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This is an **author produced version** of a paper published in:

Internet research: Electronic networking applications and policy, 12.5 (2002): 380-390

**DOI:** [http:// 10.1108/10662240210447137](http://10.1108/10662240210447137)

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# A content analysis of multinationals' Web communication strategies: cross-cultural research framework and pre-testing

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## Keywords

Internet, Marketing communications, Information, National cultures, Multinationals

## ABSTRACT

Despite the growing trend toward the interactive medium, there would appear to be a lack of comprehensive research methodology for evaluating the degree of standardisation in multinational corporations' (MNCs') online communication strategies across differing cultures. The objective of this exploratory study is to construct a research framework for cross-cultural comparison of corporate Web pages, applying traditional advertising content study techniques. A series of pre-tests were conducted to examine three explanatory variables, i.e. information content, cultural values and creative strategies on Japanese MNCs' product-based home pages in Japan, Spain and the USA. The results revealed that Japanese firms tended to localise their online communication strategies in their target markets. In closing, future research directions are discussed and content analysis research designs are summarised.

## Introduction

As more multinational corporations (MNCs) shift an increasing part of their promotional strategies into interactive medium, the controversy over market globalisation continues. Rapid technological development has interconnected global communities beyond physical boundaries, leading to the increasing homogenisation of consumer preferences, justifying the standardisation of Web-based advertising and promotional campaigns. Despite this growing trend, there has been little research attempting to shed light on the question of whether MNCs' communication strategies have been, and to what degree they should be, standardised on the Internet.

What types of explanatory variables are relevant in Web communication strategies? And how do Web pages of different cultures differ in the extent to which they are characterised by such variables? The objective of this exploratory study is to construct a research framework for cross-cultural comparison of corporate Web pages, applying traditional advertising content study techniques. The content analysis approach has commonly been regarded as a useful method for social science studies, especially in advertising (Kassarjian, 1977; Kolbe and Burnett, 1991). In this study, a series of pilot studies are conducted to examine key explanatory variables, i.e. information content, cultural values and creative strategies on Japanese MNCs' home pages. The countries analysed are Japan (the home country), Spain and the USA (host countries), chosen because they differ dearly in cultural, economic, and geographical dimensions, conditions which are necessary so as to render hypothesis tests valid.

## Literature review and hypotheses

### development

#### Information content

Resnik and Stern (1977) proposed an information classification system based on 14 criteria such as price, quality, performance, etc. An "informative ad" was defined to contain at

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The authors appreciatively acknowledge the support for this research provided by the Yoshida Hideo Memorial Foundation (Tokyo).

least one of these "cues", which enable consumers to make an intelligent and rational buying decision. This instrument has been replicated in almost 60 studies (Abernethy and Franke, 1996). Mueller (1991) pointed out that if an advertising agency aims to produce a uniform advertising campaign for a variety of markets, this could be most easily achieved through a message limited in information content. Thus, Resnik and Stern's system appears to be appropriate for analysing cultural variability between different culture's Web pages.

A pioneering study by Madden *et al.* (1986) identified more information cues in Japanese print ads (85 per cent of the total were found to contain more than one cue) than in their US counterparts (75 per cent), arguing that Japanese consumers tend to demand more detailed product information than do Americans. Hong *et al.* (1987) echoed this finding, concluding that Japanese magazine ads contained a higher number of information cues (95 per cent) than US samples (90 per cent).

More recent explorations attempted to analyse information content in cross-cultural online advertising. Ju-Pak (1999) and Yoon and Cropp (1999) reported no significant differences between UK, US and Korean Web ads, while Oh *et al.* (1999) found US target ads offered more information (85 per cent) than their Korean counterparts (48 per cent). This result is backed up by the work of Chung and Ahn (1999) who concluded that banner ads in the USA were more informative (46.6 per cent) than those in Korea (31.5 per cent).

Hypothesis related to information content As Yoon (2000) pointed out, information levels are mostly influenced by the medium's nature of involvement. Several researchers have reported empirical evidence demonstrating that the Internet contains a higher level of information because it is a highly involved medium, primarily because it can be viewed as a combination of both electronic and print media (Hoffman and Novak, 1996; Yoon, 2000). Here, the term "involvement" means the extent to which consumers are motivated by or interested in acquiring specific information. Thus, measuring information level on corporate Web pages as an indicator of the degree of

involvement, prior research on print advertising may be reflected in diverse cultures' online communication. Here is the formally stated hypothesis:

- H1.* The mean number of information cues used in Japanese MNCs' Web communication strategies significantly differs according to the target country.

### Cultural values

The relationship among individuals in a given culture is intimately linked with societal norms (Hofstede, 1980). Just as individualism has been considered a core social value of western culture, collectivism has been considered a fundamental principal in eastern culture (Gudykunst and Ting-Toomey, 1988; Markus and Kitayama, 1991; Triandis, 1995). In an advertising context, Lin (2001) suggests that within an individualistic culture the appeals used are those of "modernity", "youth" and "enjoyment", while Cheng (1994) indicates that appeals such as "group consensus" and "tradition" are more likely to be conveyed in a collectivistic culture.

Frith and Sengupta (1991) content analysed magazine ads in the USA, the UK and India, reporting significant differences in the usage of individualism. Belk and Pollay (1985) pointed out that Japanese ads use more status and materialistic appeals than their US counterparts.

Mueller (1987) asserted that Japanese ads are not "westernised", yet the usage of the traditional collectivistic Japanese values, such as "Group consensus appeals", decreased considerably from the 1970s to the 1980s. Mueller (1992) replicated her 1987 study with Japanese magazine samples and confirmed that Japanese ads are still likely to use traditional cultural values such as "collectivism" and "soft sell" appeals, and that if anything the tendency to use traditional values has increased.

Cheng and Schweitzer (1996) developed a typology for 32 cultural values, which was originally based on Pollay's (1983) 43 contemporary advertising values. This typology can be considered a useful method of measuring contrasts in eastern and western cultural values. The reason being that the researchers incorporated traditional Confucian values in

order to identify cultural differences reflected in US and Chinese television commercials. Using a similar scale, Ji and McNea! (2001) found that US children's commercials place higher emphasis on individualistic values than Chinese ones.

**Hypothesis related to cultural values**  
If Web communication strategies are not standardised, such Web content is more likely to be bound by host-country values inherent to the local market. Thus, it is likely that individualistic or collectivistic values are reflected on the Internet, depending on the level of context and relevant cultural dimensions of the target countries.

According to Hofstede's (1980) cultural scale, Japan was rated as highly more collectivistic than the USA, therefore, it is reasonable to assume that Japanese Web sites tend to exhibit more collectivistic values than US sites. Interestingly, a more recent investigation reported a higher degree of individualism in Spanish print ads than in their US counterparts (Taylor and Wolburg, 1997). Given these findings, the following hypothesis was put forward:

- H2.* The frequency of usage of individualistic values in Japanese MNCs' Web communication strategies significantly differs according to the target country.

### Creative strategies

"Creative strategies" refer to the executional tactics in which the general nature and character of advertising messages are specified for more appealing presentations. Simon (1971) proposed a typology consisting of creative strategies such as "information", "argument", "motivation with psychological appeals", etc.

Utilising this scheme in a cross-cultural comparison, Martenson (1987) concluded that commercials used in US television employed more "Brand familiarisation" and "Symbolic association" strategies than those in Swedish cinema did. Comparing US, French and Taiwanese ads, Zandpour *et al.* (1992) found that US commercials are more likely to transmit explicit arguments based on symbolism, humour and drama format. Oh *et al.* (1999)

replicated Simon's scheme for creative dimensions of Web ads, finding no significant differences between US and Korean target ads.

**Hypothesis related to creative strategies**  
Past research reports that whereas the Japanese place emphasis on subtlety in advertising appeals, Americans prefer direct and explicit selling messages (Ramaprasad and Hasegawa, 1992; Mueller, 1987; Lin, 1993). Such differences are closely linked with their distinct communication styles, especially in terms of high versus low cultural context. Here, "context" refers to the facts or information taken for granted about the subject under discussion, and has been identified as a key distinguishing feature between eastern and western culture (Hall, 1976).

In a high-context culture, explicit and direct communication styles are relatively rare, giving preference to implicit, ambiguous and non-verbal communication based on strong interdependent relationships, while in a low-context culture, clear and direct verbal expressions are commonly found. There is a close association between non-verbal and verbal communication strategies in high and low context cultures, respectively (Ramaprasad and Hasegawa, 1992; Lin, 1993; Yoon and Cropp, 1999).

According to De Mooij (1998), low context, highly individualistic countries such as the USA tend to provide more copies and factual argumentation in commercials, while high context, collectivistic countries like Japan and Spain employ less wordy, symbolic advertising. Based on these arguments, we propose the following hypothesis:

- H3.* The frequency of usage of emotional appeals and symbolic association in Japanese MNCs' Web communication strategies significantly differs according to the target country.

## Methodology

### Data collection

Traditionally, cross-cultural researchers have found difficulty ensuring an accurate match of product and target audiences. However, to

provide the strongest test possible for the hypotheses across countries, We created an information set comprised of 20 MNCs' Web pages, each of which advertised one specific product common in all three countries (e.g. Nintendo's PowerStation on Japanese, US and Spanish Web sites). To do this We used an online database created by The Research Institute for Economics and Business Administration at Kobe University (2001). The database consists of 62 Japanese companies listed on the Tokyo Stock Exchange which fulfil the following criteria: annual sales greater than 10 billion yen and foreign direct investment superior in total to 5 billion yen in more than five countries. Then, using popular search engines (e.g. Yahoo, Google, etc.), we singled out only those MNCs which published home pages in all three countries; the MNCs selected were Bridgestone, Brother, Canon, Fujitsu, JVC (Victor), Konica, Koyo, Minolta, NEC, Nikon, Nissan, Omron, Panasonic, Pioneer, Ricoh, Sanyo, Sharp, Sony, Suzuki and Toshiba. For each of these firms, one specific product was chosen with its respective product-based Web page. This resulted in a total of 60 Web pages for analysis (i.e. 20 companies times three countries).

#### Unit of analysis

The major ambiguity in Web content analysis is related to the question as to what is really meant by the term "Web site" (McMillan, 2000). Actually, a given site is a hierarchy of information, connected via hyperlinks to an infinite number of other sites. Initially, we attempted to limit our analysis to the "home page" or initial screen seen on entering the site. However, home pages usually consist of indices, icons and symbols that are linked to the next hierarchy of information, and do not provide much meaningful information. Thus, our unit of analysis should be defined as product-based Web pages for a given product accessed via hyperlinks to an MNC's frontal page.

#### Coding procedures

Categorisations of all the variables are shown in Table I. In examining the information content, Resnik and Stern's (1977) classification system was employed (Table II). Coders were asked to analyse each online ad by determining the

presence of any of the 14 information cues while at the same time counting the total number of information cues contained in each message (Figure 1).

The comparison of advertising values was carried out utilising Cheng and Schweitzer's (1996) 32 cultural values. To differentiate eastern versus western values in advertising messages, we further divided the categories into two groups: independent and interdependent values. Independent values tend to separate individuals from social context: "adventure", "competition", "individualism", "modernity", "uniqueness", and "wealth". Interdependent values are seen as connecting people with social context: "collectivism", "courtesy", "family", "nature", "respect for the elderly" and "social status". Unlike the information classification, the coding of cultural content was considered to be a more subjective or judgmental procedure, which was likely to cause substantial fatigue due to the scheme's complex operational definitions. Following Pollay's (1983) methodology it was, therefore, decided that the number of categories coded by the judges should be limited, allowing up to three dominant values per ad.

As for creative strategies, Simon's (1971) creative strategies were used. Following suggestions by Zandpour *et al.* (1994), the original definitions were supplemented with additional examples for a better illustration of the concepts. The coders were asked to identify one or more categories in the Web messages.

All three coding instruments, originally prepared in English, were translated into Japanese and Spanish, 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.

In accordance with Kolbe and Burnett's (1991) recommendations, one native and one bilingual coder, both of whom were unaware of the study's purpose, were hired for each country. They were then trained to grasp the operational definitions of all the variables in two training sessions. During the sessions, all disagreements between the two judges were solved through discussion to give the tests higher validity, a method suggested by

Table 1 Content examined in Web communication strategies

Content	Categories
Information content <sup>a</sup>	Price or value, quality, performance, components or contents Availability, special offers, taste, nutrition, packaging or shape Guarantees and warranties, safety, independent research Company research, new ideas
Cultural values <sup>b</sup>	Adventure, beauty, collectivism, competition, convenience Courtesy, economy, effectiveness, enjoyment, family, health Individualism, leisure, magic, modernity, nature, neatness Nurturance, patriotism, popularity, quality, respect for the elderly Safety, sex, social status, technology, tradition, uniqueness Wealth, wisdom, work, youth
Creative strategies <sup>c</sup>	Information, argument, emotional appeals, repeated assertion Command, brand familiarisation, symbolic association, imitation Obligation, habit-starting

Sources: <sup>a</sup> Adapted from Resnik and Stern (1977); <sup>b</sup> Adapted from Cheng and Schweitzer (1996); <sup>c</sup> Adapted from Simon (1971)

Kassarjian (1977). Finally, the coders were asked to identify the presence of the corresponding categories for each scheme in corporate Web pages. In all three analyses, when coders encountered coding disagreements, group consensus took priority over individual judgement. When faced with unsolvable conflicts, a final judgement was always given by the native coder. All coding tasks were completed by the second week of October 2001.

#### Reliability measurement

Two reliability tests were carried out on 20 per cent of the sample using the Holsti's (1969) formula. First, an intra-coder reliability test was performed by a primary judge native to the country over a one-month interval and average scores exceeded 85 per cent, the minimum suggested by Kassarjian (1977), which were considered to be satisfactory. Second, an inter-judge agreement was calculated using a reliability index suggested by Perreault and Leigh (1989), which is considered to be the best by various researchers (Kolbe and Burnett, 1991; Ji and McNeal, 2001). After coding all the Web pages, one of the authors evaluated the same sample independently and later compared his results with those of the coders. The majority of the reliability indexes exceeded the critical value of 0.80 recommended by Perreault and Leigh (1989).

## Results

### Information content

It can be seen that in the Japanese sample the most frequently employed cue was "performance" (appearing in 21.6 per cent of the Web pages), followed by "quality" (20.5 per cent), "components or contents" (18.2 per cent), and "price/value" (13.6 per cent). Looking at the Spanish sample, the results were first "performance" (18.9 per cent) and "components or contents" (18.9 per cent), with "availability" (17.9 per cent) next and then "quality" (12.6 per cent). Finally, with regard to the US Web pages studied, "quality" (29.8 per cent), "performance" (29.8 per cent) and "components or contents" (24.6 per cent) were predominantly used. Excluding "packaging or shape" (used in all the countries), "taste", "nutrition" and "independent research" (not used in any country), chi-square tests confirmed that the three countries differed significantly in the use of "price/value" ( $\chi^2 = 10.05$ ,  $df = 2$ ,  $p < 0.01$ ), "quality" ( $\chi^2 = 6.09$ ,  $df = 2$ ,  $p < 0.05$ ), "availability" ( $\chi^2 = 26.88$ ,  $df = 2$ ,  $p < 0.01$ ) and "new ideas" ( $\chi^2 = 7.35$ ,  $df = 2$ ,  $p < 0.05$ ) (Table III).

The number of the information cues ranged from two to eight. Independently of the country analysed, all the samples contained at least one information cue, and were, therefore, considered to be informative. The mean number of information cues for the US and

Table JI Operationalisations of information content classification system

Information cues	Operationalisations
Price/value	This cue relates to the product cost (including "open price"), value-retention capability, and need-satisfaction capability/price
Quality	The emphasis here is on the product's characteristics that distinguish it from competing products based on an objective evaluation of workmanship, engineering, durability, excellence of materials, structural superiority, superiority of personnel, attention to detail, or special services
Performance	This cue stresses what the product does, and how well it does what it is designed to do
Components/contents	The product composition, ingredients, items actually included within the product are shown in the form of graphics, drawings, pictures, video, etc.
Availability	The information concerning dealers, shops or any kind of distribution channel are indicated. "Dealer information" or "branch network" will be included
Special offers	Limited-time non-price deals are available with a particular purchase. This cue only counts for special promotions, gifts, trial services, etc. directly related to the sales of a given product. "Free softwaredownloads" does not count as special offers
Taste	Evidence is presented in which a particular product's flavour is perceived as being "superior" according to a sample population
Nutrition	Specific data given concerning the nutritional content of a particular product. Alternatively, a direct specific comparison is made with other products
Shapel packaging	Package and special shape in which the product is available are shown
Guarantee	This cue illustrates post-purchase assurances accompanied with the product such as a technical and/or service assistance, refunds, etc. during a specific period of time for a given product. "Customer service" is not included
Security	A product's safety features are shown. This category should consist of specific comments or guidance to avoid any hazard/harm when using the product
Independent research	Data gathered independently by an external (private or public) organisation is presented. This category includes sales rankings, pollution surveys, technical inspections, industry credentials, etc. where the information source is clearly indicated
Company research	Internal data gathered by the company is shown to emphasise its product's benefits or superiority. This category includes sales rankings, pollution surveys, technical inspections, industry credentials, etc. where the information source is clearly indicated
New ideas	This cue suggests that the product introduces a totally new concept and the advantages that this brings

Source: Adapted from Resnik and Stern (1977)

Japanese samples were exactly the same (5.75), superior to that for the Spanish sample (3.85). An ANOVA applied across the three countries revealed an  $F$  statistics of 18.038 ( $df = 2$ ) that was significant at  $p < 0.01$ .

Further, a paired  $t$ -test found a significant difference between the results for Japan and Spain ( $t = -5.985$ ,  $df = 1$ ,  $p < 0.01$ ) and between those for Spain and the USA ( $t = 5.834$ ,  $df = 1$ ,  $p < 0.01$ ). Therefore,  $H1$  was partially supported.

### Cultural values

In Japan, "convenience" (23.3 per cent), "technology" (20 per cent) and "quality" (15 per cent) were the most emphasised values. These findings concord with a large-scale survey conducted by Nomura Research Institute in 1998, which found that "convenience" is the most highly appreciated value in Japan. In Spain, "convenience" (22 per cent), "technology" (22 per cent) and "effectiveness" (16.9 per cent) were the most

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## Fujicolor QuickSnap Flash - 27 Exposure

Pre-Loaded with Fujicolor Superia X-TRA 800 35mm Film, Quick Flash System, Quiet Film Advance, 4th Color Layer Technology.

Quality

Performance \*

Packaging  
Shape



Click for Detail Image

This QuickSnap 35mm One-Tirne-Use camera captures the action under most conditions. Fujicolor Superia X-TRA 800 Film provides sharp pictures and greater flash range, while Fujifilm's "Quick Aash" system offers a quick recharge plus two selectable flash modes.

- New Next Generation Packaging .,-----LJ-----,
- Fujicolor Superia X-TRA 800 35mm Film
- Extended Aash Range
- Quick Aash Recharge Time....4 Seconds
- Compact Design Fits in Your Pocket
- Small, Simple, Super!
- 4th Color Layer Technology

New idea

Special offer

Get a FREE Plush Panda just for purchasing select Fujifilm products!

Note: \* The infonnation content classification system counts only once for "performance"

Table 111 Information content in corporate Web communication

Information cue	$\chi^2$ (df = 2)	$\chi^2$ (df = 1)		
	three countries	Japan x Spain	Japan x USA	USA x Spain
Price/value	10.05***	5.01	8.64***	0.63
Quality	6.09**	4.80	0.23	3.13
Performance	1.11	0.36	1.11	0.23
Components/contents	2.50	0.78	0.53	2.50
Availability	26.88***	10.42***	5.63	25.86***
Special offer	10.91	3.13	3.24	10.00
Guarantee	2.14	2.11	2.11	0.00
Safety	3.75	1.11	1.03	3.24
Company research	10.03	4.33	7.06	1.03
New ideas	7.35**	2.56	1.29	7.03
F value (df = 2)	18.038			
t value (df = 1)		-5.985*	1.0	5.834*

Notes:  $p < 0.10$ ;  $p < 0.05$ ;  $p < 0.01$

prevalent type of cultural values while in the USA "technology" (18.2 per cent), "effectiveness" (16.4 per cent) and "modernity" (14.5 per cent) occurred most frequently. As shown in Table IV, chi-square tests indicated significant differences across the three countries with regard to the type of cultural values used: "convenience"  $\chi^2 = 5.84$ ,  $df = 2$ ,  $p < 0.10$ ) and "modernity"  $\chi^2 = 4.8$ ,  $df = 2$ ,  $p < 0.10$ ).

The frequency of independent values was calculated for each sample ad. The resulting data were then treated as numerical variables for a one-way ANOVA. The results showed significant differences between the three countries ( $F = 5.433$ ,  $df = 2$ ,  $p < 0.01$ ). Furthermore, a paired t-test revealed that there were significant differences between Japan and the USA ( $t = 1.594$ ,  $df = 1$ ,  $p < 0.01$ ). Nevertheless, no significant difference was found



Table IV Cultural values reflected in corporate Web communication

Cultural values	$\chi^2$ (df = 2)		$\chi^2$ (df=1)	
	three countries	Japan x Spain	Japan x USA	USA x Spain
Adventure	1.03	1.03	1.03	0.00
Beauty	6.32	3.24	NA	3.24
Competition	5.67	1.03	4.44	2.06
Convenience	5.84	0.11	4.91	3.60
Economy	1.11	0.23	0.36	1.11
Effectiveness	4.37	3.96	2.85	0.10
Joy	2.02	2.06	0.17	1.11
Family	2.03	1.03	1.03	NA
Magic	2.03	1.03	NA	1.03
Modernity	4.80	1.56	4.80	1.03
Nature	6.32	3.24	3.24	NA
Neatness	13.33	7.06	7.06	NA
Quality	1.00	0.42	0.96	0.11
Respect for the elderly	2.03	1.03	1.03	NA
Security	4.14	NA	2.11	2.11
Social status	2.03	1.03	1.03	NA
Technology	0.96	0.11	0.40	0.92
Uniqueness	0.54	0.00	0.36	0.36
Work	4.14	NA	2.11	2.11

Notes:  $p < 0.10$ ;  $p < 0.05$

when comparing Japanese and Spanish results, nor did there exist any difference between those of Spain and the USA. From this it is apparent that statistically fewer independent values are used in Japanese Web pages than in US ones. Moreover, when adding up the number of interdependent values present in each page, Japan was found to be the only country in which such values were used (Table V). Collectivistic values were not present in Spanish and US Web pages. *H2* was, therefore, supported.

#### Creative strategies

The creative strategies used in each country showed similar patterns: "information", "argument" and "motivation with psychological appeals" were the three most employed strategies in all three countries. On the other hand, "command" and "imitation" were not used in any country. In Spanish Web pages the most frequently used strategy was "argument" (31.8 per cent), with "motivation with psychological appeals" and "information" being second (26.8 per cent). In Japan, "information" was predominantly used (55.2 per cent), while "information" (34 per cent) and "motivation with psychological appeals" (24 per cent) were

Table V Aggregated analysis for individualistic versus collectivistic values

Aggregated values	Cultural values	Japan (%)	Spain (%)	USA (%)	F value (df = 2)
Individualistic values	Adventure Competition Individualism Modernity Uniqueness Wealth	11.5	30.8	57.7	5.423...
Collectivistic values	Collectivism Courtesy Family Nature Respect for elderly Social status	100	0	0	

Note:  $p < 0.01$

dominant in the USA. As shown in Table VI, chi-square analysis revealed statistical differences in the use of "argument" ( $\chi^2 = 13.17$ ,  $df = 2$ ,  $p < 0.01$ ) across the three countries: Japanese samples employed this strategy much less than their Spanish and US counterparts. Although differences were found in the use of "motivation

Table VI Creative strategies in corporate Web communication

Creative strategies	$\chi^2$ (df = 2)	$\chi^2$ (df = 1)		
	three countries	Japan x Spain	Japan x USA	USA x Spain
Information	5.28.	2.85	0.17	4.29**
Argument	13.17...	6.46**	12.13***	1.13
Emotional appeals	5.76"	3.75	5.01	0.10
Repeated assertion	6.32	NA	3.24	3.24
Brand familiarisation	2.11	0.36	1.03	2.11
Symbolic association	4.14	NA	2.11	2.11
Obligation	8.57	4.44	NA	4.44
Habits-starting	4.14	2.11	2.11	NA

Notes: \*  $p < 0.10$ ;  $p < 0.05$ ;  $p < 0.01$

with psychological appeals" and "obligation", their respective cell sizes did not exceed 5, the minimum required for the results to be meaningful. Therefore, *H3* was not sufficiently supported in this study.

## Conclusions

Corporate Web pages are a valuable medium through which MNCs can communicate effectively with potential international consumers. However, there would appear to be a lack of comprehensive research methodology for evaluating the degree of standardisation in their online communication strategies across differing cultures. In this study, advertising content studies were adapted to construct a research framework for a cross-cultural comparison of corporate Web communication strategies, utilising three explanatory variables, i.e. information content, cultural values and creative strategies. In order to assess reliability and validity of the methodology, a series of pre-tests were conducted using Japanese MNCs' Web pages.

In the pre-tests, Web pages were equally informative in Japan and the USA, and Web pages in both these countries were found to be more informative than those in Spain. This finding suggests that the high involvement nature of interactive medium is closely related to the high level of information content in Web pages. This result is coherent with past cross-cultural studies that compared print and television ads. Internet users appear to behave as active "information seekers", thus, a logical inference may be drawn that Web advertising planners are likely to include more information.

## Analysis over cultural values detected

significant differences in the use of "convenience" and "modernity". This finding suggests a possible convergence of cultural meaning for high-tech products. More importantly, however, aggregated analysis revealed significant differences in the use of individualistic and collectivistic values across the three countries. This implies that traditional eastern and western cultural dimensions are in fact reflected in Web marketing communications.

It was noted that the use of two creative strategies was significantly different in Japan, Spain and the USA those being "argument" and "motivation with psychological appeals". The less frequent use of argumentative presentations in Japan implied that a commonly accepted view (i.e. emphasis on "soft sell") was sustained in MNCs' online communication. On the contrary, a decline in the utilisation of emotional appeals in Japanese advertising is not reported in the literature and should be an interesting topic in future research.

These findings suggest that Japanese MNCs have adapted their Web communication strategies in external markets, echoing conclusions obtained in prior research. Moreover, the predominant usage of independent values in Spain and the USA suggest that international advertising planners and producers should take into account cultural values inherent in respective local markets.

## future research suggestions

Table VII lists procedural recommendations for future research planning, which should be

Table VII Research designs for content analysis of Web communication strategies

Phase	Procedure	Key considerations
	Hypothesis statement	Theoretical background and literature review Hypothesis development Research questions
2	Sampling	Type of database to be used Sampling method: random, stratified random, non-probabilistic, convenience, judgmental, etc.
3	Unit of analysis	Dimension and hierarchy of Web sites What to measure and not to measure Technical aspects
4	Measurement	Key explanatory variables Construction of categories Operationalisations Illustrative examples
5	Coder training	Bilingual or native Translation of the materials Trial coding and feedback procedure Reliability measurement (intra and inter-reliability)
6	Coding	Conflict solving procedure Final arbitrage Reporting and confirmation of the results
7	Statistical treatment	Type of statistical methods Confidence levels Theoretical limitations
8	Analysis	Interpretation of the results Managerial implications and recommendations Graphics, tables, charts, etc.

noted. Needless to say, each phase should be contemplated according to the research objectives and corresponding hypotheses.

Additional attention should be paid to the following points. First, a broader sample from a larger number of cultures should be obtained to make the conclusions more comprehensive. As with small samples, the statistical analysis undertaken may not detect statistically significant differences, when in fact such differences may indeed exist in the population. Thus, we should be fully aware of minimising the danger of type 2 error (falsely accepting the null hypothesis) by presenting only those results at the most stringent confidence levels, 90 per cent being the minimum.

Second, this investigation examined only a limited part of interactive communication. Future research may include other spatial (e.g.

more levels of hierarchy, etc.) as well as technical (e.g. Java, Shockwave, etc.) dimensions of the Web medium so as to provide a clearer picture of corporate online communication.

Finally, the pilot study did not control for the classification of products. Mueller (1991) pointed out that advertising content is likely to be influenced by the relative importance of the purchase decision: product involvement. In future research therefore, some kind of classification system should be selected to identify possible relationship between product classes and explanatory variables.

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