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Does Culture Matter?: Identifying Cross-national Dimensions in Japanese Multinationals' Product-based Websites

SHINTARO OKAZAKI

INTRODUCTION

As the Internet has revolutionized the world economy, multinational enterprises (MNEs) have drastically shifted their communications strategies into cyberspace. Total online advertising revenues are projected to reach an astonishing US\$28 billion worldwide by 2005, compared with US\$4.3 billion in 1999 (NE Asia Online 2000). MNEs are increasingly realizing the potential of the Internet as an effective communications tool, and they have established corporate websites, on which they integrate competitive product information and an online transaction platform (Dou *et al.* 2002). In this vein, websites can be seen as a global interactive communications medium, where consumers across the world can interact with the company, and seek and find almost every kind of information regarding the company and its products and services (Hwang *et al.* 2003; Roberts and Ko 2001). Consequently, in the attempt to meet international consumers' needs MNEs now even offer their websites in different languages (Warden *et al.* 2002). However, there has so far been little research into the issues raised by such

A b s t r a c t

Despite the increasing importance of marketing communication on the World Wide Web, little effort has been made to shed light on the role of culture in how multinationals' create websites for home-country and host-country markets. This study aims to explore cross-national differences in the product-based websites created by Japanese firms for two different markets, Japan (home country) and the USA (host country). A theoretical framework was based on Hall's (1976) high versus low cultural context. Five hypotheses were formulated to empirically test three principal variables: information content, creative strategies and cultural values. A content analysis of 100 websites was performed by native coders.

The multivariate discriminant analysis revealed that the two market samples were successfully classified according to their cultural affiliations for all the variables examined. However, the findings provide only limited support for the proposed links between cultural context and web content in term of information cues, cultural values and creative strategies. Specifically, while the multivariate discriminant analysis confirmed that the two market samples were statistically classifiable into their cultural affiliations for all variables, it failed to recognize widely accepted culture-specific influences: a greater usage of collectivism and emotional appeals in the Japanese market sample. Nevertheless, a higher informativeness remains its significant discriminator.

Keywords: Internet, culture, Japan, marketing communications, multinationals, website

A u t h o r s

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websites, directed as they are to culturally and linguistically diverse groups.

This study attempts to explore the heart of the issue, that of cross-national differences in Japanese MNEs' marketing communications on the World Wide Web (WWW). Specifically, the author conducted a content analysis of 100 product-based websites in Japan (the home-country) and the USA (the host-country). The principal objective was twofold: to examine the divergence of cultural factors communicated on the websites, and to explore whether Japanese MNEs adapted their online communications for the American market.

The USA was chosen because it is Japan's largest economic partner in external trade, and Japanese MNEs are thus likely to deploy their most important resources to capture its market. The two countries also differ substantially on important cross-cultural dimensions, in terms of core values and communication styles, which renders tests of our hypotheses reasonable. Further, according to a recent survey, there are now approximately 678.3 million people online in the world, among whom English (35.2%) and Japanese (10.3%) are the first and third most dominant languages (Global Reach 2003). Thus, examining the two markets that are the largest English-speaking and Japanese-speaking zones seems likely to produce very meaningful results.

The remainder of the paper is organized as follows. First, the significance of the study is justified. Next, the major literature regarding Japanese marketing communications, cross-cultural Internet communications research, and the principal conceptual frameworks is reviewed. Hypotheses and research questions are then developed, and the design of the content analysis is explained. Then, study results are presented, and finally we provide managerial implications and future research directions.

SIGNIFICANCE OF THE STUDY

Leading MNEs, such as Sony, Hewlett Packard and Microsoft, now provide multiple versions of 'global sites', by focusing on non-English speaking consumers in their local languages. The creation of such multiple-language sites reflects a desire to 'develop a standardised brand image by the identical combination of content, graphics, backgrounds, and multimedia effects throughout all of their websites in different languages' (Roberts and Ko 2001). However, there has been a lack of cross-cultural research into a fundamental question, whether such websites differ from one market to another in cross-cultural content dimensions. In particular, only a few studies have examined non-Western enterprises in this area (Dou *et al.* 2002; Fink and Laupase 2000; Okazaki and Alonso 2002, 2003). Our results offer valuable resources for both marketing practitioners and scholars,

primarily because both American and European marketers often overlook the gap between Eastern and Western cultures.

This study follows three basic approaches that have been regarded as the most important ways to investigate cross-cultural marketing communications. One is to examine the type and amount of the information in the main selling argument. A second is to extract the cultural values reflected in advertising messages, focusing on the psychological impact on multiple cultures. A third is to identify the creative strategies employed in advertising, as moderated by a set of rational as well as emotional factors influencing message content and execution.

JAPANESE CULTURE AND ADVERTISING

During the 1990s, cross-cultural explorations of Japanese marketing communications were frequently reported, generally in comparison with their American counterparts. In fact, Japan ranks second to the USA as the country most studied in advertising content analysis studies (Abernethy and Franke 1996). The predominant research theme is the evaluation and comparison of information content, and most studies adopted Resnik and Stern's (1977) instrument, which consists of 14 information 'cues', such as price, quality, performance and so forth. This literature provides evidence that Japanese advertising contains a higher level of informativeness than American advertising, primarily in the print medium (e.g., Hong *et al.* 1987; Keown *et al.* 1992; Madden *et al.* 1986; Ramaprasad and Hasegawa 1992). As regards cultural difference in the types of information presented, the Japanese tend to focus on 'very specific details concerning packaging, design, safety features and guarantees', while Americans are sensitive to the evidence, and to the persuasiveness of the arguments employed (Mueller 1991).

With respect to cultural values, Belk and Pollay (1985) found that Japanese ads tend to stress 'social status' and 'materialism' more than their American counterparts. Belk *et al.* (1985) and Belk and Bryce (1986) conducted similar comparative analyses, and pointed out that although clearly 'Americanized' in style, Japanese ads tend to conserve deep-rooted cultural values. Mueller (1987) explored the 'Westernization' of Japanese print ads, and asserted that the usage of traditional collectivistic Japanese values, such as 'group consensus', decreased considerably from the 1970s to the 1980s. In a subsequent study Mueller (1992) confirmed that Japanese ads are still likely to use traditional 'soft sell' as opposed to 'hard sell' appeals, and that this tendency had if anything increased.

Ramaprasad and Hasegawa (1992) focused on advertising creativity and argued that Japanese television commercials are likely to use 'symbolism' and 'emotional appeals' more than those of Western firms. Lin (1993)

■

echoed this finding, pointing out that Japanese commercials prioritize the importance of creating a 'mood for consumption'. Also, Japanese consumers are said to appreciate highly 'subtleties' and 'imagery', while advertisers tend to seek 'the sophistication of either a physical or emotional embodiment' (Lin and Salwen 1995). In this vein, Miracle (1987) proposed that a 'feel — do — learn' sequence, rather than a 'learn — feel — do' hierarchy of effects, accounts for Japanese consumer behaviour.

However, one apparent paradox is the co-existence in Japanese advertising of both high emotionality and high informativeness. Mueller (1991) attributes this contradiction to differences in the media analysed. In fact, the majority of comparative studies on information content examined print media (e.g., Hong *et al.* 1987; Madden *et al.* 1986), while research on creative dimensions focused primarily on television (e.g., Lin 1993; Ramaprasad and Hasegawa 1992). Mueller's argument is corroborated by Lin and Salwen (1995) and by Keown *et al.* (1992), who both found that the information content of television commercials is higher in the USA than in Japan.

CROSS-CULTURAL WEB COMMUNICATION RESEARCH

A careful examination of the literature on traditional media clearly indicates that advertising reflects some of the principal cultural characteristics of a given market. Thus, in relation to our study objective, there arises a fundamental question: whether a culture affects the content dimensions of websites. However, research concerning the cultural aspects of Internet communications remains scarce.

Oh *et al.* (1999) examined 50 American and 50 Korean target ads, and concluded that there was no significant difference in creative and technological aspects. However, applying the Resnik and Stern (1977) information classification system, they found that American web ads are more informative than their Korean counterparts. Yoon and Cropp (1999) conducted a similar study of emotional appeals and information content on 20 US and 20 Korean brand websites. Significant differences were found not between countries, but between two product categories: websites for 'rational' products (e.g., computers, automobiles, audio systems and airlines) contained more information cues, while those for 'emotional' products (e.g., underwear, cosmetics, beer and beverages) were more mood-oriented. On the other hand, there were no technological differences between the two countries, in the usage of graphics, animation and video. Similarly, Ju-Pak (1999) compared target ads from the USA, the UK and Korea, and found no significant differences in information content among the three countries, whereas creative strategies varied in emotional and visual execution.

Recently, Okazaki and Alonso (2002) conducted a content analysis of 60 Japanese MNEs' websites created

for the Japanese, Spanish and American markets, and examined information, cultural values and creative strategies. Despite a small sample size, they found significant differences in terms of individualist and collectivist values, as well as in the level of informativeness across the three market samples. Similarly, Dou *et al.* (2002) examined important commercial attributes on 463 exporters' corporate websites in three countries: Canada, Denmark and Malaysia. They found that a country's Internet development and its website communications capability are closely related.

KEY CONCEPT: CULTURAL CONTEXT AND MESSAGE SYSTEMS

Many of the studies considered above employed diverse theoretical frameworks to focus on how culture influences the content of marketing communications. Among them, Hall's (1976) context of culture has been used as a theoretical bridge to explain the differences between the Eastern and Western communication systems. Hall (1976) developed a conceptual framework for intercultural communications based on the high-versus-low context of culture. 'Context' refers to the fact that when people communicate they take for granted how much the listener knows about the subject under discussion. A high-context communication is one in which most of the information is either in the physical context or internalized in the person, and very little is in the coded, explicit, transmitted part of the message. The Japanese tend to emphasize indirect and non-verbal modes of communication, and Japan has been regarded as a typical example of high context culture. In contrast, Americans show a clear preference for low-context communication, in which the mass of the information is vested in the explicit code. This leads to the direct and verbal persuasion that is often used in the USA. In marketing communications, high-context cultures tend to use indirect or less wordy messages with more visuals or symbols, while low-context cultures employ direct, textual and analytical argumentation (De Mooij 1998).

Gudykunst and Ting-Toomey (1983) argue that the concepts of low context and high context are analogous to individualism and collectivism, respectively. 'Individualism versus collectivism' has been a central theme in many cross-cultural studies, because this dimension addresses the degree to which a culture relies on and has allegiance to the self or to the group. In cross-cultural marketing communications, this dyad has been found to involve, on the individual dimension, a strong emphasis on individual determinism (Mueller 1992), and a relationship between individualism and direct speech techniques (Frith and Wesson 1991), and on the collective dimension a reluctance to use confrontational practice (Ramaprasad and Hasegawa 1992), among others.

Furthermore, the contrast between high and low cultural contexts has been discussed in parallel to emotional and rational message appeals. For example, De Mooij (1998) argues that in the USA ‘along with a trust in facts goes a distrust of emotions, advertisers tend to be afraid of emotional advertising’, and therefore, ‘they think the rational appeals for their products and services are much more important than the consumer thinks they are’ (p 149). This is a natural consequence of Westerners’ tendency to think that ‘information that serves to enhance rational decision making is good information’ (Batra *et al.* 1997: 673). Therefore, hard sell approaches, for example, explicit comparisons and aggressive brand repetition, are often used in the USA. In contrast, Japanese advertisers tend to appeal more to the emotional level of the consumer, building atmosphere and friendly relationships (Mueller 1987, 1992).

RESEARCH HYPOTHESES

On the basis of the preceding arguments, we propose a theoretical framework for this study, as shown in Figure 1. First, the context of culture determines the ‘type’ of information to be delivered: verbal or non-verbal. Here, despite the widely accepted interpretation of Hall’s proposition, we argue that the cultural context does not control the ‘quantity’ of information, but rather the ‘quality’ of information. Second, this preference for verbal or non-verbal information determines the way in which to deliver messages: rational or emotional strategies. Finally, along with the type of information and creative strategy, the ‘meaning’ of the message will be influenced by core cultural values: individualism or collectivism.

As reviewed previously, there is abundant empirical support for this conceptualization in the literature, in terms of information content (e.g. Hong *et al.* 1987; Keown *et al.* 1992; Lin and Salwen 1995; Madden *et al.* 1986), creative strategy (e.g., Lin, 1993; Ramaprasad and Hasegawa 1992), and cultural values (Belk *et al.*

1985; Belk and Bryce 1986; Belk and Pollay 1985; Mueller 1987, 1992). The issues to be examined in this study are therefore the three principal attributes of marketing communications, namely information content, cultural values and creative strategies.

Hypotheses related to information content

Overwhelming empirical evidence shows that there are important cross-cultural differences in the amount of advertising information. In particular, Japan has been found to be the country in which promotional messages include the highest level of information (Abernethy and Franke 1996). Furthermore, it is often said that the Japanese tend to be very susceptible to obscure product conditions, requiring especially a detailed price description along with an appropriate source for the credibility of the information (Lazer *et al.* 1985; Lin 1993; Miracle 1987). In contrast, the USA tends to rely on more practical information, such as performance, warranty/guarantees and safety, and the presentation of ‘facts and attributes to showcase product superiority’ (Lin 1993: 44). This argument therefore leads to:

H1: The Japanese market sample will be more informative than the American market sample.

Hypotheses related to cultural values

Collectivist culture greatly enhances the formation of a sense of belonging, mutual reliance, empathy, dependency and reciprocity. Hence, ‘group integrity’, or being an integral part of the whole, is highly respected in such a society (Triandis 1995). Collectivist behaviour is more commonly observable in Japanese society, as Japanese socialization practices are based on the feeling of *amae*, originating from the intense closeness of the mother — child bond (Doi 1973). Typically, *amae* has been defined as ‘the sense of, or the accompanying hope for, being lovingly cared for and involves depending on and presuming another’s indulgence’ (Markus and Kitayama 1991). In this regard, Mueller (1987, 1992) found that the use of this appeal in Japanese print advertising has decreased considerably. However, a recent survey conducted by the Nomura Research Institute (1998) found that although the numbers who support an individualist lifestyle increased from 1985 to 1996, respondents also showed an increasingly strong aversion to social isolation. The study suggests that this tendency helps to explain the extremely rapid diffusion of mobile communication devices in Japan in recent years. The following hypothesis is therefore formulated:

H2: A higher percentage of the Japanese market sample than the American market sample will emphasize ‘group integrity’.

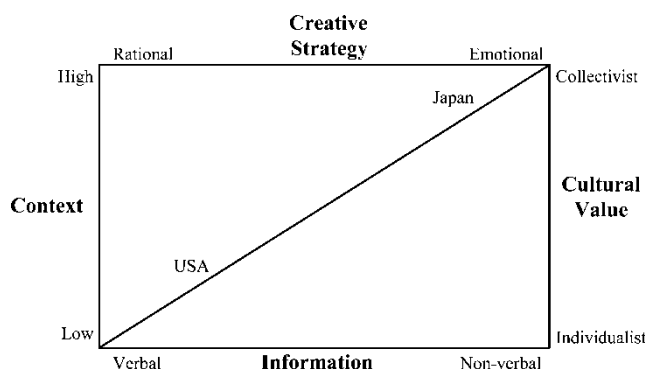


Figure 1. Theoretical framework of the study

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The combination of Confucian culture and collectivism results in long-term thinking in a large part of the Asian world, while the combination of strong respect for tradition and short-term orientation is highly stressed in a number of Western countries. Triandis (1995) argues that social relationships in an individualist culture are likely to be superficial and short-term and thus disappointing to collectivists, and that individualists need to be trained to build long-term relationships that may offer little immediate benefit. De Mooij (1998) expands this explanation, arguing that 'a sharp difference between Americans and Japanese is the difference between control of time (management of deadlines) and control of human relationships'. In the USA, products are described as an efficient way to save time, while in Japan they are shown as a guiding principle of future productivity. Given these arguments, it is posited that:

H3: A higher percentage of the Japanese market sample than the American market sample will emphasize 'long-term orientation'.

Hypotheses related to creative strategies

Emotional and rational creative strategies are analogous to 'feel' and 'think' strategies, respectively, in turn corresponding to soft sell and hard sell approaches. Soft sell tends to emphasize messages using more emotions, such as joy, happiness, surprise or sadness, in the attempt to create a mood and capture consumers' consonance. By contrast, hard sell stresses messages that verbally communicate facts and data through elaborate argumentation (De Mooij 1998; Gudykunst and Ting-Toomey 1988). Traditionally, Japanese advertisers exhibit a strong preference for emotional appeals to create and transfer 'the intended "feelings" to consumers [rather] than detailing specific product attributes and quality' (Lin 1993: 42). Similarly, earlier research reports that Japanese print advertising employs more emotional appeals and is also more informative (Hong *et al.* 1987). Therefore:

H4: A higher percentage of the Japanese market sample than the American market sample will employ 'emotional appeals'.

Writing systems are parallel to the context of culture, and are another important aspect of communications. Japanese use logographic writing systems with ideograms called 'Kanji', which were originally adopted from ancient Chinese characters. While alphabetic systems transmit only sound, logographic systems can transmit both sound and the meaning of the word. Kanji is also a visual image or symbolic representation of the concept, which can play an important role in visual processing (Mukai 1991; Pan and Schmitt 1996). Lin has suggested that this symbolism, along with the use of metaphor, is an important aspect of Japanese advertising (Lin 1993). Thus, it is proposed that a combination of symbolism and

metaphor will work on websites as visual and pictorial communicative modes that create imaginative or artful representations of possible worlds. This leads to our final hypothesis:

H5: A higher percentage of the Japanese market sample than the American market sample will employ 'symbolic metaphor'.

METHODOLOGY

As a research methodology this study employs content analysis, which has been recognized as a useful technique for identifying cross-cultural differences, including online marketing communications (McMillan 2000; Okazaki and Alonso 2002).

Data collection

In order to provide the strongest possible test for the hypotheses across countries, efforts were made to create an identical information set comprised of 'equivalent' product-based websites, created by the same Japanese firms in both Japan and the USA (see Figure 2).

Therefore, 50 listed companies were selected from an online database of the Tokyo Stock Exchange during the second week of August 2001, according to the following criteria:

- 1 Annual income greater than \$80 million;
- 2 Foreign direct investment in more than five countries; and
- 3 Corporate home pages in both Japan and the USA

Only 50 companies met all three conditions. Table 1 presents the MNEs examined in this study. As can be clearly seen, almost three-quarters of the firms produce non-durable goods, reflecting the strong Japanese presence in this industry worldwide. Only 10% of the firms have established 'global sites' with several language options, while the majority offer websites with local languages and country URLs.

Second, one specific product or brand was chosen for each of these firms, according to sales volume and the level of public exposure. This procedure was adopted from Harris (1994), in order to 'obtain meaningful and representative indications' regarding multinationals' promotional strategies across markets. This practice also makes sense for Japanese MNEs, since Japanese brands are normally corporate brands, with a global presence and an extensive geographic reach (Pan and Schmitt 1996). Therefore, extracting one specific product greatly simplifies the analytic procedure, without diluting the importance of product variations. In total, 100 websites (i.e., 50 products in each of two countries) were examined in this study.

Japanese market sample



The Perfect Experience


Japan
 ホーム ▶ サイト内検索
 ▶ 家庭用製品

THX Ultra2認定
A/Vコントロールアンプ

AX-V8000



希望小売価格 350,000円(税別)
 自販式マルチブランドリモコン付属
 AVシステムコントローラ
 RM-A2500X (AX-V8000特別仕様) 付属


Hi-Fiコンポーネント



THX Ultra2認定による高品質7チャンネルパワーアンプに、CCコンバーター、マルチチャンネルDAP、プレジジョンダウンミックスコンバーターなどビクターの先進技術を凝縮した、本格AVアンプAX-V8000。

THX
SURROUND EX
MPER-2 AAC 対応



>> 主な仕様はこちら

AVアンプとしての最高峰を求めて、THX Ultra2の認証取得と世界最速・大容量DSPの採用と高音質を追求するベシックテクノロジーの融合。

Emphasis on price

Visual indications

‘Industry certificate’: strong credibility needs

American market sample

Practical and functional information

Rational reasoning

Wordy, hard-hitting presentation

Figure 2. Examples of product-based websites from the two markets

Unit of analysis

The unit of analysis was determined to be the product-based page of corporate websites, examined to the second level of hyperlinks. Whenever no relevant information was found on the first page the coders were allowed to click the hyperlinks only once. The reason for this was that evaluating an entire site could be extremely time-consuming as well as confusing (Ha and James 1998). Also, Hwang *et al.* (2003) suggested that coding only the first page, excluding the analysis of hyperlinks, would provide meaningful information.

Therefore, limiting the unit of analysis to a minimum was considered to be more appropriate in improving accuracy in the light of our primary objective: to identify major differences between the two market samples, not to scrutinize every detail of a whole site. The unit of analysis included textual information, video, audio, graphics and animation, with banner ads and pop-up messaging excluded. The latter were not included as units of analysis because the main purpose of both banner ads and pop-ups is to catch consumers' attention. Neither contains enough visual or verbal material to allow meaningful analysis (Ju-Pak 1999; Oh *et al.* 1999).

Table 1. Product categories and website classification

<i>Product categories</i>	<i>%</i>	<i>Global sites¹</i>	<i>Country sites²</i>
Consumer durables	34	Bandai, Hitachi, JVC, Pentax	Brother, Canon, Daikin, Fuji Film, Konica, Minolta, Mitsubishi Electronic, Nikon, Panasonic, Pioneer, Sanyo,
Electronic equipment	24	Mitsumi	Epson, Fujitsu, Icom, Kenwood, Kyocera, NEC, Oki, Ricoh, Roland, Sharp, Toshiba
Automobile and accessories	18	Bridgestone, Toyota	Honda, Isuzu, Kubota, Mazda, Mitsubishi Motors, Nissan, Suzuki,
Industrial products	16	NSK	Ebara, Koyo, NCR, Omron, Sakata Inx, YKK, Yokogawa
Miscellaneous	8	Casio, JAL	Citizen, Hoya

¹ Firms offering a global site with multiple language/country options.

² Firms offering separate country sites with localized URLs in the two markets.

Coding instrument

The coding instrument consists of three parts. First, a set of 12 information cues, originally based on Resnik and Sterns' (1977) information classification system, was adopted from Okazaki and Alonso (2002) to measure the information content of product-based websites. The categories examined were: price/value, packaging, shape, components/contents, quality, performance, guarantees/warranties, availability, special offers, safety, independent research, company research, and new ideas.

Second, 20 cultural values, originally based on Cheng and Schweitzer (1996) and Mueller (1987, 1992), were adopted from Okazaki and Alonso (2003). The categories were: competition, exuberance, pragmatism, rational, self-esteem, directness, short-term orientation, activeness, youth, individuality, harmony, precision, oneness with nature, passionate, social status, indirectness, long-term orientation, passiveness, veneration for the elderly, and group/family orientation.

Finally, 12 creative strategies were developed on the basis of various studies (e.g., Ghose and Dou 1998; Gudykunst and Ting-Toomey 1988; Leogn *et al.* 1998; Lin 1993; Martenson 1987; Ramaprasad and Hasegawa 1992). They were: emotional/psychological appeals, entertainment, celebrity endorsement, symbolic/visual metaphor, brand repetition and familiarization, habit-starting, comparison, logical reasoning, interactive communication, special incentives, curiosity arousal, and personalized choice/attention.

These instruments were originally prepared in English and then translated into Japanese, using the 'back translation' technique suggested by Brislin (1980). The quality of the translation was examined by having the materials translated back into the original language by an independent translator.

All these measures were categorical, and the coders judged only the existence of each category, by assigning a number '1' or '0' for 'Yes' or 'No', respectively. With

regard to information content and creative strategies, coders were allowed to check as many categories as they found per website. With regard to creative strategies, coders were instructed to place an equal emphasis on the textual and electronic parts of websites. As for coding cultural values, it was decided that the number of categories identified by the coders would be limited to three dominant values per website in overall impression (the website's 'gestalt'), textual element, and electronic element (Pollay 1983).

Coder selection and training

In accordance with Kolbe and Burnett's (1991) recommendations, two native coders, both of whom were unaware of the study's purpose, were hired for each country (four in total). They were then trained, in two sessions, to grasp the operational definitions of all the variables. During these sessions, all disagreements between the two coders were solved through discussion in order to give the tests higher validity, a method suggested by Kassarian (1977). In all three analyses, whenever coders encountered coding disagreements, group consensus took priority over individual judgement.

Reliability

Two reliability tests were carried out in this study. First, an intra-coder reliability test was performed over a one-month interval on 20% of the sample using Holsti's (1969) reliability formula. Average scores exceeded 85 percent, the minimum suggested by Kassarian (1977), and were therefore considered to be satisfactory. Second, an inter-coder agreement was calculated using a reliability index suggested by Perreault and Leigh (1989), and considered the best by various researchers (Kolbe and Burnett 1991). After coding all the web pages, the

Table 2. Reliability index (I_r)

	Two native coders			Final coder and the author		
	Information content	Cultural values	Creative strategies	Information content	Cultural values	Creative strategies
Japan	0.83	0.83	0.80	0.85	0.81	0.79
US	0.77	0.80	0.79	0.81	0.77	0.81

Notes: $I_r = \{[(F/N - (1/k))][k/(k-1)]\}^5$ for $F/N \geq 1/k$; $I_r = 0$ for $F/N \leq 1/k$

where F is the observed frequency, N is the sample size, and F/N the percentage of agreement. All values are based on the average of reliability indexes calculated for each of 12, 20 and 12 categories of information content, cultural values and creative strategies, respectively.

author evaluated the same sample independently and later compared his results with those of the coders. As Table 2 shows, the majority of the reliability indexes exceeded the critical value of 0.80 recommended by Perreault and Leigh (1989).

RESULTS

To test the hypotheses proposed in this study, multivariate statistical tests were performed. In each test, all of the variables were entered into a stepwise discriminant analysis. The use of a nominal dependent variable in the multivariate technique has been found to be appropriate under certain situations (Gessner *et al.* 1988). The rationale for adopting multivariate analysis was that it was assumed that the distinguishing features of explanatory variables are formed on the basis of their cultural affiliations. Thus, it should be possible to classify them into two groups (i.e., the Japanese and American market samples) according to the relative importance of such variables.

First, Table 3 summarises the results from a discriminant analysis applied for 12 information cues. The results indicate a function that was statistically significant (Wilk's Lambda = 0.546; Chi-Square = 57.715; $p = 0.000$), indicating that the two market samples distinctively exhibit their overall informativeness. Seventy-nine percent of the websites examined for their level of informativeness were successfully classified in relation to their cultural affiliation. Because the total number of information cues was 313 in the Japanese market sample and 307 in the American market sample, the former was slightly more informative than the latter. This finding lends support to Hypothesis 1.

Five out of 12 individual information cues contribute to the discriminating power of the function. The strongest discriminator appears to be company research ($r = 0.854$), followed by performance ($r = -0.46$), components/contents ($r = -0.40$), price/value ($r = 0.32$), guarantees/warranties ($r = -0.25$), and safety ($r = -0.25$). As prior research suggests, the Japanese sample tended to

focus on economic and credibility sources, while the American sample emphasized practical and functional attributes.

Second, a statistical analysis of 20 cultural values is shown in Table 4. The two market samples were statistically separable at a level of $p = 0.000$ or better (Wilk's Lambda = 0.389; Chi-Square = 90.663). The classification results indicated that 90% of the websites were correctly classified. Only 4 out of 20 values, however, contributed to the discriminating power of the function. The primary discriminator was passiveness ($r = -0.76$), while pragmatism ($r = -0.63$), activeness ($r = -0.54$), and competition ($r = -0.42$) were secondary. However, neither group integrity nor long-term orientation was found to be significant. Therefore, both Hypotheses 2 and 3 were

Table 3. Standardized canonical discriminant coefficients for information cues

Information cues	Japan (%)	USA (%)	Function 1
Price/value	9.9	6.2	0.320**
Quality	12.8	13.7	-0.033
Performance	13.7	16.0	-0.460**
Components/contents	12.8	16.0	-0.402**
Availability	14.1	12.4	0.096
Special offers	2.6	4.6	-0.101
Packaging/shape	14.7	15.3	0.097
Guarantees/warranties	1.0	5.2	-0.254**
Safety	2.6	3.3	-0.247
Independent research	1.3	0.3	0.141
Company research	6.7	0.0	0.854**
New ideas	8.0	7.2	0.191
Eigenvalue = 0.830			
Canonical correlation = 0.673			
Wilk's Lambda = 0.546			
Chi-Square = 57.715			
Significance = 0.000			
Grouped Classification = 79.0%			

The total number of information cues identified is 313 for the Japanese sample and 307 for the American sample.

** $p = 0.000$.

Table 4. Standardized canonical discriminant coefficients for cultural values

<i>Cultural values</i>	<i>Japan (%)</i>	<i>USA (%)</i>	<i>Function 1</i>
Activeness	0.7	3.3	0.538 **
Competition	4.0	12.0	0.416 **
Directness	9.3	10.0	0.411
Emotional	8.7	3.3	−0.002
Exuberance	5.3	8.0	0.084
Group integrity	1.3	0.0	−0.024
Harmony	3.3	0.0	−0.037
Indirectness	0.0	0.0	na
Individuality	6.7	4.0	0.278
LT orientation	0.0	4.7	0.317
Minimalism	9.3	9.3	0.258
Oneness with nature	2.0	1.3	0.021
Passiveness	0.7	13.3	0.761 **
Pragmatism	32.0	9.3	−0.633 **
Rational	7.3	12.0	0.168
ST orientation	0.0	1.3	0.106
Self-esteem	1.3	1.3	0.208
Social status	2.7	3.3	0.075
Veneration for elderly	0.0	0.0	na
Youth	5.3	3.3	na
Eigenvalue = 1.571			
Canonical correlation = 0.782			
Wilk's Lambda = 0.389			
Chi-Square = 90.663			
Significance = 0.000			
Grouped Classification = 90.0 %			

The total number of cultural values identified is 150 for each market sample.

** $p = 0.000$.

rejected. Overall, the Japanese sample emphasised pragmatic values, which have been recognized as some of the primary Eastern values (Cheng and Schweitzer 1996). In comparison to the Japanese sample, the American sample was more likely to exhibit competition, along with two contrasting values, activeness and passiveness.

Third, with regard to creative strategies, a discriminant analysis between the two market samples was also successful in classifying 91% of the websites in relation to their cultural affiliations (Wilk's Lambda = 0.367; Chi-Square = 95.679; $p = 0.000$). The results are presented in Table 5. The strongest discriminator was found to be rational reasoning ($r = 0.64$), followed by personalised choice/attention ($r = 0.43$), interactive communication ($r = 0.39$), emotional/psychological appeals ($r = 0.35$), and symbolic/visual metaphor ($r = -0.34$). However, with regard to emotional/psychological appeals, the direction was contrary to our hypothesis: the American market sample used this strategy more than the Japanese market sample. Thus, Hypothesis 4 was not supported,

Table 5. Standardized canonical discriminant coefficients for creative strategy

<i>Creative strategies</i>	<i>Japan (%)</i>	<i>USA (%)</i>	<i>Function 1</i>
Comparison	1.5	3.5	0.102
Interactive communication	12.2	16.5	0.391 **
Curiosity arousal	20.6	2.5	−0.227
Entertainment	6.9	11.0	0.404
Special incentives	4.6	4.5	−0.018
Habit-starting by trials/simulations	6.9	3.5	−0.279
Emotional/psychological appeals	3.1	10.5	0.351 **
Symbolic/visual metaphor	9.2	0.0	−0.340 **
Personalized choice/attention	9.2	16.0	0.428 **
Rational reasoning	9.2	22.0	0.639 **
Celebrity endorsement	6.1	0.0	−0.136
Brand repetition/familiarization	10.7	10.0	−0.062
Eigenvalue = 1.723			
Canonical correlation = 0.795			
Wilk's Lambda = 0.367			
Chi-Square = 95.679			
Significance = 0.000			
Grouped Classification = 91.0%			

The total number of creative strategies identified is 131 for the Japanese sample and 200 for the American sample.

** $p = 0.000$.

while Hypothesis 5 was. In total, the number of creative strategies used in the websites was 131 in the Japanese market sample and 200 in the American market sample. Therefore, the American market sample tended to incorporate a more diverse range of strategies, in terms of both hard and soft sell approaches. These findings suggest that the American market sample employed more rational persuasion with a higher level of interactivity.

Limitations

To ensure a balanced discussion when interpreting our data, we must recognize some limitations of our study. First, a general problem of content analysis is the inability to expand interpretations beyond manifest content. Second, it should be remembered that only product-based websites and not overall corporate websites were examined, and the results presented in this study may not be applicable to overall corporate websites. Third, the decision to focus on just one selected product or brand per company, and then only from Japan and the USA, limits our ability to draw general conclusions from the data obtained. Rather, the study adopted this methodology to provide a case study that would be useful as well as meaningful, and that reveals Japanese MNEs' practices in Internet communications strategies.

DISCUSSION

The present study attempts to explain cross-cultural differences on the websites in the light of a cross-cultural communications framework: Hall's (1976) high versus low cultural context. Specifically, this study focused on the product-based websites created by the same firms for different markets, so that clearer cross-cultural differences could be extracted. The findings provides only limited support for the proposed links between cultural context and web content in term of information cues, cultural values, and creative strategies. Specifically, while the multivariate discriminant analysis confirmed that the two market samples were statistically classifiable into their cultural affiliations for all variables, it failed to recognize widely accepted culture-specific influences: a greater usage of collectivism and emotional appeals in the Japanese market sample. Nevertheless, a higher informativeness remains its significant discriminator.

It should be noted that, as previous empirical studies of traditional media confirm, stating clear price information and credible sources were found to be the strongest classifiers for the Japanese sample. Especially, the Japanese sample tends to include public certification, industry accreditation, and third party surveys to stress the company's reputation. These characteristics contrast sharply with the American sample, which persists in presenting factual and verifiable attributes associated with product benefits.

However, the results related to cultural values may need to be interpreted with more caution. The discriminant function between the Japanese and American market samples was found to be significant with strong eigenvalue and canonical correlation, albeit with only four significant discriminators. That is, the two market samples are indeed statistically distinct as a whole on the basis of their cultural affiliations, but with lesser 'visible' evidence. Perhaps, the most reasonable interpretation would be that, given that only 50 websites were examined in this study, few discriminators were identified simply because of the lack of observations. Still, it should be noted that the two significant discriminators, competition and pragmatism, have been considered as the most representative values in Western and Eastern society, respectively (Cheng and Schweitzer 1996; De Mooij 1998; Mueller, 1992). In addition to the small sample size, an explanation for the absence of collectivist values in the Japanese sample may be the type of product categories examined. At a glance, most of the products in Table 1 are durable goods, which often use 'universal' product descriptions. These products tend to emphasize the features in terms of the improvement of individual performance and productivity, which may have offset the usage of group-oriented values.

The analysis of creative strategies produced the most striking differences between the two market samples. The American market sample indulges in providing more

complex or sophisticated online appeals, while mixing rational, entertaining and emotional appeals. At the same time, they are likely to offer more personalized and interactive functions than their Japanese counterparts. In contrast, the Japanese market sample uses more symbolic and metaphoric appeals, which is consistent with prior research (Lin 1993). The few observations of emotional appeals in the Japanese market sample were rather surprising. One tempting interpretation is the relatively static nature of the Japanese sample. By contrast, the American sample tends to be dynamic, with more eye-catching functions, full of emotional stimulus. However, this aspect needs to be explored further in the future.

CONCLUSION

This research was inspired by a simple but all but unexplored question regarding online marketing communications: does culture matter on the web? The rapid penetration of the Internet tends to produce the illusion that cross-cultural differences in paper and ink may have disappeared on the web. However, the advancement of electronic markets *per se* cannot rule out the importance of culture as a basis for understanding consumers with different needs and wants across national boundaries. In this regard, as online marketers become more and more interested in capturing cross-border consumer segments, such cross-cultural factors should be considered in the light of the 'standardization' versus 'localization' issue.

Many MNEs offer multiple language websites, but it remains largely unknown whether such content has been customized or standardized. However, while enhanced integrated marketing communications facilitate MNEs' online global network, the existence of 'homogenized online consumers' cannot be taken for granted. Beyond the obvious importance of language, various aspects of websites, such as information, cultural values and creative strategy, must be made to operate effectively in the local culture. In this light, more research effort will be needed to re-evaluate the issues involved in globalization on the web.

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