

Survey of Explanation Contents for Gourmet Product Information in Japanese e-Shopping Sites

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Abstract: - Various guidelines exist for explaining product information in e-shopping web sites that have rapidly increased in recent years. However, in Japan, it remains doubtful whether they are actually helpful. This survey report shows what kind of explanations about gourmet products are presented in Japanese retail e-shopping web sites.

Key-Words: - E-shopping, Survey report, Product information, Product explanation, Gourmet product, Web page design

1 Introduction

Recently, the popularity of e-shopping sites continues to increase, and a survey shows that 89.9% of Japanese Internet users have purchased products from them. 63.7% of all Internet users have used e-shopping for more than two years [1][2], and these numbers are still growing. E-shopping sites are used as an information collection method that is second behind actual stores [3]. E-shopping sites are often used as indirect information collection ways. Therefore, improving e-shopping web sites is necessary. In this report, we pay attention to the contents of product explanations, which is one of the qualities of e-shopping web sites. There are many guidelines about how sellers should show product information on web pages, including the following: presenting product photos that show its features and how to use it, detailed explanations about the product's manufacturers or sellers to wipe out uncertainty, and written explanations to stimulate consumer imaginations. Furthermore, sellers are also counseled to attach catchy phrases to increase product appeal, to explain the product in detail, and to emphasize important product information with image data. However, it remains unclear how much these guidelines are applied to e-shopping web sites and how effective they are.

In this report, we investigate the actual conditions of product explanation ways in Japanese e-shopping web sites, what kind of product information is presented, and what trends exist in actual e-shopping web sites.

2 Conditions of e-shopping web sites

2.1 Status of Internet users

"White paper 2006 Information and Communications in Japan" reported Internet penetration rate of 66.8% and over 85 million Internet users.

The percentage of broadband households among all Internet households rapidly expanded to 62.0%, increasing by 55.2 points from the end of 2000. At the end of 2005, broadband (FTTH, DSL, cable Internet, wireless, and third-generation mobile phones) householders exceeded 23 million, an increase of 19.1% over the previous year. DSL accounts for 60% of all broadband lines, and FTTH is merely 5.46 million or about 23.4%. However, regarding the rate of increase from the previous year, FTTH increased 88.4%, but DSL only increased 6.2%. Moreover 80.5% of users planning to change Internet lines intend to change to FTTH. Managers and storeowners of e-shopping web sites need to provide FTTH users with product information by data formats that can exploit FTTH line speed.

2.2 Status of online shopping

In this subsection, we describe the Internet's influence on consumer behavior, which consists of three steps: finding products, gathering product information, and comparing stores. Concerning "finding products," 38.0% of consumers find products through Internet. On the other hand, concerning "gathering product information" and "comparing stores," about 60% of consumers use Internet before they buy. However, only 26.1% purchase products through the Internet.

Furthermore, only 36.2% of Internet users have experience online shopping (from a survey in 2005), and actual store purchases remain the norm.

Figure 1 shows a questionnaire result regarding the "selection reason of online shopping sites" answered by 2360 Japanese online shopping consumers [4]. Figure 1 shows the five highest ranking reasons, and another is "easy search for products." The principal reason is "low prices." The lower age bracket chooses a "wide variety of products" and the upper age bracket chooses "easy to buy." In the same questionnaire regarding "what product will you try to buy," many respondents answered "products cheaper than other stores," because consumers pay attention to low prices. The second answer is "products hard to buy at usual stores;" these two answers account for 60%.

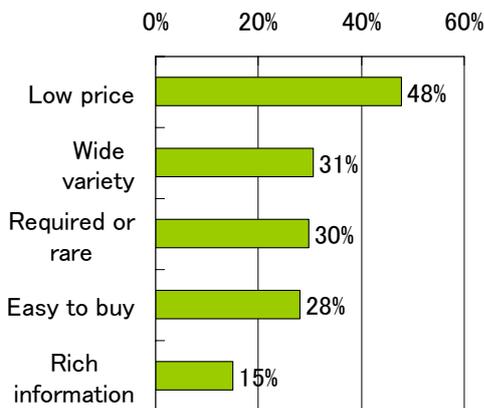


Figure1 Reasons of selecting shopping sites

Meanwhile, according to "White paper 2006 Information and Communications in Japan," the following are the expected effects by B2C diffusion: customizable functions, rich product lineup, improvement of product information notification, lowering of prices, and expansion of purchase opportunities. Although consumers' greatest concern is "lower prices," based on consumer behavior when using the Internet, we will study "improving product information notification."

3 Survey of providing product information

3.1 Survey policy

When concentrating on "product information notification," which is one expected e-shopping effect,

we must examine "what information" and "what format".

For the former, if the information that consumers need is missing, they cannot make purchase decisions. Namely, no matter how many details are given by explanations, when one site doesn't provide important points, consumers search other sites for necessary information. Therefore, referring to guidelines, we examine points that are necessary to make purchase decisions.

Concerning format, as FTTH spreads, mass data contents will be provided and the choice of forms for providing information will increase. For example, products can be explained with clear images, animation, or 3D video, etc. However, it remains unclear whether information provided by animation effectively stimulates consumers to buy. Although explanations with product images are effective, merely increasing the number of images is not expected to be beneficial; it is necessary to examine what kinds of images should be provided.

Since these two points--"what information" and "what format"--for product information differ by product categories, surveys are necessary for each category. We narrow the examination target category. Moreover, since this survey concerns the contents themselves, it is difficult to collect data mechanically. Therefore, we collected e-shopping data by viewing web pages.

3.2 Survey method

First, we chose a gourmet foods category because e-shops of this category mostly handle original products and product's information is important. To fix the survey items, we selected content items provided in about 20 e-shopping sites. The survey items in the gourmet foods category include the following:

- Shop information: site name, URL, search engine, keyword for search, subcategory, price range, and mall or individual
- Text information: amount of words in a page, amount of words in a summary, explanations of features, how to use, product origin, ingredient, catchphrase, special attention, usage of an image presenting only letters, and the size of an letter image
(Amount of words counts with number of letters)
- Specifications (written in table or itemized format) : size, ingredients, product origin, weight, volume of contents, expiration date, and preserved condition

- Image : number of product images, size of main and detail images, enlarged image capability, usage example, without a product, animation image, and ingredients
- Producer : amount of words explaining a producer and size of producer's image

We developed a web-based system that registers these survey items in a database and checks duplicate data by URL.

4 Survey results

4.1 Survey data

Survey data consist of 200 samples extracted with search engines: Google, Yahoo, Tabelog (Consumer Generated Media Site of Japanese gourmet information), InfoSeek etc. The following are the product price ranges of the survey data: 500yen (about \$4.4) , 3 samples; 1,000yen (about \$8.7), 22 samples; 5,000yen (about \$43.5), 112 samples; 10,000yen (about \$87), 49 samples; and 50,000yen (about \$435), 14 samples.

4.2 Survey results

Table 1 shows a summary of the survey results. 64.0% of e-shopping sites prepare one page for one product's information. Besides listing products on a main page, the majority of e-shopping sites prepare one page intensively provide one product's information.

Regarding image data, 52.5% of e-shopping sites provide more than two product images. Roughly half use more than two product images. 44.5% of sites use images of product usage examples, as recommended by the guidelines. Contrary to our expectation, sites whose product images can be enlarged are fairly small at 19.5%. No site uses animation for product explanation.

Although the guidelines recommend that e-shopping sites describe their producers in detail, only 13.0% of e-shopping sites practice this recommendation. 92.5% of e-shopping sites display product features. Product features are essential to provide product information. The remaining 7.5% sites almost never use language to explain their products.

55% of sites display usage. We found that providers think a great deal of information about how to use products, which is second to product features.

Table1 Summary of the survey results

	Item	Result
Shop information	shop in a mall	24.5%
	one page for one product	64.0%
Image	more than two	52.5%
	enlarge	19.5%
	usage	44.5%
	without the product	15.0%
	animation	0.0%
	ingredients	8.5%
Producer	explanation	13.0%
	image	10.5%
Text information	feature	92.5%
	how to use	55.0%
	product origin	42.5%
	ingredients	53.0%
	catchphrase	41.5%
	special attention	19.5%
	letter image	15.5%
Specifications	size	23.0%
	ingredient	35.5%
	product origin	18.5%
	weight	27.5%
	volume of content	74.0%
	expiration date	46.5%
	preserved condition	40.5%

More than half of the sites wrote about the ingredients. Safety or brand appeals of ingredients was expected in the gourmet category. We assumed that the rate of this item is different by product category.

Using catchphrase is 41.5% even though it is recommended by the guidelines. Using letter images, which is also recommended by the guidelines, is only used by 15.5%.

For the specifications, 74.0% of sites included the "volume of content." Despite the importance for gourmet products, "expiration date" and "preserved condition" are only included in 46.5% and 40.5% of the sites, respectively. Providers tend to think volume

is most important, but that may be different from consumer needs.

4.3 Survey result about amount of words

Figure 2 shows the amount of all letters used to explain products. When the amount of words is increasing, the proportion of sites is decreasing. 3% of sites have no sentences. 1-400 letters, which denotes a brief written comment, is the largest at 65.0%.

The mean which is 435.52 letters corresponds to a range of 401-600 letters. The median of 256 letters is supposed to be commoner than the mean. Furthermore, 26 sites write explanations about producers, but only eight sites do so with more than 400 letters. It is clear that producers' information is lacking, even though guidelines recommend it.

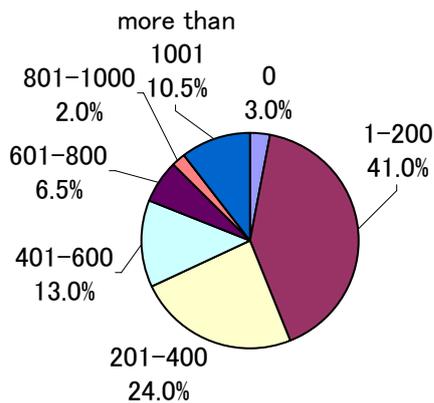


Figure2 Number of letters
(Amount of words)

4.4 Survey result about usage of images

Figure 3 shows how many images are used for products in a shopping site. As the number of images increases, the number of sites decreases. Many sites use only one product image. All 200 sites we examined use at least one image.

When we examined the size of the main image, about 97% of the sites used image larger than 100x100. The most frequent main size is between 101x101 and 300x300.

We also examined the relation between the size of the main image and the number of images. The size of images tends to become larger when the number of product images increases. If more than three images are used in a site, the image in the site is larger than

100x100. When more than five images are used, the images in the site are larger than 200x200.

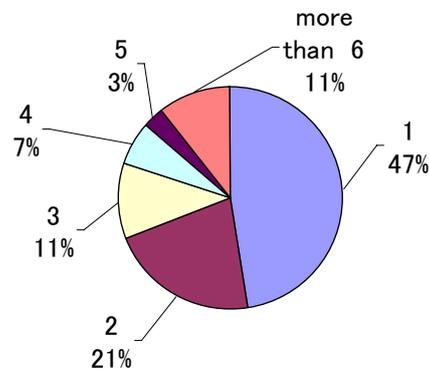


Figure3 Number of images

4.5 Relations between survey items

We examined the coincidence between survey items. Coincidence means the rate of sites in which two items are written or neither are written. The following combinations have high coincidence:

- product origin(specification) and weight(specification) : 78%
- product origin(specification) and size(specification) : 67%
- product origin(specification) and special attention(text information) : 73%
- product origin(specification) and product origin(text information) : 65%
- catchphrase (text information) and product origin(text information) : 69%
- preserved condition(specification) and expiration date(specification) : 77%
- preserved condition(specification) and ingredient (specification) : 69%

When "product origin" is written as a specification, "weight and size" as a specification and "special attention and product origin" as text information are written in more than 65% of the sites. When "product origin" information is written as text information, "catchphrase" is also written in more than 65% of the sites. This relation probably reflects that catchphrases often include "product origin".

4.6 Comparison between individual and mall shops

Table 2 shows comparison results between individual and mall e-shopping sites. 49 samples are from malls and 151 from individual sites. From Table 2, among all items, mall sites are larger than individual sites, especially large image and text information differences.

Table 2 Comparisons between individual and mall sites

	Item	Mall	Individual
Shop info	one page, one product	81.6%	58.3%
	more than two	81.6%	43.0%
Image	enlarge usage	34.7%	14.6%
	without a product	63.3%	38.4%
	ingredients	32.7%	9.3%
	ingredients	22.4%	4.0%
	ingredients	22.4%	4.0%
Producer info	explanation	20.4%	10.6%
	image	14.3%	9.3%
Text Info	how to use	75.5%	48.3%
	product origin	55.1%	38.4%
	ingredient	67.3%	48.3%
	catchphrase	57.1%	36.4%
	letter image	26.5%	11.9%

Regarding the four items recommended by the guidelines ("image of usage", "explanation about producer", "catchphrase", and "letter image"), less than half of individual e-shopping sites adhere of them. The guidelines haven't spread yet. However, mall sites have a comparatively high guideline spread rate because mall manager recommend their guidelines. Therefore, it is necessary to inform individual e-shopping sites about the guidelines.

When we compare the number of explanation letters, mall sites use more letters than individual sites. Individual sites with 1-200 letters are 47.7%, but mall sites are just 20.4%.

Furthermore, regarding images, mall sites include more images than individual sites as shown in Figs 4 and 5. 56.95% of individual sites use only one image but just 18.37% of mall sites use one image.

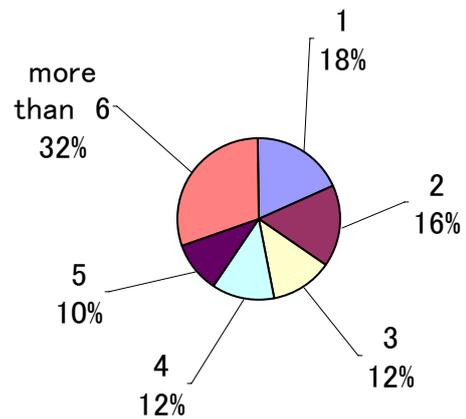


Figure4 Number of images in mall sites

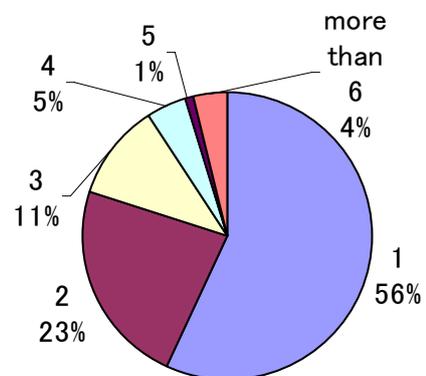


Figure5 Number of images on individual sites

4 Conclusion

In this report, we examined 200 gourmet e-shopping sites to study the actual conditions of product explanation in Japanese e-shopping web sites. 92.5% of e-shopping sites provide product features as text. Our survey clarified that the guidelines have not spread yet, especially regarding individual e-shopping sites.

References:

- [1] Internet Association Japan: *Internet white paper 2006*, Impress, 2006.
- [2] Internet Association Japan: *Internet white paper 2005*, Impress, 2005.
- [3] White paper 2006 Information and Communications in Japan
<http://www.johotsusintokei.soumu.go.jp/whitepaper/ja/h18/>
- [4] InfoCom Research Inc: MIN 45th questionnaire about Internet shopping 2005 <http://www.icr.co.jp/min/i>