ORIGINAL ARTICLE

A Study of Trade Marks, Symbols and Logotypes of Japanese Corporations – By Means of Perspective on Visual Evolution –

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Abstract: Customer's impression for corporate logos is very important on management strategy. Building up strong VI produces a large amount of profit to corporations. This study considers what impression the customer has, based on a questionnaire survey data. We focused on the logo evolution of Japanese corporations. We used 3 Japanese corporations' logos as stimulus. These logos are categorized into 3 typical Japanese logo designs. We proposed a questionnaire to the university students to investigate what the impressions of the logos of the 3 Japanese corporations. As the result of Factor analysis, 2 factors were gained. Factor 1 was named F1 Reliability-confidence and Factor 2 was named Innovation-invention. And we gave consideration on the combination of the logo designs and participants' impressions. The combination of (1) figurative designs and (3) logotype has the tendency that both F1 Reliability-confidence and F2 Innovation-invention. The results of our study are useful in VI strategy.

Keywords: Logos, Visual Identity, Corporate Identity, Customers' Impression

1. INTRODUCTION

Corporate logos are symbols which are based on Corporate Identity (CI). One of CI aspects is Visual Identity (VI). Building up strong VI produces a large amount of profit to corporations. VI refers to the visual part of CI. CI includes how a corporation should be, but VI limitedly refers how a corporation manages and develops 'the appearance' of a corporation [1].

We assume a strong logo image will differentiate from others. Gorb (1992) describes that the psychology of corporate identity is all-important in understanding its potential for strongly representing the organization externally [2].

And we have some studies of logos in Asia. Henderson et al. (2003) evaluated the logos in China and Singapore [3]. Henderson et al. (2004) also evaluated typeface design [4]. Doyle and Bottomley (2004) investigated both typeface designs and brand names [5].

Developing a specific strategy for Asian countries seems to be worthy to the corporations that aim to increase profits for the international market.

On the other hand, the designs of Japanese corporate logos are categorized into the three types: (1) figurative designs, (2) non-figurative designs and (3) logotypes [5]. Figurative designs seem to be influenced by traditional patterns which describe Japanese nature motif like flow-ers, birds, winds and the moon. Non-figurative designs

are simplified with the drawing to a minimum level. A corporate logo with simplified non-figurative design would have a strong image. Logotypes are directly reflected corporate names. A logotype could be read in second. So, customers would cognize and memorize a company name or a brand name directly. Cognition and memory is important for a first step of purchasing behavior. Many logotypes are used under influence of the western styled corporate strategy after the period of prosperity '80s, but traditionally, figurative designs were used in Japan. We considered that tendency had occurred under the influence of the hieroglyphic and emblems. Japanese emblems resemble western emblems in the meaning of a family mark. But, there are slightly differences between Japanese and western at the point of shapes and designs. A lot of Japanese emblem designs and shapes are made up of the natural world figures and geometric figures.

We consider that corporate logo must be designed carefully and considerably. Because a corporate logo design has a sensitive assignment which it includes legal view point likes trademark rights [6].

In another case, a consideration of logo evolution has done. Only a figurative design of animal has been referred to an anatomical viewpoint. The new abstracted logo of panda of WWF (World Wide Fund for Nature) was better suited to life in the rich, digital environment. It was judged that the old logo is thought to be a bit "old, sick, depressed" [7].

And Ezaki Glico Co., Ltd as the one of Japanese corporation modified the face of “running man” of their logo because of a word of a moment –His face is scary– by a school girl [8].

“Old, sick, depressed” and “scary” images suppose to be evoked the negative impressions for the corporation by customers. Many corporations have changed logos for building strong CI and VI strategy and sometime for visual accuracy or corporate image. But there were not previous studies indicated whether new logos evoked more positive impression for customers than old logos by using quantitative analysis.

Rand (1985) described about symbols. The fact that some of the best symbols are simplified images merely points to the effectiveness of simplicity but not to the meaning of the word per se. In essence, symbol is not what the symbol looks like but what a symbol does that defines as a symbol.

In this case, the symbols take as the example an abstract shape, a geometric figure, a photograph, an illustration, a letter of the alphabet, or a numeral. Thus a five pointed star, a picture of a little dog listening to his master’s voice, a steel engraving of George Washington, and the Eiffel Tower itself are all symbols [9]. This thought seems to refer to not only design of the symbols but also the function of what the symbols evoke by human. We consider it might be useful for VI strategy if we could what impression customers have on trademarks, symbols and logotypes.

Based on the above, we evaluated the changing of impressions that due to the logo evolution of the 3 Japanese corporations in this investigation.

2. METHOD

We proposed a questionnaire to the university students to investigate what the impressions of the logos of the 3 Japanese corporations. The 3 corporations were chosen by the meaning of their logos were almost evenly categorized into the 3 categories in the introduction. The logos were shown randomly for about 30 seconds on a screen in the lecture room. The stimuli were 22 corporate logos of the 3 Japanese corporations (Ezaki Glico Co., Ltd.; Glico, Kao Corporation; Kao, Matsushita Electric Industrial Co., Ltd.; National). These logos can be classified into (1) figurative designs, (2) non-figurative designs, (3) logotype. The corporations are long-established thus the logos had changed several times. The participants were 46 university students (age: 19-53, Male: 20, Female: 26). The questionnaire included 12 questions for investigating what the impression of the logos are (Q1 Vitality/ Q2 Innovation/ Q3 Familiarity/ Q4 Confidence/ Q5 Reliability/ Q6 Affection/ Q7 Tradition/ Q8 Prospect/ Q9 First rank/ Q10 Invention/

Q11 Character). The impression is rated on a 1 to 5 point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree).

3. ANALYSYS AND RESULTS

First, we analyzed the data matrix 1012 rows (22 stimulus $\times$ 46 participants) $\times$ 12 columns (questions) by using Factor analysis in a Principal Axis Factor (PAF) with a Varimax (orthogonal) rotation (Eigenvalue was more than 1, Cumulative proportion of valiance explained: 57.329%) (Table.1). As the result of Factor analysis, two factors were gained. Factor 1 was labeled “reliability-confidence” (F1 Reliability-

Table 1: Factor loading.

	F1 Reliability-confidence	F2 Innovation-invention
Q5 Reliability	0.877	0.126
Q9 First rank	0.770	0.252
Q4 Confidence	0.745	-0.161
Q8 Prospect	0.673	0.391
Q6 Affection	0.668	0.415
Q7 Tradition	0.646	0.139
Q3 Familiarity	0.585	0.418
Q12 Luxury	0.466	0.374
Q10 Invention	0.130	0.849
Q2 Innovation	0.202	0.757
Q11 Character	0.029	0.687
Q1 Vitality	0.447	0.546
Sum of squared factor loading (%)	4.051	2.828
Proportion of valiance explained (%)	33.760	23.569
Cumulative proportion of valiance explained	33.760	57.329

(Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser normalization.)

Table 2: Mean value of factor loading per logo.

Stimulus	Launch year	F1 Reliability-confidence	F2 Innovation-invention
Glico	1 (unknown*)	0.245279	0.84147
	2 1952	-0.63462	-0.1045
	3 1972	0.72007	0.929412
	4 1992	0.770865	0.381254
Kao	1 1890	-0.38851	0.488487
	2 1897	-0.15022	0.46902
	3 1912	-0.45623	0.228393
	4 1925	-0.89024	0.379143
	5 1943	-0.93728	0.35733
	6 1948	-0.74726	0.369614
	7 1953	0.371351	0.271852
National	1 1929	-0.26323	-1.21074
	2 1932	-0.35748	-0.59651
	3 1932	0.254946	-0.34458
	4 1937	0.093543	-0.6962
	5 1937	-0.01563	-0.13023
	6 1961	0.462612	-0.46111
	7 1961	0.132875	-0.07915
	8 1963	0.006402	-0.77244
	9 1968	-0.29706	-0.67561
	10 1974	1.175894	-0.18614
	11 1974	0.792128	0.459606

(*the reference [2] suggests the year of publication of the logo is unknown, but the web site of Glico [<http://www.glico.co.jp/kinenkan/goal/goal.htm>] suggests the year is 1922.)

confidence). F1 Reliability-confidence has the high value of factor loading on the questions Q5 Reliability, Q9 First rank, Q4 Confidence, Q8 Prospect, Q6 Affection, Q7 Tradition, Q3 Familiarity and Q12 Luxury. Factor 2 was labeled “Innovation-invention” (F2 Innovation-invention). F2 Innovation-invention has the high value of factor loading on the questions Q10 Innovation, Q2 Invention, Q11

Character and Q1 Vitality. Afterword, we calculated the mean value of factor loading for each logo (Table 2). After calculating factor loading on each participant, we fixed the data matrix to 1012 rows (22 stimulus $\times$ 46 participants) $\times$ 2 columns (F1 Reliability-confidence and F2 Innovation-invention) and calculated the mean value. The mean value in Table 2 is presented in Figs. 1-3 with the logos.

Figure 1: Logo evolution of Glico.**

Figure 2: Logo evolution of Kao.**

Figure 3: Logo evolution of National.**

(** The arrows in the figure 1-3 are describing the time flow from old to new.)

4. DISCUSSION

Each latest logo of the 3 corporations has positive impression for F1 Reliability-confidence and F2 Innovation-invention. But we assumed the latest logos have familiar impressions for participants, i.e. the participants marked all the 12 questions 5=strongly agree or 4=agree about the latest logos.

Positive affection was evoked by familiar logos in the case of American broad casting company (ABC) [10]. There seemed to be the same tendency in this investigation.

We indicated the designs of Japanese Corporate logos are categorized into the 3 types: (1) figurative designs, (2) non-figurative designs and (3) logotype in the introduction. The Design changing of the logo Glico is categorized into from (1) figurative designs to (3) logotype, Kao is categorized into (1) figurative and National is categorized into (3) logotype including (2) non-figurative design. We categorized the impressions of these 3 corporation's logos into 4 types below.

- 1) AB: both F1 Reliability-confidence and F2 Innovation-invention are high values.
- 2) ab: both F1 Reliability-confidence and F2 Innovation-invention are low values.
- 3) aB: F1 Reliability-confidence is low value and F2 Innovation-invention is high value.
- 4) Ab: F1 Reliability-confidence is high value and F2 Innovation-invention is low value.

We categorized the logos into AB, ab, aB and Ab: Glico is categorized into AB, Kao is categorized into aB and National is categorized into ab in earlier period (National 1 (Unknown)-National 9 (1968)) and Ab in later period (National 10 (1974)-National 11 (1974)) (Fig. 4).

In addition, we put together the 4 impressions categories, i.e. AB, ab, aB and Ab, and the 3 design categories, i.e. (1) figurative designs, (2) non-figurative designs and (3) logotype.

Glico: AB (1)(3)

Kao: aB (1)

National: ab (2)(3) and Ab (2)(3)

As we can speak within our investigation, the combination of (1) figurative designs and (3) logotype has the tendency that both F1 Reliability-confidence and F2 Innovation-invention are high values, only (1) figurative designs have the tendency that F2 Innovation-invention is high value and F1 Reliability-confidence is low value and the combination of (2) non-figurative designs and (3) logotype has the tendency that F1 Reliability-confidence is high value and F2 Innovation-invention is low value.

5. CONCLUSION

The logos of the 3 corporations seemed to succeed to gain the positive affection such as reliability-confidence and innovation-invention in this investigation. And we investigated the correspondence between design attributes

Figure 4: Relationship between factors and design characteristics of logos.

and impression attributes.

We suggested evaluating what impressions customers have on trademarks, symbols and logotypes might be needed in the introduction, and the combination of (1) figurative design and (3) logotype has both F1 Reliability-confidence and F2 Innovation-invention are high values that would be a positive impression for corporations. WWF, described in the introduction, has changed their logo from (1) figurative design to (1) figurative design and (3) logotype in 1986. Collating with this investigation, that logo seems to be more competitive one. We expect the conclusion might be a suggestion for a first step of a decision making how to develop VI strategy.

Further our study should be arranged for age expansion and additional other corporation long-established but unchanged logos for long period (e.g., Meiji Co. Ltd.), and should be needed the more consideration how to adapt to VI strategy in both theoretical and practical.

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