



# Consumer patronage of ethnic portals

Ethnic portals

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**Abstract** *The emergence and diffusion of the Internet has prompted a surge in web portal sites that are designed to meet the specific needs of ethnic Internet users who are not native English speakers. These ethnic portal sites may be set up by global portal giants (e.g. Yahoo!) or by local entrepreneurs (e.g. netease.com in China). Often, because of the different origins of these sites, they tend to have different operating philosophies and varying appeals to ethnic Internet users. In this study, we first analyze the differences and similarities among different types of ethnic portals. We then propose a conceptual model concerning the factors that affect the patronage of ethnic portals by ethnic Internet users. An empirical study was designed to test the conceptual model with data collected from Mainland Chinese Internet users. Finally, implications of the study results for ethnic portals are presented.*

## 1. Introduction

The Internet is increasingly becoming a powerful medium for global marketing communications (Angelides, 1997; Carey, 1998). Today, the landscape of the global Internet is broader and more diverse. According to *EMarketer* (2002), the number of Internet users worldwide will rise from 445.9 million in 2001 to 709.1 million in 2004, with the fastest growth coming from outside the North American market, e.g. from Latin America and Asia.

With the rising numbers of online users who may not use English as their first language, the need for web sites and contents in languages other than the English, rises. Ethnic Web portal sites (e.g. StarMedia) that provide highly targeted content and services to specific ethnic groups (e.g. Latin American Internet users) have seen considerable growth because of their importance as gateways to Web sites in ethnic languages (IMT Strategies, 2000). In addition, almost every major portal site in the US has developed ethnic-oriented portals



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for ethnic Internet users. For instance, Yahoo has established 19 localized ethnic portals for various country markets (e.g. Yahoo! France, Yahoo! Australia, etc.). In addition to ethnic portals that are brand extensions of US-based portal brands (e.g. AOL), ethnic entrepreneurs have set up totally new ethnic portals, either within the US (e.g. sina.com) or within the local country (e.g. netease.com).

Like their counterparts in the US (e.g. MSN), global ethnic portal sites generally strive to provide non-US Internet users with a gateway to the gigantic global Internet in a familiar user interface (e.g. language and content). However, owing to the differences in their origins (i.e. domestic or foreign), they may possess different characteristics and thus may be perceived differently in the eyes of ethnic Internet users.

For developers of ethnic portals, understanding the factors that may affect how often ethnic Internet users patronize their sites is critical because the prevailing business model for portals is advertising revenue generation, which in turn depends on the number of visitors to the portal site (Wong, 2001). Yet, despite the critical importance of attracting more visitors to ethnic portals, little is known about how various factors influence ethnic users' patronage rates of various types of ethnic portals; a number of questions await answers. For instance, how would ethnic users perceive the differences between ethnic portals set up by global media companies and those set up by domestic ones? How would such perceived differences in the attributes of ethnic portals affect the patronage rates of these ethnic portals? Do personal characteristic variables of ethnic Internet users play a role?

The purpose of this study is to explain the patronage rates of ethnic portals by ethnic Internet users through the assessment of critical variables. Specifically, we propose an integrative conceptual framework in which we examine the effect of perceived needs for ethnic portals, evaluative criteria (indexing capability and unique information of ethnic portals), perceived cultural similarity (design style, information perspective, and self-positioning of ethnic portals), and user ethnocentrism on patronage of ethnic portals. We test the proposed model, using empirical data collected from a sample of Mainland Chinese Internet users. Our study results contribute to the emerging research stream on global e-commerce and it also provides useful implications for ethnic portals in enhancing their attractiveness to ethnic Internet users.

We start by carefully examining the nature and forms of various types of global ethnic portals in the next section. Our conceptual model is developed in Section 3. Following that, we present the empirical results of hypothesis testing in Section 4 with the analysis results in Section 5. Finally, in Section 6, we discuss implications of our findings for ethnic portal sites.

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## 2. Analysis of ethnic portals

During the last few years specialized portal sites targeting specific ethnic groups have emerged for several reasons. First, as Internet users' profiles become increasingly multicultural, more specialized ethnic portal sites that provide targeted content and services for specific ethnic groups became necessary (Ni, 1999). Second, professionals (e.g. computer programmers, consultants, lawyers, business executives) become increasingly mobile at the global scale (Brady, 1999); they want to stay connected to their ethnic culture, no matter where their assignments may take them. Indeed, settlers who have recently immigrated to a foreign land, business people and their families who are temporarily working in a foreign land, and students who study overseas, do not easily leave their ethnic culture, even when they go through the acculturation process (Mendenhall and Oddou, 1985) to the culture of the host country. Not surprisingly, ethnic portals are well positioned to serve as such bridges in this digital age.

Despite this common goal shared by ethnic portals, they differ in their strategies and operational practices. For instance, global ethnic portal brands such as Yahoo! and ethnic portals with international flavors such as sina.com, tend to capitalize their positive "country-of-origin" associations (Johansson, 1989; Hastak and Hong, 1991) by leveraging their experience in the forefront of the Internet (i.e. the US or Europe). On the other hand, locally brewed ethnic portals (e.g. netease.com in China) that lacked such converted connections tend to exploit ethnic consumers' ethnocentric (Shimp and Sharma, 1987) reactions by touting their closeness to ethnic culture and their culturally sensitive product features. As a result, such differences in strategic orientations among ethnic portals often lead to distinct differences in operational practices. Such dissimilarities provide a base for the following three classifications of ethnic portals.

- (1) *Global portal brand extensions.* These are essentially extensions of global portal brands that have started outside the host country and have built reputations around the world. Yahoo! Japan is an example of this type of global ethnic portal. Such portals usually enjoy high, or almost instant, brand recognition inherited from their parental brands.
- (2) *Ethnic portals with strong international flavor.* These are ethnic portal sites designed to target Internet users of a specific ethnic group worldwide without a special emphasis on a particular ethnic country. An example of this type of portal is StarMedia, which targets Portuguese- and Spanish-speaking users in Latin America. Such portals are generally developed in the US or other Internet-leading countries to serve primarily ethnic users, who may or may not reside in their home countries. These types of ethnic portals claim to have a deep understanding of the ethnic culture, but are close to the forefront of the Internet (e.g. the US).

- (3) *Locally brewed ethnic portals*. These are portal sites built primarily by local entrepreneurs for domestic Internet users. An example of this type of portal is Rediff (in India). Such portals pride themselves on their deep understanding of the needs of domestic ethnic Internet users.

Table I outlines major differences among the three types of ethnic portals in terms of Web site characteristics, target audience types, and management practices. The differences among these three types of ethnic portals are worth highlighting because they may influence consumers' perceptions of these portals. Further, such differences may also help explain why certain types of ethnic Internet users prefer certain types of ethnic portals.

### **3. A conceptual model of ethnic portal patronage**

To understand why ethnic Internet users may patronize certain types of ethnic portals, we start by examining relevant issues in the consumer behavior and innovation of diffusion literature. Specifically, we explored the following four sets of variables that may affect ethnic users' decisions about the patronage of ethnic portals.

#### *3.1 Perceived need for visiting web sites in native language*

Consumer decision-making literature (Bettman *et al.*, 1991; Engel *et al.*, 1995) suggests that the first important step in a consumer's choice process is recognizing a pressing need for the product under consideration. As majority (about 70-80 percent) of Web traffic are originated from search engines (SearchEnginWatch.com, 2001), ethnic Internet users must rely on ethnic portals to provide them with directions to Web sites in ethnic languages (CNNIC, 2000). The more ethnic users visit ethnic Web sites, the more their reliance on ethnic portals. This line of reasoning leads to the following hypothesis.

- H1.* The more ethnic Internet users visit Web sites in their own native language, the more likely it is that they will use ethnic Web portals.

#### *3.2 Evaluative criteria*

The indexing capability of Web portals contributes significantly to their performances in fulfilling users' search requests (SearchEngineWatch, 2001). In the case of ethnic portals, when ethnic Internet users rely on the search capabilities of ethnic portals to locate Web sites in native languages, the percentage of existing ethnic Web sites that are indexed becomes critical, as Internet users will place more confidence on the directions rendered by those ethnic portals that could index a large percentage of all existing ethnic Web sites. According to the consumer decision making theory (Engel *et al.*, 1995), this salient evaluative criterion would play a pivotal role in consumers'

Portal type	Brand name recognition	Content and coverage	Perspective	Likely target audience	Operating practices	Resources
Global portal brand extensions (e.g. Yahoo! Japan)	Globally strong	Stripped down version of global	US extrapolated	Ethnic overseas Domestic pioneers	Primarily the Silicon Valley style	Strong support from parental brand
Ethnic portals with strong international flavors (e.g. StarMedia)	Strong among overseas users Strong among outward-looking domestic users	Mix of global and domestic	Ethnic with international twist	Ethnic overseas Domestic pioneers	Silicon Valley style with an ethnic twist	Rely on own content
Locally-brewed ethnic portals (e.g. Rediff)	Strong with domestic users	Primarily local	Feeling the domestic pulse	Mainstream domestic users	The domestic Silicon Valley wannabes	Rely on own content

**Table I.**  
Comparison of ethnic portal sites

purchase decisions. This way of thinking leads us to propose the next hypothesis:

- H2.* The more ethnic Internet users perceive an ethnic portal to be capable of indexing a larger portion of Web sites in their native language the more they will use ethnic Web portals.

Another prominent feature of Web portals is to serve as an electronic information hub for Internet users through gathering and presenting information at their sites (Watson and Fenner, 2000). To evaluate the impact of this application on the decision-making of ethnic portal patronage, we rely on the Theory of Diffusion of Innovation (Rogers, 1983), which stipulates that “relative advantage” of the innovation over the prevailing practices favors its adoption. Thus, ethnic portals’ abilities to gather and present valuable information better than traditional media competitions (e.g. newspaper, magazines, etc.), becomes important. For instance, ethnic portals will have a bigger appeal in competing for users’ eyeballs if they can gather and present information that is not readily accessible in traditional media. Hence, we develop the following hypothesis:

- H3.* The more ethnic Internet users perceive ethnic portals to be capable of delivering useful information not easily accessible in traditional (native language media, the more likely they will use ethnic Web portals.

### *3.3 Perceived cultural similarity*

Past research indicated that consumers’ familiarity with a product (or its physical cues such as color of packaging) might have a positive impact on product selection (Srinivasan *et al.*, 1987; Shimp *et al.*, 1991). This effect is thought to occur owing to the conditioning effect through which the consumer, facing a familiar stimulus, elicits a positive feeling associated with the product, such that the user is more likely to choose it.

Within the context of ethnic portals, we focus on the impact of cultural familiarity. A large body of cross-cultural consumer research had attested to the importance of culture in shaping consumer behavior (Cote and Tansuhaj, 1989; Hofstede, 2001). When ethnic Internet users decide which of the three types of ethnic portals they might frequent, cultural considerations may prevail if the perceived need for ethnic portals is similar among these three choices. This may be true because the different types of ethnic portals carry different cultural connotations and such perceptual factors may influence consumer decision making (Briley *et al.*, 2000).

Despite the fact that all ethnic portals are selectively new developments, some elements – such as a local perspective on global news coverage, the ways ethnic portals portray themselves (hometown player or global player), or Web site design styles (using culturally familiar colors or globally neutral colors) – may convey a sense of cultural familiarity to ethnic users. Further, the warm

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feelings generated from such familiarity are likely to subsequently translate into better evaluations and higher usage rates.

A related line of reasoning also highlights the key role of cultural familiarity on ethnic portal usage comes through the Theory of Diffusion of Innovation (Rogers, 1983), which posits that innovations that can be used less effortlessly tend to encourage adoptions. In the context of ethnic portals, information that is aligned closely with the processing style and cultural preferences of ethnic users should invite portal patronage, as users find it easier to absorb the information through a culturally familiar interface and context.

In practice, ethnic portals have a couple of options that they can use to enhance their cultural similarity in the eyes of ethnic Internet users; namely, their design style (culturally-bound or global), perspective of information coverage (local vs global), and self-promotion theme (hometown favorite vs global player).

To summarize the above discussions, we propose the following three hypotheses:

- H4.* The more ethnic Internet users perceive ethnic portals to be designed in a style familiar to their ethnic culture, the more likely they will visit ethnic Web portals.
- H5.* The more ethnic Internet users perceive ethnic portals to be presenting information from the locals' perspective, the more likely they will visit ethnic Web portals.
- H6.* The more ethnic Internet users perceive ethnic portals to be positioning themselves as "hometown players" on the Internet, the more likely they will visit ethnic Web portals.

### *3.4 Ethnic Internet users' ethnocentrism*

The preceding discussions focus on the innovative characteristics of ethnic portals. Yet differences in individual consumers' resources and various personal traits (e.g. need for cognition) are often cited as reasons for explaining variations in the purchase decisions of consumers who may have similar needs (Engel *et al.*, 1995).

A number of individual difference variables surface in our conceptualization of the usage frequency of various ethnic portals. However, we deem target consumer ethnocentrism (Shimp and Sharma, 1987), a critical construct in the cross-cultural research domain (Balabanis *et al.*, 2001; Good and Huddleston, 1995), as the most pertinent one for our study. The selection is consistent with recent research findings (Iyer and Taube, 2002) that culture was instrumental in the diffusion and development global Internet and e-commerce.

Since consumer ethnocentrism refers to whether consumers of a specific ethnicity are receptive to marketing influences from companies of foreign descent, we hypothesize those ethnic consumers who are high in ethnocentrism

should prefer to use a local ethnic portal (or international flavor portal) more than using the global portal brand extension for ethnic users. The rationale here is that those ethnic Internet users who are less open to foreign products/services will find the local ethnic portal or international flavor portal more acceptable, as both types offer a local touch. On the other hand, they might deem global ethnic portals less desirable and being simply the duplicates of the global brands without adaptations to the unique needs of ethnic users.

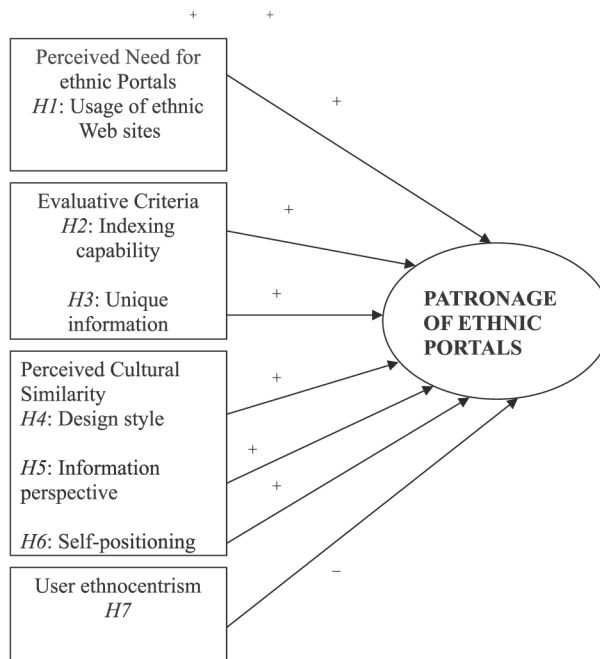
*H7.* The more ethnocentric an ethnic Internet user is, the more likely he or she will use ethnic Web portals.

The propositions developed above are summarized in schematic illustration in Figure 1. The model provides a guiding foundation for our empirical study.

### 4 Empirical study

#### 4.1 Study design

An empirical study was conducted to test the research hypotheses embodied in our conceptual model. The Internet market in Mainland China was selected because of its importance in the global Internet domain (*EMarketer*, 2002) and the existence of a variety of ethnic portals for the Chinese Internet users. Based on the 2000 Chinese Internet User Survey results provided by CINIC (2000), five popular ethnic portals were chosen for this study, including [www.sina.com](http://www.sina.com) (Sina), [cn.yahoo.com](http://cn.yahoo.com) (Yahoo! China), [www.sohu.com](http://www.sohu.com) (Sohu), [www.netease.com](http://www.netease.com)



**Figure 1.**  
A conceptual model of ethnic portal patronage

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(Netease), and [www.lycos.com.cn](http://www.lycos.com.cn) (Lycos China). According to the information collected about their origins (e.g. from their corporate history as described at each portal), Sina and Sohu can be considered “ethnic portals with strong international flavor”; Netease can be classified as a “locally-brewed ethnic portal”, and Yahoo! China along with Lycos China fit into the “global portal brand extensions” category.

#### *4.2 Sample*

A convenience sample of 350 college students from a major University in Guang Zhou, China, participated in this study. They completed the distributed questionnaires during classes, in exchange for partial course credits. The sample consisted of MBA level students as well as upper level undergraduate business students. A total of 329 completed responses were collected (response rate was 94 percent). Of the respondents, 60 percent were male. Approximately 90 percent of the respondents were between 18 and 30 years old. Of the respondents, 60 percent stated that their household income level was comparable to, or higher than, the national average. Compared to the overall profile of Chinese Internet users (e.g. CINIC, 2000), these respondents appeared to be typical of Chinese Internet users at this stage of Internet adoption in China.

#### *4.3 Questionnaire*

The survey questionnaire was developed in reference to our proposed conceptual model. It consists of five major sections. In section 1, subjects answered a few questions about their general Internet usage. Subjects indicated the frequency with which they used each of the five Chinese language portals in section 2. In section 3, they were asked to evaluate each ethnic portal along five dimensions: perspective of information presentation (domestic vs global), indexing capability of Web sites in Chinese (few vs many), Web site design style (Chinese vs foreign), ability to provide unique information that is not easily available in traditional Chinese media (poor vs good), and how each Chinese ethnic portal promoted itself (hometown favorites vs global players). Demographic information about each respondent was collected in section 4. Finally, consumer ethnocentrism was assessed using the scale developed by Shimp and Sharma (1987).

The survey questionnaire was developed in Chinese by the bilingual researchers. A pretest of 20 Chinese Internet users found no ambiguity in the wording of questions.

#### *4.4 Measures*

Respondents evaluated the following five dimensions of each ethnic portal on a 5-point scale: “Indexing capability of Web sites in Chinese” (1 = none to 5 = almost all), “Informational advantage over traditional media” (1 = very little to 5 = very strong), “Site design style” (1 = Chinese to 5 = global),

“Information presentation perspective” (1 = Chinese and 5 = Global), and “self-promotion theme” (1 = hometown favorites to 5 = global player). “Usage of ethnic portal” was measured by a 5-point Likert scale from 1 = never to 5 = everyday. “Consumer ethnocentrism” was measured on an 8-item 5-point scale developed by Shimp and Sharma (1987). Finally, respondents’ “Internet experience” was measured in the following scale: “less than one year”, “between six months and one year”, “one to three years”, “four to five years”, and “more than five years”. A summary of the measures and their descriptive statistics are given in Table II.

While we did not use multiple-items for most of the constructs used in this study, we argue that the fact that each construct item was repeatedly applied on five different ethnic portals, provided a way for “gauging” the reliability of each construct item. Hence, we took this approach and calculated the reliability of the following single-item constructs, based on measures of the single item for each construct collected across the five ethnic portals. The “reliability” for the constructs used were thus estimated as follows (in parentheses): ethnic portal usage (0.50 for all five portals, and 0.56 for all except Lycos, which is a relatively new portal), indexing capability (0.84) unique information (0.81), perspective of information (0.72), site design style (0.73), and self-promotion theme (0.79). Consequently, we concluded that the scale for ethnic portal usage achieved moderately acceptable reliability; and the scales for other single-item constructs exhibited acceptable reliabilities – especially in view of the exploratory nature of this study (Nunnally, 1978).

## 5 Analysis results

Our data analysis consists of two major tasks. First, we applied multidimensional scaling technique to derive a positioning map for the five

Measure	Sina	Sohu	Netease	Yahoo! China	Lycos China
Indexing capability	3.28 (1.01)	3.53 (1.04)	3.40 (1.04)	3.08 (0.95)	2.63 (1.03)
Unique information	3.36 (1.00)	3.54 (0.97)	3.40 (1.03)	3.17 (0.95)	2.77 (1.05)
Site design style	2.25 (1.19)	2.33 (1.28)	3.31 (1.38)	2.12 (1.13)	2.65 (1.32)
Information perspective	2.45 (0.94)	2.49 (1.00)	3.06 (1.07)	2.28 (0.93)	2.71 (1.16)
Self-promotion theme	2.86 (1.45)	2.80 (1.40)	3.38 (1.46)	2.48 (1.24)	2.81 (1.25)
Usage frequency of portal	3.23 (0.91)	3.34 (0.88)	2.57 (0.94)	2.92 (1.00)	1.20 (0.62)
Visit frequency of Chinese language sites			4.43 (1.82)		
Close to visiting Chinese language Web sites everyday			2.98 (0.84)		
Internet experience			2.98 (0.84)		
Average experience 1-3 years					

**Table II.**  
A list of key measures and mean values of measures

**Notes:** Standard deviations in parentheses. A 1-5 scale was used for each measure listed in the Table

ethnic portals. Second, multiple regression was used to test the hypotheses embodied in our conceptual model.

5.1 Relative positioning of ethnic portals

Multidimensional scaling (or MDS) is a statistical technique often used by marketing researchers to identify key dimensions underlying respondents' evaluation of product offerings (Hair *et al.*, 1998). MDS also simplifies the structure of information presentation. Based on the analysis outputs on the evaluations of the ethnic portals' five attributes (i.e. indexing capability; unique information capability, perspective of information coverage, Web site design style, and self-promotional theme), a two-dimensional positioning map of the five ethnic portals was created (Figure 2). The MDS analysis produced a stress value of 0.02 and an *R*-square of 0.99. We also explored two-, three-, and four-dimensional solutions but concluded that the two-dimensional solution

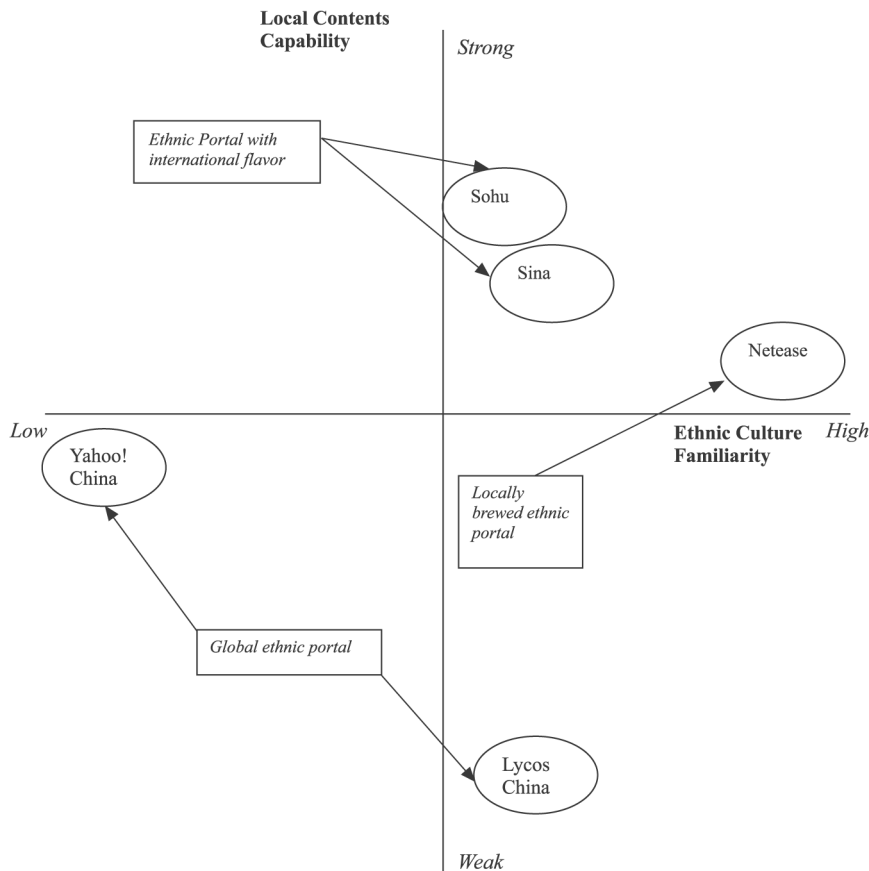


Figure 2. Positioning map of five Chinese ethnic portals

was most appropriate, based on the meaningfulness and interpretability, and also on Kruskal's stress index (Kruskal and Wish, 1978).

The two dimensions were interpreted as:

- (1) *Local contents capability*. This encompasses the ethnic portal's ability to index as many Chinese language Web sites as possible and to provide unique information that is not easily located in traditional Chinese media; and
- (2) *Ethnic culture familiarity*. This accounts for design style, news coverage perspective, and self-promotion theme.

Overall, dimension one captures the actual information gathering capability of ethnic portals while dimension two describes the subjective feel of an ethnic portal's degree of familiarity with the Chinese culture. The findings of MDS analysis provide added evidence to substantiate our theoretical model's validity in which "perceived informational advantage" and "perceived cultural familiarity" were proposed as two sets of factors. Finally, the final two-dimensional position map was also replicated via correspondence analysis (not shown here).

Figure 2 shows that the two "international flavor ethnic portals" – Sina and Sohu – were perceived to be quite good at providing localized information. In addition, these two portals were also perceived as neither too "global" nor too "local" in terms of news perspective, design style, and advertising theme. The "locally-brewed" ethnic portal Netease was perceived as "highly Chinese" along the "perceived cultural familiarity" dimension. Yet compared to Sina and Sohu, this site was judged relatively weaker in terms of its ability to locate particular information. The global portal Yahoo! China was perceived to be the most "global" of the five portals as can be seen in its position along the "ethnic culture familiarity" dimension. Nonetheless, Yahoo! China was judged to be acceptable in terms of its ability to provide Chinese-specific information to Chinese Internet users (though it still trails behind Sohu and Sina in this dimension). The positioning of Lycos China seemed interesting. Though it is a "global ethnic portal", it was perceived to be relatively "Chinese" for its perspective of news coverage, design style, and advertising theme. A closer examination revealed that Lycos China was actually built on a smaller Chinese portal site ([www.myrice.com](http://www.myrice.com)) that it acquired not long ago. Thus, the "Chinese look and feel" of Lycos China probably can be attributed to its heritage from its predecessor. On the other hand, Lycos China was rated inadequate in terms of its ability to provide information that is of particular interest to Chinese Internet users.

### *5.2 Implications of the perceptual map*

Ethnic Internet users expect ethnic portals to index as many ethnic Web sites as possible and to compile information that is not easily available from

traditional media. If an ethnic portal is to improve on the “local contents capability” dimension, the challenge is to develop its technical capability for searching and indexing a larger portion of the ethnic language Web sites. This may entail the use of advanced search bots or more human compiling. The other dimension is certainly more subjective and requires more creative thinking from the ethnic portal. For instance, a “classical Chinese design” style may use culturally bound symbols (e.g. yin-yang), colors (e.g. yellow), shapes (e.g. Great Wall), etc. to convey the message that the ethnic portal is truly adopting a domestic orientation. On the other hand, “the perspective of news coverage” requires the input of experienced editorial staff to decide the proper mix of news sources (e.g. domestic vs foreign news agencies), and the proper spin to put on the news story. Finally, the “self-promotion theme” of the ethnic portal can be changed by manipulating factors such as ad style (traditional Chinese vs global), spokesperson (domestic vs foreign), and judicious use of proper images or scenarios in ads.

To summarize, each ethnic portal needs to critically assess the discrepancies between its current position and its desired position before it can decide the correct directions for making any modifications.

### *Regression models*

To test our conceptual model, a multiple regression model with a dummy variable for each ethnic portal was run to test the seven hypotheses, and also to examine how the proposed relationships may differ for each different ethnic portal.

The dependent variable for the regression was “usage of the ethnic portal”, which was measured by a 5-point Likert scale. Explanatory variables include: the five attributes of ethnic portals; visit frequency of Chinese language Web sites (1 = never to 5 = everyday), a dummy variable for each ethnic portal (except Lycos China that was designated as the base category); and finally, a control variable on internet experience (number of years of using the Internet). The rationale for using dummy variables is that, even though the direction of relationships among various usage antecedents and usage should be similar across the various types of ethnic portals, the distinctiveness of each ethnic portal dictates that such relationships may differ in their intensities. Dummy variables for each ethnic portal would be appropriate for capturing such potential differences.

To check for the potential of multicollinearity effect, variance inflation factors were calculated. Since all predictors have VIF values smaller than two – well below the threshold value of ten (Belsley *et al.*, 1980); we concluded that there were no serious multicollinearity concerns.

A summary of the regression model is given in Table III. The model appeared to be adequate as it was significant overall and it explained 42 percent of the total sample variance. Among the predictors, “indexing

Hypothesis	Predictor	Coefficient	<i>t</i> -value	Conclusion
<i>H1</i>	Usage frequency of ethnic Web sites	0.06	2.52*	Supported
<i>H2</i>	Indexing capability of ethnic portal	0.09	4.03*	Supported
<i>H3</i>	Informational advantage over traditional media	0.02	4.56*	Supported
<i>H4</i>	Design style	-0.01	-0.80	Not supported
<i>H5</i>	Local information perspective	0.02	0.85	
<i>H6</i>	Self-position as either local or global player	0.03	1.60	Not supported
<i>H7</i>	Consumer-ethnocentrism	-0.00	-0.15	Not supported
	Dummy variable for Sina	1.82	24.07**	
	Dummy variable for Sohu	1.93	25.48**	
	Dummy variable for Netease	1.17	15.67**	
	Dummy variable for Yahoo! China	1.52	20.41**	
	Internet experience (control variable)	0.13	4.40*	Significant predictor
	<i>F</i> -value of the regression model: 92.56			Overall regression model is significant
	Adjusted <i>R</i> -square for the model: 42.09%			

**Table III.**  
Summary of the  
regression model results

**Note:** \*  $p < 0.05$ , \*\*  $p < 0.001$

capability of Web sites in ethnic language”, “informational advantage over traditional media”, and “visit frequency of Web sites in ethnic language” emerged as significant. Further, the coefficients were in agreement with the hypothesized direction, *H1*, *H2*, and *H3* were clearly supported.

However, contrary to other hypotheses, “design style”, “information perspectives”, and “self-promotion theme” did not appear as significant predictors. Therefore, *H4*, *H5*, and *H6* were not supported by our sample data. Further, “consumer ethnocentrism” did not reach significance level, thus failing to support *H7*. We offer two possible explanations for the lack of significance for “perceived cultural similarity” variables. First, even though there are cultural differences among the five Chinese ethnic portals, the perceived cultural differences among them, as perceived by the Chinese Internet users in our sample, may not be distinct enough to be detected by the regression model. Second, the existing sample consisted of college level business students from Guang Zhou, a city known for a long history of openness towards foreign products and ideas. The relatively homogeneous sample of most likely open-minded respondents may have disguised the influence of ethnocentric opinions. Nonetheless, we suspect that cultural variables would have surfaced in an ethnic Internet market if:

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- (1) the three types of ethnic portals are sufficiently different along the cultural attributes; or ethnic Internet users show sufficient variances in their “ethnocentrism” measures.

The control variable for the regression model, “internet experience”, was significant. This interesting finding indicated that more experienced ethnic Internet users actually visited ethnic portals more often. This finding further attests to the importance of developing ethnic portals, as even experienced ethnic Internet users have the tendency to rely on ethnic portals to find directions to other ethnic Web sites, or they simply browse the ethnic portal for information.

Finally, all four dummy coded variables (with Lycos China as the base category) were highly significant (see Table III). Considering the dependent variable was measured on 1-5 scale, we converted the coefficients for dummy variables to develop an approximation of how much more an ethnic user is going to visit a particular ethnic portal, as compared to visiting Lycos China (the base category). Our calculations indicated that, given the same set of predictors, (i.e. same perceptions of the ethnic portal in five attributes, etc.); an ethnic Internet user will visit Sina about 36 percent ( $= 1.8/5$ ) more than he/she will visit Lycos China. In a similar fashion, an ethnic Internet user will visit Sohu about 38 percent more ( $1.8/5$ ), Netease 23 percent more, Yahoo! China 30 percent more, than he/she will visit Lycos China.

## 6 Conclusion

This paper studied three types of ethnic portal Web sites, examined their positioning in ethnic users’ minds, and identified factors that may affect usage frequency of ethnic portals. We developed a conceptual model that explains what variables may impact ethnic Internet users’ patronage of ethnic portals’ and the model received partial support in an empirical study. Our empirical analysis results served two purposes for this study. First, we identified two dimensions in the MDS analysis that may be used in evaluating the relative positioning of five ethnic portals. The positioning of the five sample Chinese ethnic portals on the discovered perceptual map is in general agreement with our prior classifications of three types of ethnic portals, thus attesting to the validity of the two dimensions. Second, our regression model analysis provided partial support for our conceptual model, which posits that “perceived need” and “perceived cultural similarity” are related to patronage of ethnic portals.

Owing to the exploratory nature of this study, a couple of limitations are worth mentioning. First, the sample selected was not a random sample and generalization of our study results should be viewed with caution. Further, the current sample was relatively homogeneous in terms of demographics (college level students in China). This relatively homogeneity of respondents might explain the lack of ethnocentrism measure variations and the subsequent lack of support for this factor on ethnic portal usage. Further studies should investigate a more diverse sample of ethnic Internet users to provide a stronger

test of our conceptual model. Second, most measures (with the exception of consumer ethnocentrism) used in this study are single-item measures. Future studies could develop and test multi-item measures that may have more desirable psychometric properties. Third, while the overall regression model was significant, “perceived cultural similarity” variables failed to emerge as significant predictors. One possible implication for this surprise finding could be that Chinese Internet users were paying more attention to the informational aspects of ethnic portals, as informational capabilities of ethnic portals are still their foremost concerns about ethnic portals at this level of Internet development in China (CINIC, 2000). However, we suspect that in a country (e.g. Japan) where the Internet is more developed and there are many varieties of ethnic portals, then ethnic Internet users may adopt a more balanced approach in evaluating both the “informational capability” and “cultural familiarity” of ethnic portals. Certainly, replicating the existing study in countries with different levels of Internet development will be beneficial.

Ethnic portal sites are important gateways to the WWW for ethnic Internet users. Even though they may differ in some aspects, they all have to be concerned with attracting visitors to their sites, as more visitors often result in more advertising revenue. Our study found that “perceived needs” and Internet experience are instrumental in explaining the usage frequency of ethnic portals. Thus, the challenge for ethnic portals is first to improve their informational capabilities. Then, as ethnic Internet users gain experience, they will likely use ethnic portals more; thus putting more pressure on the performance of ethnic portals. At that stage, the challenge is then to appear culturally familiar and attract more patronage from ethnic Internet users in a competitive cyberspace for ethnic portals.

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### Further reading

- Roth, M. (1997), "Marketing in a multicultural world: ethnicity, nationalism, and cultural identity", *Journal of Marketing Research*, Vol. 34 No. 3.