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An empirical study of the perceived values of world-class design awards for Taiwan's design-award-winning firms

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ABSTRACT:

Design awards aimed at diffusing best practices in product design have become an important part of the design industry worldwide. Although a number of studies have advocated that design awards are increasingly and widely perceived as a model for world-class firms in global design competitions, less attention has been paid to the explorations of their values. The primary question addressed in this study is what the values of world-class design awards perceived by the contestants are. Data from 62 Taiwan's design-award-winning firms which have won at least one of the three world-class design awards (i.e., G-Mark, iF, and red dot), during the period of years 2004-2006 is analyzed. The findings of this study showed that iF received significantly higher "strong reputation" scores under *symbolic value* than red dot, while G-mark received significantly higher "emblematic attraction" scores under *symbolic value* than iF. Furthermore, red dot received significantly higher "product collection" scores under *customer value* than iF. However, the results indicated that there existed no significant difference in all variables under *competitive value* among the three design awards. Finally, the implications of recognizing the importance of the above differences for the organizers and the contestants of the design contests are further discussed.

Keywords: design award, design competition, value

1. PREAMBLE

For most firms, design has become a must-have for being competitive (Peters, 2003). In this world of knowledge economics, intangible assets have a greater influence than tangible assets on a firm's success; therefore, a firm can not only rely on its tangible assets to achieve competitive advantages. Under such a circumstance, design has been viewed as a key element to convey a firm's value and to secure and sustain its competitive advantages (Olson et al., 1998). Previous research (Borja de Mozota, 2003; Gemser and Wijnberg, 2002; Roy, 1994) has clearly indicated that design awards can not only be a measurement for a firm's effectiveness on its creativity management, but also have an impact on its performance as a whole. In general, receiving an award can elevate a firm's reputation, create its publicity, and meanwhile, express its legitimacy and recognition by the public (Helgesen, 1994). For example, Samsung has become one of the most valuable famous brands around the world after receiving many major design awards (Rocks, 2005, p. 66). It is, therefore, not difficult to identify the important effect of design awards (in this article, design awards refer to product design awards) on a firm's competitive advantages and performance.

In recent years, Taiwan's design ability has been recognized through the fact that many internationally renowned design awards, such as G-Mark, IDEA, iF and red dot, have been received. In 2006, for example, Taiwan's firms received, only fewer than German's firms, a total of 65 German iF design awards, and thus Taiwan was ranked the second place globally, and the first place in Asia, and with the large number of awards received, Taiwan's ability in product design was successfully demonstrated. Among Taiwanese firms which received the awards, BenQ alone obtained 13 awards, which was ranked only lower than Korea's Samsung and Holland's Philips, and therefore was the third place internationally. Furthermore, DUCKIMAGE received 10 awards, which made it the most glamorous among the design firms which took part in the contest. These achievements reveal that Taiwan's product design ability has been world-class, but the participative motivations of Taiwan's firms and the values of the design awards perceived by the firms are still unknown and need to be further clarified. Some scholars (Bloch, 1995; Ulrich and Pearson, 1998)

claimed that a firm's efforts in design had a considerable impact on its performance and suggested that research on topics related to a firm's efforts in design and performance should be encouraged. Therefore, in this study, a measuring tool to evaluate the perceived values of the design award was first developed based on earlier literature, and then a survey was conducted to explore why Taiwan's design-award-winning firms participated in design contests and what their perceived values on various world-class design awards were.

2. LITERATURE REVIEW

2.1 AWARD VALUE AND MEANING

Merriam-Webster Dictionary (2003, p. 86) defines an award as: "a judgment or final decision; esp. for the decision of arbitrators in a case submitted to them." In fact, there exist several ways to select winners for certain awards, and the meaning of an award is difficult to be confined to cover all aspects with which an award is involved. However, it is not hard to constrain the conditions where an award is given; in other words, it is easy to find out what should or should not be included in an award. Gemser and Wijnberg (2002, p. 64) stated that three elements should be included in an award: 1) the actors who set up the award, making the institutional arrangements to enable the award being conferred and providing the substance of the award, 2) the actors who determine who will receive the award, and 3) the award winners. In short, any selection events or competitions which contain the three mentioned elements will be deemed as award activities. Moreover, an award can be seen as an achievement in a profession, with the main function of which is to identify and commend the best performer in a certain field (Helgesen, 1994). As for design awards, Gemser and Wijnberg (2002, p. 64) noted that awards create the 'legitimacy' for certain products or producers, and set up the rules of the competitive game. Therefore, an award not only can confirm the professional performance of an individual, a group, or an enterprise, but also differentiate the best from the others and become a selection system dominating the industry.

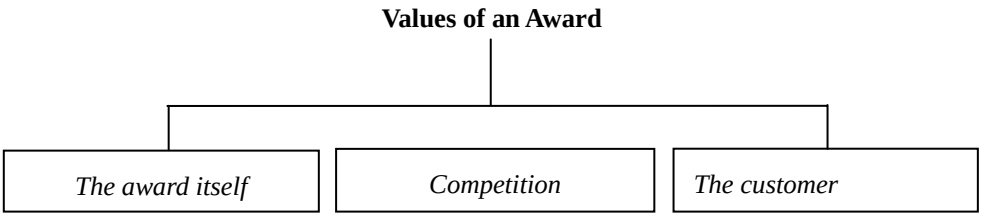

Figure 1 Three types of the value of an award

But what value can an award provide? West et al. (2003) argued that an award should be able to: 1) symbolize professional leadership, 2) identify professional excellence, 3) set up the standard for professional evaluation, and 4) strengthen the social acceptance. In a competitive environment, Gemser and Wijnberg (2002, p. 65) further proposed three types of the value of an award which are *the award itself*, *competition*, and *the customer*, as shown in Fig. 1.

First, an award as a valuable object may present in itself important benefits, such as money, specific rights or privileges, reputation, and a boost to staff moral. Second, the award may function as a signal to competitors to achieve competitive advantages or to deter competitive imitation. For different competition environments, the receiving of an award implies the value of competition. Since the award receiver will be categorized as a certain group, receiving a certain award infers that the award is able to differentiate among the competitors. For instance, if a person who receives a Nobel prize will enter a group of full-fledged members of the Academy. Besides, since receiving an award is a public action, it will intimidate other competitors from copying the winner's concept or the winning product. In contrast with the traditional and legal way of protection act, i.e. patent, Gemser (1999) noted that some firms are willing to adopt an award-winning strategy to make certain that their devotion in design innovation is effective and secured. The third type of the value of an award focuses on the perceived values, such as collection, unique taste, and special usability, of the final customers who eventually have to buy the award-winning item, or the distributors who choose to stock the item.

2.2 DESIGN AWARD

In general, there are various types of awards or prizes. There are cultural awards, performance awards (e.g. Oscar award), quality awards (e.g. Malcolm Baldrige national quality award), advertisement awards (e.g. ADDY® Awards), architecture prizes (e.g. Pritzker architecture prize), and design awards (e.g. G-Mark, IDEA -The Industrial Design Excellence Awards, iF, and red dot). Due to the fact that IDEA evaluates "the photo of a product," this study will therefore mainly focus on G-Mark, iF, and red dot which evaluate "the actual product." First, G-Mark award, which is also known as Good Design Award, was established to provide education and guidance to industry and design by Japan's Ministry of International Trade and Industry in 1957. Until now, there have been a total of 32,000 such awards given to participants from various countries world-wide through this design evaluation system. Walters (2006) pointed out that the fifty-year old G-Mark has been placing tremendous efforts on reinforcing the impact of design on the society and on cultural values in these years. Second, iF award, which has been established over fifty years, is sponsored by International Forum Design of Germany annually and is also one of the most influential design awards recognized globally. The objectives of iF are to boost industrial product design and to advocate the concepts of design innovation. Nowadays, iF has opened an Asian branch office in Taipei. Third, red dot award was established by German's Design Zentrum Nordrhein Westfalen, the European's most well-known design association. It also has a history of more than fifty years and is the greatest honor among international design competitions. The winning products of such an award are to be exhibited at red dot's design museums in Essen of Germany and in Singapore (Zec, 2007).

As shown in Table 1, the comparison among G-Mark, iF, and red dot reveals that all the three design awards are held yearly and allow new products which are not yet introduced to the market to take part in the design contests. Other findings are: 1) the history: iF and red dot both enjoy a longer history, comparing with G-Mark; 2) motivations: in addition to on-line exhibition, press services, and use of the label, red dot

Table 1 A comparison of the characteristics of three world-class design awards

Award Characteristics	**G-Mark**	**iF**	**red dot**
Nationality	Japan	Germany	Germany
Since the year	1957	1954	1955
Type of judging	product	product	product
Frequency	once per year	once per year	once per year
Purpose(s)	• to attain the improvement in qualitative lives and the advancement of industry through design	• to provide the intersection of design and industry, and to offer a display window on the latest design developments and trends	• to recognize quality label for excellent design that is aimed at all those who would like to qualify their business activities with the help of design
Organizer	Japan Industrial Design Promotion Organization (JIDPO)	International Forum Design, Hannover, Germany	Design Zentrum Nordrhein Westfalen, Essen, Germany
Motivations	• award ceremony • online exhibition • use of label • press services • publication of yearbook	• award ceremony • online exhibition • use of label • press services • publication of yearbook • money (only for students)	• award ceremony • online exhibition • use of label • press services • publication of yearbook • product design awards collected in red dot design museum • money (only students)
Entries	manufacturers and designers	manufacturers, designers, and students	manufacturers, designers, and students
Juries	Japanese journalists and designers	international designers	International journalists, designers, and university lecturers
Qualification	products being sold in Japan or abroad at the time of the application, or products with plans to be marketed	mass-produced products which have been on the market for three years or less or which are scheduled to go into mass production during the year of competition	industrially manufactured products which have been launched onto the market for two years or which will have gone into series production by a half year of competition
Criteria	1. Is it a good design? • It's aesthetically superior. • It's designed with safety in mind. • It's sincere. • It's designed to fit the usage environment where it's used. • It's original. • It meets the needs of consumers. • It's a good value for the price. • It offers good functionality and performance. • It's user-friendly. • It's attractive. 2. Is it a superior design? 3. Is it a design that breaks new ground for the future?	• branding • brand value • choice of materials • degree of innovation • design quality • environmental friendliness • ergonomics • functionality • safety • universal design • visualization of use • workmanship	• content • degree of innovation • durability • ecological soundness • ergonomics • formal quality • functionality • product peripherals • self-explanatory quality • symbolic and emotional
Registration cost per entry	Yen 10,500 (= EUR 63) 1st selection*	EUR 115 (for early bird)	EUR 190 (for early bird)
Cost of online exhibition	NA	EUR 100	EUR 400 (1st year)
Cost of listing in yearbook	Yen 13,650 (= EUR 82) *	EUR 825 (1 page)	EUR 1280 (1 page)

Notes: NA: not applicable; * as of April 30, 2007: 1 Yen= 0.006 EUR

provides the museums to exhibit the award-winning products permanently; 3) participants: besides manufacturers and designers, iF and red dot also hold design concept awards for students to take part in; 4) juries: the jury members of red dot include international journalists, designers, and university lecturers, while G-mark's juries are Japanese journalists and designers and iF's juries are international designers; 5) evaluation criteria: the evaluation criteria for various awards might not be exactly the same, but they all seem to emphasize the importance of innovation, aesthetics, functionality, and ecological soundness; 6) costs for award winners per entry: the expenditure on receiving a red dot award is higher than those on receiving the other two awards.

During the past three years, Taiwan's firms which participated in the world-class design competitions received great achievement as shown in Table 2. As for the three world-class design awards, the total number of Taiwan's design-winning products has increased considerably during the years 2004-2006. In addition, as for the average mean of the number of design award applications, G-Mark had the greatest among the three design awards, while iF had the fewest. Moreover, as for the average mean of the ratio of design awards granted, G-Mark was the highest (40%), while red dot was the lowest (23%).

Table 2 Statistics of Taiwanese firms' performance on three world-class design awards from 2004 to 2006

Year	2004			2005			2006		
Measure	G-mark	iF	red dot	G-mark	iF	red dot	G-mark	iF	red dot
Number of Taiwan's design winning products	36	14	1	35	30	20	37	65	33
Number of Taiwan's design winning firms	9	6	1	21	16	9	18	35	16
Number of design award applications	**2,593**	1,630	1,673	**3,010**	2,322	1,857	**2,918**	1,952	2,068
Number of design awards granted	1,263	424	381	1,158	542	421	1,034	689	485
Rate of design awards granted (%)	49	26	**23**	38	23	**23**	35	35	**23**

3. METHODS

3.1 SAMPLE

In this study, a purposive sample, including a total of 69 qualifying Taiwanese firms that have won one or

more of the three world-class design awards (i.e., G-Mark, iF, and red dot) from years 2004 to 2006, was chosen as the research subject. A revised questionnaire was administered by e-mail to each designated respondent (one person per firm) who was one of the design-award-winning team members and agreed to participate, with multiple follow-ups (telephone and e-mail) to generate a sufficient response rate. In this study, a total of 62 usable responses were finally received.

3.2 INSTRUMENT AND DEVELOPMENT

Instrument or scale development is often necessary in new research area (Specter, 1992). To capture variation among various design awards, measures of the perceived values of the design award were developed in this study. In this study, three-dimensional conceptualization of the perceived values of the design award, consisting of *the award itself*, *competition*, and *the customer*, was incorporated based on prior literature (Gemser and Wijnberg, 2002; West et al., 2003). Following this, a pretest was conducted to determine the clarity of the measurement items used in all research constructs. In doing so, three leading

Table 3 Dimensions and measurement items of the perceived values of the design award used in this study

Dimension	**Measure**	**Sources**	
		Literature	Participants in the pretest
The award itself	· economic gains (e.g., money)	Gemser and Wijnberg (2002)	
	· rights (or privileges)	Gemser and Wijnberg (2002)	
	· company reputation	Gemser and Wijnberg (2002) West et al. (2003)	Acer, Asus, and BenQ
	· emblematic attraction	West et al. (2003)	Acer, Asus, and BenQ
	· a boost to staff moral	Gemser and Wijnberg (2002) West et al. (2003)	Acer, Asus, and BenQ
Competition	· proclaiming superior product quality		Asus and BenQ
	· deterring competitive imitation	Gemser and Wijnberg (2002)	BenQ
	· securing competitive advantages	Gemser and Wijnberg (2002)	Asus and BenQ
	· increasing the visibility of the firm	West et al. (2003)	Acer, Asus, and BenQ
	· finding more cooperative chances	West et al. (2003)	BenQ
The customer	· product collection	Gemser and Wijnberg (2002)	Asus and BenQ
	· unique tastes		Acer, Asus, and BenQ
	· special usability		Acer, Asus, and BenQ

Taiwanese firms' representatives, who are design executives, participated in the pretest, which resulted in a shortened questionnaire, some new questions, and some statement reformulation. As shown in Table 3, thirteen items measure the construct of the perceived values of the design award on 11-point Likert scales, ranging from 0 to 10. Moreover, respondents were also asked to indicate the extent to which the reason why their firms participated in the world-class design contests. An 11-point scale is likely to be appropriate for studying Taiwanese operation practices since a 100 percent grading system is used in Taiwanese (and in most other Asian) schools (Sung & You, 2007).

4. DATA ANALYSIS AND RESULTS

Among all the 62 respondents (as shown in Table 4), 44 of them indicated that they had design background. Furthermore, most of the respondents were designers in the design team (58%), and the rest were design managers or appropriate proxies (e.g. company owners, general managers, and functional managers). It should be noted that there existed no significant difference between respondents from the two groups – designers (N=36) and managers (N=26) – on the reasons why the firms participated in the world-class design contests and on the variables of the perceived value of the design award in this study. As shown in Table 5, to demonstrate own design ability (Mean=8.97) and to boost the firm's image (Mean=8.69) were the two main reasons for the firms to take part in the design contests. Moreover, factor analysis was used to

Table 4 Types of respondents

Measure	**Type of respondents**	**No. of respondents**	**% of respondents**
Professional background	design related	44	71.0
	non-design related	18	29.0
The role played in the design-award-winning team	designer	36	58.0
	design manager	14	22.6
	other functional manager	6	9.7
	owners or general manager	6	9.7

Table 5 Reasons for Taiwan's design-award-winning firms participate in the world-class design contests

Measure	Mean [a, b]	S.D. [a]	Max.	Min.
to boost the firm's image	**8.69**	1.57	10	1
to encourage internal competition	7.44	2.55	10	0
to promote new products	8.39	1.36	10	5
to demonstrate own design ability	**8.97**	1.13	10	5
to enhance the competitiveness of the product	8.14	1.41	10	5
to enhance the firm's reputation	8.33	1.80	10	0

Notes: [a]: An 11-point Likert-type scale (0 = strongly disagree, 10 = strongly agree) was used.
[b]: 6.0 or above is an acceptable score.

generate the predicated factors (variables) that emerged from the scale items of research construct in this study. Principal component extraction with rotated varimax rotation was employed. To classify each factor specified by the principal component analysis, the average of each measure with a factor loading of 0.5 or more was calculated. The Kaiser criterion with an Eigenvalue greater than one was also employed in conjunction with evaluation of screen plots to determine the appropriate number of factors. Table 6 reports the results of factor analysis of the twelve variables of the perceived values of the design award. Three extracted factors, which are *competitive value*, *symbolic value*, and *customer value*, accounted for 72.130 % of the total variance. It should be noted that "economic gains" as one of the measurement items listed in Table 3 was deleted since its factor loading is less than 0.5. The results of the reliability tests in factor analyses all met, or exceeded, the recommended 0.70 criterion suggested by Guielford (1965) and Nunnally and Benstein (1994) for selecting factors. As stated earlier, a pretest was conducted to fit the norms and practices of the industry. As a consequence, the test's content validity was found to be satisfactory. Moreover, in order to test the homogeneity within and differences among the three world-class design awards, one-way analysis of variance (ANOVA) and Scheffe's pair-wise comparison were conducted based on the previously statistics obtained from factor analysis (as shown in Table 7). The results revealed that G-Mark received significantly higher *symbolic value* scores than red dot. Moreover, the latter received significantly higher *customer value* scores than iF. However, no significant difference in terms of *competitive value* existed among the three design awards. In order to further discover the differences of the

Table 6 Factor analyses and reliability results for the perceived values of the design award

Measure	*Mean*	*S.D.*	**Factor loadings**		
			competitive value	*symbolic value*	*customer value*
Securing competitive advantages	6.63	1.30	**0.864**	0.163	0.239
Increasing the visibility of the firm	7.05	1.24	**0.864**	0.085	0.141
Deterring competitive imitation	5.90	1.88	**0.833**	0.202	0.060
Proclaiming superior product quality	5.60	1.55	**0.820**	0.150	-0.021
Finding more cooperative chances	6.83	1.28	**0.781**	-0.031	0.226
Emblematic attraction	7.90	1.30	0.067	**0.917**	0.008
Boosting staff moral	8.12	1.27	0.160	**0.900**	0.085
Strong reputation	7.64	1.24	0.121	**0.881**	-0.037
Award rights	7.07	1.38	0.109	**0.750**	0.102
Unique tastes	7.21	1.45	-0.022	-0.122	**0.858**
Special usability	7.38	1.63	0.384	0.280	**0.623**
Product collection	7.12	1.54	0.443	0.147	**0.556**
Eigenvalue			4.953	2.513	1.189
% Variance explained			32.242	26.687	13.201
% Cumulative variance			32.242	58.929	72.130
Cronbach's α			**0.901**	**0.871**	**0.713**

Note: KMO = 0.752; Bartlett's test of sphericity = 318.126; significance = 0.000

measurement items under *symbolic value* and *customer value* among the three design awards, ANOVA and Scheffe's tests were employed again in this study. Table 8 shows that the variables of the perceived values under *symbolic value* and *customer value* varied across respondents in the three design awards. The results indicated that iF received significantly higher "strong reputation" scores under *symbolic value* than red dot, while G-mark received significantly higher "emblematic attraction" scores under *symbolic value* than iF.

Table 7 Means and standard deviations of the perceived value factors in each design award

	G-Mark (*n*=20)		iF (*n*=22)		red dot (*n*=20)		f *value*	p *value*	Scheffe's Test
Factors	Mean[a]	S.D.[a]	Mean[a]	S.D.[a]	Mean[a]	S.D.[a]			
Competitive value	-0.383	(1.375)	0.038	(0.966)	0.257	(0.606)	1.008	0.374	
Symbolic value	0.628	(0.752)	0.360	(0.718)	-0.449	(1.013)	6.030	0.005**	G-Mark > red dot
Customer value	0.339	(0.616)	-0.428	(1.043)	0.643	(0.812)	4.680	0.016*	red dot > iF

Notes: [a]: factor score; * p <0.05; ** p <0.01

Table 8 Means and standard deviations of *symbolic value* and *customer value* in each design award

Variables	G-Mark (*n*=20)		iF (*n*=22)		red dot (*n*=20)		f *value*	p *value*	Scheffe's Test
	Mean[b, c]	S.D.[b]	Mean[b, c]	S.D.[b]	Mean[b, c]	S.D.[b]			
Symbolic value									
rights	7.44	(1.23)	7.00	(1.41)	6.90	(1.52)	0.421	0.660	
strong reputation	7.22	(1.09)	8.71	(1.23)	6.80	(0.79)	6.110	0.005**	iF > red dot
emblematic attraction	8.89	(0.61)	7.61	(1.37)	7.70	(1.25)	3.719	0.033*	G-Mark > iF
a boost to staff morale	7.89	(1.36)	8.17	(1.30)	8.20	(1.23)	0.181	0.835	
Customer value									
product collection	7.11	(1.27)	6.57	(1.61)	8.40	(0.70)	6.105	0.005**	red dot > iF
unique tastes	7.78	(1.72)	6.96	(1.49)	7.30	(1.06)	1.053	0.359	
special usability	7.89	(1.54)	7.09	(1.80)	7.60	(1.27)	0.889	0.419	

Notes: [b]: An 11-point Likert-type scale (0 = strongly disagree, 10 = strongly agree) was used.
[c]: 6.0 or above is an acceptable score.
* $p < 0.05$; ** $p < 0.01$

Furthermore, red dot received significantly higher "product collection" scores under *customer value* than iF. One plausible reason for this finding is that red dot has provided design award museums for the collection of the red dot's award-winning products in Germany and in Singapore (Zec, 2007).

5. CONCLUDING REMARK

While design awards have played a crucial role in global design competitions, amplifying our understanding of the contestants' perceived values of the design award is vital for most organizers of the design contests in the world. This study advances to the design research in several ways. First, this study used multi-item scales for all constructs and then purified the scales using confirmatory factor analysis to provide theoretical contributions on the delineation of a range of the perceived values for the design award. Second, to our knowledge, this study is the first of this kind study to examine the contestants' perceived values of the three world-class design awards (i.e., G-mark, iF, and red dot). Third, the results of the study indicated that no single design award received superior scores in all indicators of the perceived values of the design award. Moreover, there appeared to be little difference in all variables under *competitive value* among the three

design awards. Undoubtedly, how to provide more specific distinctive competitive values is fundamental for most organizers of the design contests.

According to the findings of this study, it has been suggested that the organizers of the design contests should first, compared with their rivals, identify the differences of the contestants' perceived values in various measurement items under *competitive value* which are shown in Table 6. In this regard, it is mostly important for the organizers to maximize the contestants' perceptions on the tangible and intangible benefits to outweigh the expenses of receiving a design award. For the tangible benefits, the organizers should carefully concern the possibility of offering "discount rates" on the entry fee to the design-award-winning firms or individuals who have won the award for a consecutive year. For the intangible benefits, the organizers should develop insights into innovative PR campaigns and marketing activities, which especially dealing with the issues of "deterring competitive imitation" and "proclaiming superior quality." Then, they need to further set up certain levels of award barriers. For instance, they can join forces with other international product safety or quality certification organizers (or institutes), such as EC (European Commission) or ISO (International Standard Organization). As a result, a design award with an international quality label is more likely to increase the contestants' perceived values of the design award on *competition*.

Participating in a particular award contest rather than another has become a matter of strategic choice (Halachmi, 1995, p. 89). Before entering a particular design contest, it is crucial for a firm to develop an award-winning strategy based on the assessments of the selection system (such as the characteristics of the contestants and jury members), award reputation, product market orientation (e.g., G-mark for the Japanese market) and the expenses of receiving an award (Gemser and Wjinberg, 2002). Although past research has shown that the customer will often pay more for a product if they consider it to be of a "high quality design" (Walsh et al., 1992), there still exists an undiscovered aspect of whether a product with a design award label can really charge price premiums in the market place. Good design does not mean effective design (Bedford et al., 2006). In this regard, it is essential for the participating firms of the design contests to explore their

current and potential customers' perceived values on various design-award-winning products since their buying or using the products signals that they belong to or desire to be in certain kind of social status (e.g., an elite group).

However, the current findings only pertain to enterprises in Taiwan, and the results may differ in other settings; therefore, there is a need for future work to validate the findings in other countries in order to rule out possible country biases. Despite these limitations, this study should shed some light on exploring the antecedents of the perceived values of the design award. Moreover, even the method applied in this study suggests that no single design award received superior scores in all indicators of the perceived values of the design award, causality has not been completely found; therefore, other analytical techniques are required to look into this issue closely.

Based on the resource-based view (RBV) of the firm, a firm's competitive advantages come from its capabilities which are rooted in resources that are rare, valuable, and difficult to duplicate (Barney, 1991; Prahalad and Hamel, 1990; Wernerfelt, 1984). Accordingly, a firm that receives design awards as its desirable outcomes or competitive advantages should possibly benefit from its distinctive design capabilities in order to cope with the dynamic competitive environments and uncertain demand conditions. Lastly, as a consequence, there are several future research directions which are likely to expand our knowledge of the perceived values of the design award. First, a research agenda aiming at discovering what comprises the design capabilities which enable a firm to receive a design award needs to be further scheduled. Second, interesting results are likely to be found to explore whether a design award can indeed contribute to a firm’s performance. Third, it could be productive in findings by examining the moderating role of the design award in the relationships between design capabilities and firm performance under various competitive environments.

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