icon to indicate transition to secure pages. Since product images will depend upon the type of retail business (which may be influenced by locale), it is both impossible and unnecessary to “localize” these graphics. The only issue surrounding product images is how much detail they must contain to yield purchases (see *High-Context vs. Low-Context Communication*).

On the other hand, the shopping cart/basket and pad lock metaphors may cause problems in France or the UK. For example, someone in the U.S. might typically equate the shopping cart/basket with a grocery or department store. In France, however, there is an abundance of small street markets and neighborhood shops; large supermarkets are few and far between. What’s more, travel sites about France warn: “remember to bring along your own shopping bags, basket or backpack. Only thin and tiny baggies are given away for free” ([Paris Anglophone](#)). Although many sites about living in the UK also boast the street-side markets, information about any cultural differences for this activity cannot be located. Based on the differences in a number of localized e-commerce sites for the UK, however, it would appear as though baskets (rather than carts) are the common storage device.

Another icon commonly used in order processing Web pages is the pad lock icon, which indicates that the transaction (of personal and credit card information) is secure. Although no research on this subject can be located at the present time, it is highly likely that this icon can be considered a cross-cultural or “worldwide” icon. Both Netscape Communication Corporation’s Navigator and Microsoft’s Internet Explorer browsers have indicated secure transactions using this icon in their status bar for many years now.

Text used in conjunction with an image to form an icon should also be considered. Because the English language typically uses the “verb-object” order, many designs incorporate this usage in their design ([Cooper, 217-219](#)). It is fortunate that all three cultures for this Web site follow the same sentence structure ([French Language Course](#)). For additional information on use of text, see *Language Translation*.

Units of Measure/Weight

While most of the world has standardized on the metric system for units of measure, the United States and the UK still rely upon the English customary system of weights and measures. The English system, though derived from a variety of interesting areas (including human body parts, histories of both England and the Roman Empire, etc.), makes international trading more difficult because it requires yet another conversion ([A Dictionary of Units of Measurement](#)).

The metric system (which coincidentally, arose out of the French Revolution), is in many aspects a much simpler system for representing measurements and weights. Only a single basic unit is defined for each quantity, and these are modified to smaller or larger units using prefixes based on powers of ten. The metric system is so widely used that it is also known as the *International System* (SI) of Weights and Measures ([A Dictionary of Units of Measurement](#)). For products on an e-commerce site that require descriptions of their size or weight, it is apparent that the units used will require localization – not for the minority cultures in this case (the U.S. and UK), but for the country in the majority (France).

Time/Date Formats

Dates in the U.S. are typically represented in the format MM-DD-YYYY, using the Gregorian calendar (year). While both the United Kingdom and France follow the same calendar, it is important to recognize that the formatting they use differs. Dates in the UK and France are noted as DD.MM.YYYY ([Quick Reference: International Data Forms](#)). For an e-commerce site, differences like these could be confusing to consumers who expect shipment to occur on a certain date, or to those who print their order confirmation that shows when the order was originally placed.

E-businesses often list the current date and time of day as part of their main navigation. Although the time will not be present in the order processing prototype pages, it is important (as part of the overall site design) that time formats also be carefully considered. The U.S. is comfortable representing time in 12-hour increments, using the abbreviations “AM” and “PM” to designate morning or afternoon. However, many other cultures (including the UK and France) subscribe to a 24-hour time format ([International Integers & Intercultural Expectations, Quick Reference: International Data Forms](#)). Failure to take this detail into account could result in confused users.

Numeric Formats

While some may believe that the language of mathematics is universal, the formats applied to numbers in different cultures may vary. In the United States, numbers we use commas to help readers quickly determine larger numeric values, and periods to denote small ones. However, other countries may use spaces for large values instead (or worse, periods), leading to serious confusion if the conventions are misunderstood. For example, fifteen hundred would be written in the U.S. as 1,500, but in France it would be displayed as 1.500 ([International Integers &](#)

[Intercultural Expectations](#)). The UK also uses the exact reverse of the U.S. domestic notation, writing our 1,500.00 as 1.500,00 ([Quick Reference: International Data Forms](#)).

Postal Addresses and Salutations

One of the most common aspects of the ordering process is the shipping/billing address and customer name. Much like the U.S. has a standard addressing convention, so too does France and countries in the United Kingdom. To determine the proper number of form fields, their length, and those required to be considered a complete postal address, it is important to understand the differences of each locale. Additionally, the manner in which a person is addressed changes based on locale. Referring to a customer or addressing a package with the wrong level of formality could produce negative associations with the site.

For example, cities in UK postal addresses should be capitalized. Postcodes normally have either 6 spaces between it and the county, or are placed on a separate line. Postcodes can include capital letters and numbers, and are usually 6 characters separated into groups of 3 (as opposed to the U.S. 5 or extended 9-digit Zipcodes). In France, a non-abbreviated formal salutation (Monsieur, Madame, or Mademoiselle) should be used as a salutation, and the capitalized family name should be followed by the person's given name ([International Addresses and Salutations](#)).

Color

Someone with an ethnocentric view of interface design might believe that the meanings associated with various colors are universal, when in fact they are not. However, careful use of color in an e-commerce site can not only make the overall design more pleasant to look at, but perhaps even subtly make the user feel more comfortable about ordering products using it.

The best method in designing this international Web site is to choose colors that have relatively the same meanings in the U.S., U.K., and France. The research indicates that blue is symbolic of masculinity and constancy in both the U.S. and U.K. ([Color Perceptions](#)). In France, blue can signify freedom, which is highly valued in an individualistic culture such as theirs ([Week 7 Presentation, Samovar, et al., 67](#)). Therefore, it is relatively certain that the use of blue would be acceptable. Green is another color that, in Western culture, is associated with freshness, renewal, and nature. It is the color that brings the world back to life following a cold, desolate winter ([Color Perceptions](#)). Shades of white and gray are typically viewed as neutral, and would probably be safe to use as additional colors on the site.

Language Translation

Because the United Kingdom is made up of various countries (each with their own cultural identity), it is incorrect to assume that English is the national language. Additionally, British English and American English differ in many ways that interface designers need to be aware of, including spelling and use of vocabulary. Oftentimes, the same word can have entirely different meanings, depending upon the culture ([Differences Between American and British](#)

English). Localization of the Web site for France will require full translation but luckily, the character set is similar. However, it is important that this site make use of “international” or “Parisian” French to increase the likelihood that the site will be understandable by speakers of all French dialects ([French Language Course Page](#)).

When translating into French, expansion for short words such as those used as field captions will expand horizontally by 139% ([Week 7 Presentation](#)). Furthermore, French makes use of various accent characters that are placed above certain letters, which may also slightly increase the vertical space required to display text ([French Language Course Page](#)).

The tone that is used throughout the Web site also needs to be taken into consideration. Being that France has a much higher power distance than the U.S. or countries that make up the U.K, it is probably more important that the tone be polite and lean away from informality, but also steer clear of authoritative text ([Samovar, et. al, 72](#)). Redundancy may also not be tolerated as easily in France ([Week 7 Presentation](#)). Overall, a middle-of-the-road approach would best be suited to meet the needs of these international audiences.

Although there may also be differences in the typographic conventions used for emphasis (particularly for France), this author cannot locate any specific information on the topic. It is probably wise to simply limit the amount of these conventions and rely upon the design and textual content to convey an accurate message.

Navigation/Information Flow

Since all three cultures read in a left-to-right, top-to-bottom arrangement, this will not be a concern for designing the order processing screens or the navigation among them. However, the density of the information (both textual and graphic) may vary depending on the culture. The research for other cultures in this area is sparse, but it can only be assumed that a simple design is better. Although some cultures may be more tolerant and like quite a bit of information presented to them at once (see *Interaction Localization Issues: Monochronic vs. Polychronic Time*) it is important to keep them focused on the task at hand (completing the ordering process). If too much information or options on the screen distract users, they may abandon their original decision to purchase a product, which could have critical implications for the business’ bottom line.

Along the same lines, most Web site designers will advocate that scrolling on a page should be minimized. Although at first glance this may seem like a domestic preference, following this convention should help humans in general focus on the task at hand and will in many cases prevent them from getting frustrated when they do not see the full amount of information on the page. All things considered, it is clear that the navigation and information flow can make or break the user’s online experience and is a business critical variable in the design of the interface.

Prototype for Web-Based Order Processing

For the purpose of this assignment, a prototype has been developed for four screens that make up any order processing Web site. The “Item Detail Page” is where users find out about a specific product and can initiate the ordering process by placing the item in their “shopping cart”. The “Shopping Cart Page” is where users can view all the products that make up their current order, update quantities, review prices, discounts, and availability, and if desired, empty their cart. The “Billing/Shipping Information” page collects the customer’s billing and shipping information (including their credit card information, multiple addresses, and preferred shipping method). After submitting their order, the customer receives an “Order Confirmation” (receipt) as proof of their submission.

Each of these screens has been developed with the culturally significant concepts described in this paper in mind. Because users are generally tolerant and focus needs to be placed upon those factors that directly influence business needs and ROI, not all of these variables may be explicitly noted. Since the differences among these cultures are not as dramatic as it might have been with others, design differences for localization are noted on the same screen. Each of these screens is available in HTML format and as attachments to this paper.

As a side note, one important concept that this author believes our German human factors speaker brought to light is whether or not the “.com” Web site is the international page leading into a localized version or whether it is the U.S. domestic page. Ideally, it would be the international “splash” page that provides options for the user to choose their culture (see <http://www.buy.com> for a great example of this).

Conclusion

Designing a prototype of even a few screens for users in more than one culture can seem daunting at first. However, when one is armed with knowledge about the cultures in question and is aware of the deeper interaction issues that can be used to generate a global core, interface design becomes a manageable task. Most surface-level issues can be handled in localized versions of the software or Web site, as long as developers plan ahead of time. In cases like an e-commerce site, where a user’s interaction with a site can mean the success or failure of a business, designing prototypes like this one can make or break you. It is in these situations that effective, intercultural user interface design is even more critical and hopefully, more recognized by management as a necessary part of the development process.

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