

**Experimental Research**  
**about the Efficacy of Branding in B2B market**

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### **Abstract**

Despite extensive research advocating the efficacy of advertising in B2B domain, only a few B2B companies have conducted branding activities, especially in terms of advertising to the general public. Rather, they mainly do sales activities to business customers. There is a gap between research on the advertising of B2B brands and the awareness of B2B companies about advertising. This is because prior research could not clearly reveal the effectiveness of advertisements in actual business scenarios. To solve this problem, this research re-examined past validating models and adopted tangible factors such as QCDS (quality, cost, delivery, service) perceived by buyer companies as brands and also brand loyalty as a performance measure of brand. As a result of the demonstration, advertising improved the image of quality and delivery that buyer companies have. Moreover, it turned out that those images affected brand loyalty.

**Keywords: B2B branding, brand loyalty, QCDS, advertising, sales**

**7,025Words**

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## 1. Introduction

Many B2B companies have questioned the necessity of building a brand for their products, services, or themselves (Kotler, 2006). However, there is a demand for branding in the B2B market in order to differentiate a company's merchandise from that of its competitors, owing to a rapidly growing market and a growing interest in acquiring new customers (Yoda, 2010). A recent overview of the world's 100 strongest brands includes IBM, Intel, Cisco, and Oracle, which are typical B2B companies. The importance of building a brand as an intangible asset is gaining momentum in B2B domain (Table-1).

We interviewed selected businesspersons who are in charge of brand strategy, and it appeared that their understanding of B2B branding varies<sup>1</sup>.

*“A brand builds the trust of a company's stakeholders and is connected to the business impact; it is the value that a company provides to its stakeholders. Investing in brand building is necessary in order to get an understanding of the social values that a company offers to society.”*

*Mr. K, a major B2B manufacturer, Brand strategy department*

Table-1 Best Global Brand Ranking 2015

Rank	Brand	Type of Industry	Brand Value (US million)
1	Apple	Technology	170,276
2	Google	Technology	120,314
3	Coca-Cola	Beverages	78,423
4	Microsoft	Technology	67,670
5	IBM	Business Services	65,095
6	Toyota	Automotive	49,048
7	Samsung	Technology	45,297
8	GE	Diversified	42,267
9	McDonal's	Restaurants	39,809
10	Amazon	Retail	37,948
11	BMW	Automotive	37,212
12	Mercedes-Benz	Automotive	36,711
13	Disney	Media	36,514
14	Intel	Technology	35,415
15	Cisco	Technology	29,854
16	Oracle	Technology	27,283
17	Nike	Sporting Goods	23,070
18	HP	Technology	23,056
19	Honda	Automotive	22,975
20	Louis Vuitton	Luxury	22,250

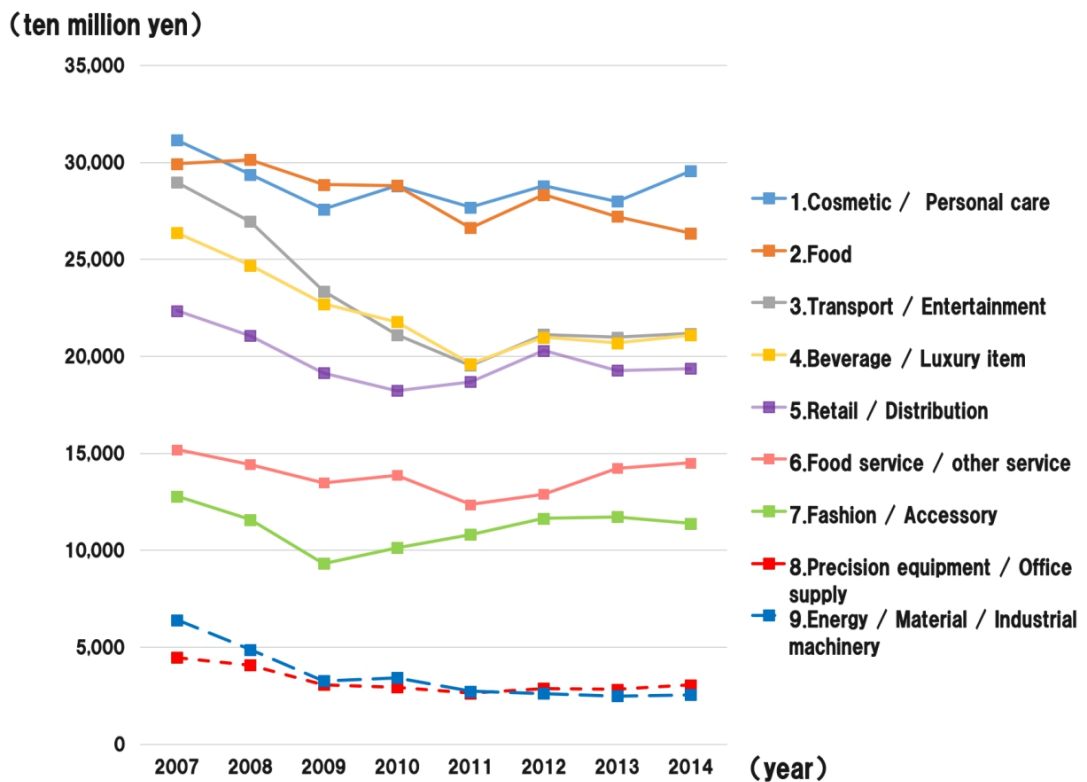
Source: Author according to Interbrand Website.

However, it is still a challenge to build a B2B brand that is valuable. Although there are various means to achieve branding, advertising is the most effective means of building a strong brand (Tanaka, 2008). As Kishi (1997:209) proposes, brand equity is the indicator of “the long-term cumulative effect of advertisement.” Many researchers have argued the importance of advertisement in building a brand since the inception of the concept of brand equity (Aaker & Biel, 1993; Keller, 2005; Kirmani & Zeithaml, 1993). Moreover, in the B2B space, many studies have been conducted on the importance of

advertisement in brand building (Shimamura, 2006; Takashima et al., 1996).

While the importance of advertisement has attracted academic attention, only a few B2B companies actually use advertising as a brand strategy. In fact, a research by Dentsu states that advertising expenses in the B2C industry including food, beverage and cosmetic products are higher, as compared to those in the B2B industry like material, energy, and precision equipment (Table-2).

Table-2 Advertising expenses by industrial type



Source: Author according to Dentsu Website.

This is because B2B companies strongly believe that brands merely distinguish products or services from one another and that purchasing decisions are based on economic rationality and long-term business relationships (Yoda, 2006). Hence, since much emphasis is placed on “sales activities to business customers,” there is an inclination to treat “advertising activities to the general public” as a strategy of minor importance.

This study focused on the gap between studies on advertising in the B2B market and the awareness of B2B companies about advertising. This study considered the reason these studies are not reflected in actual business activities despite extensive researches on the efficacy of advertising in the B2B space is that B2B companies don't have enough understanding of the importance of advertisements. This is because prior research did not clearly reveal the effectiveness of advertisements in actual business scenarios.

Therefore, the purpose of this study is to re-examine past conceptual models and to verify the effectiveness of advertising on B2B brand concretely through comparison with sales.

Our study focuses on sales activities directed towards customers and advertising activities aimed at the general public, and it analyzes the effects of both activities on

branding using quantitative data collected from 201 managers<sup>2</sup>. This paper is organized as follows: in the literature review section, we examine branding in the B2B market, and focus on a case in which a variable of a conventional model is formless and is not connected to actual business activities. The next section develops the conceptual model and the hypotheses, and the following sections describe the methodology, results, and implications.

## **2. Literature Review**

Ever since Aaker's (1991:15-21) study organized the concept of brand equity, brand became an objective of marketing strategy, and brand research became prolific. The initial focus of branding research was on B2C products, while brands in the B2B market were not considered important because it was felt that in B2B dealings, purchasing decisions were based on economic rationality and long-term business relationships (Yoda, 2006).

However, past studies on the B2C market have had great impact on B2B branding today (Yoda, 2011). For instance, branding B2B products has the ability to differentiate its product from other products, influence the buyer's purchasing decision, and also, put a premium price to a product (Michell et al., 2001). In addition, brand not only brings



about sustained differentiation, but also helps raise brand loyalty (Mudambi, 2002). Moreover, it is expected that the likely effect of building brand equity in the B2B market would accept a brand extension and subsequent recommendation of the selling company by purchasing managers to their colleagues (Bendixen & Abratt, 2004). Thus, building a brand in the B2B space is important and would provide marked benefits to companies in this space.

Most of the researches on B2B brands are in the form of individual case studies because B2B products range from small parts to large equipment, and each product varies from another (Yoda, 2014). On the other hand, research seeking a universal conceptual model for all B2B brands has increased.

Van Riel et al.'s (2005:12-13) study suggests that product quality is enhanced by the price and delivery time and service quality is enhanced by information and personnel, and they strengthen brand loyalty through brand equity. Cretu & Brodie's (2007:233-237) study considers prior factors that affect brand equity, such as brand image, product quality, service quality, consumer value, and brand loyalty, and identifies that a company's reputation directly affects brand loyalty, while brand image indirectly influences brand loyalty. Moreover, Kim & Hyun's (2011:432-435) study examines the factors that enhance B2B brand equity by the model related company image and

marketing mix, and thus identifies that each factor of marketing mix indirectly affects perceived quality through company image and enhances brand equity. Baumgarth & Binckebanch's (2011:491-493) study also verifies that sales force and classic marketing including product quality and non-personal communication influences brand loyalty through brand strength.

Table-3 provides a conceptual model of all B2B brands dealt with in these prior researches. Our study identifies the efficacy of advertising based on this conceptual model.

Table-3 conceptual figures of previous researches



Source: Author

The challenge faced by this model is to adopt formless factors, such as brand equity and image, as variables directly affecting brands. If the final goal is to provide suggestions for actual business activity, the factor that directly affects the performance of a brand must be substantially connected to business activity. Therefore, this study

attempts to concretize brand in order to identify the efficacy of advertising. The next section provides our conceptual model, which adopts concrete factors, our hypotheses and our methodology.

### **3. Experimental Research**

#### **3.1 Experimental Model**

##### **(1) Brand Loyalty and QCDS**

In order to compare the effect of advertising activities on the general public and sales activities to business customers in brand building, it is necessary to demonstrate the causal relationship, “brand leads to results which B2B companies seeks” as a premise. In this section, we first derive the basic hypothesis “brand leads to results,” and subsequently derive the hypothesis that sales activities and advertising activities enhance a brand.

In several prior studies of B2B brand, brand loyalty has been adopted as a performance measure of brand. In the B2B domain, since long-term transactions with existing business customers is the norm, it is important for B2B companies to increase customer satisfaction and ensure repeat purchases (Yoda, 2006). Van Riel et al. (2005:841-847), Cretu & Brodie (2007:230-240), Kim & Hyun (2011:424-438), and

Baumgarth & Binckebanck (2011:487-498) have also adopted brand loyalty as the performance measure of brand. In addition, Choi (2014:157-177) and Morioka (2015:111-124) based on van Riel et al.'s (2005:841-847) study also make use of brand loyalty. Thus, a consensus was reached to adopt brand loyalty as the performance variable of B2B brands. Therefore, we have adopted brand loyalty in this study as the performance measure of B2B brands.

Next, as shown in section 2, it is necessary to set the concrete variables that represent brand. Therefore, in this study, we define the elements of QCDS as a brand, which leads to the results. In the next section, we explain the reason for adopting the QCDS as a brand, setting it as the variables that affect the BL.

First, QCDS can be measured as an element of perception of business customers. Keller (1993:2) focused on the mind structure of buyers on the brand, and has organized the framework of brand building as “customer-based brand equity.” According to Keller, a brand reflects consumer perceptivity and is a cluster of customer experiences such as seeing, hearing, and feeling (Keller, 1993). Similarly, Tanaka (2008:247) defines brand as “a symbol that expresses value of products (meaning, function, benefit, idea, and feeling) and a bundle of information which is embedded in customer psychology”. In this research, we obtained information by means of questionnaires from business customers,

so that we could measure QCDS as it is perceived by them. Usually, QCDS denotes the absolute quality, cost, delivery, and service of a product. However, since in this study, it is the buyer who perceives QCDS, it is a combination of mixed absolute factors and images generated by the buyer's experience. According to this approach, we associated QCDS with a brand, because it reflected a consumer's perceptivity, which represented customer experiences such as seeing, hearing, and feeling.

Second, QCDS is an element that has a strong influence on the purchasing decisions of B2B companies. For example, Collins (1977:354) states that "product performance, product quality, delivery, service, and price were strong determinants of competitive advantage in B2B markets", and Keith et al. (2007:383~390) also shared a similar view<sup>3</sup>. In addition, Shibuya (2009:280), who reviewed prior studies on the purchasing decisions in the B2B space, states that although the selection criteria that prior researches have demonstrated are varied, four elements, namely quality, price, service, and delivery, are recognized as major selection criteria.

For the above reasons, we associate brand in terms of the QCDS perceived by the buyer because it is most compatible with the conditions of this study, and has a strong influence on purchasing decisions. Moreover, some prior researches demonstrate that QCDS perceived by the buyer indirectly affects brand loyalty (Baumgarth &

Binckebanck, 2011; Cretu & Brodie, 2007; Van Riel et al., 2005). Keeping all these factors in mind, we develop the following basic hypotheses:

H(1)-1: Product quality perceived by business customers has a positive influence on brand loyalty.

H(1)-2: Cost perceived by business customers has a positive influence on brand loyalty.

H(1)-3: Delivery perceived by business customers has a positive influence on brand loyalty.

H(1)-4: Service perceived by business customers has a positive influence on brand loyalty.

## **(2) The Effect of Advertisements and Sales Activities**

Despite the extensive studies on advertising activities in the B2B domain, these research results are not reflected in actual business activities because there is no concrete proof on the efficacy of these activities. To solve this problem, as mentioned above, we considered the association of brand with QCDS. Next, in order to compare the effects of advertising and sales, we set them as variables to enhance the brand. Furthermore, we set sales as an object of comparison with advertising considering the present situation that B2B companies put more importance on sales for their customers

than advertising to the public.

Many studies have pointed out the fact that advertising activities increase a brand's value. For example, as described by Aaker & Biel, (1993:5) profit impact of marketing strategy (PIMS) database, advertising enhances the perceived quality of a brand and affects the ensuing profits. In addition, Kido (2000: 291~300) and Kirmani & Zeithaml (1993:144~159) prove that advertising affects perceived quality and brand association and contributes towards brand building. Furthermore, Keller (2005:19~23) points out the positive effects of advertising in building brand equity.

Particular to the B2B domain, the effect of advertising activities on the general public to enhance B2B brands have been confirmed. Takashima & Takemura & Otsu (1996:64~65) reveal that purchasing managers who experienced advertisements via TV, newspapers, or magazines form favorable images of the sales activities of advertising companies. More so, Shimamura (2006:362~368) suggests that forming a positive perception in the buyer companies' mind via advertisements leads to brand building, and as a result, brands can create an environment in which buyers can make informed purchasing decisions. Morioka (2015:120) also shows that through "corporate brand equity" and "final consumer awareness and product brand equity," advertisement-branding activities of B2B players have a significant and positive influence on repeat

purchasing decisions of buyer companies<sup>4</sup>. Therefore, as it has been noted, advertising activities enhance brand image.

On the other hand, opinion to assert the importance of sales activities remains constant because of the characteristics of a B2B transaction. According to Baumgarth & Binckebanck (2011:487~493), of the two important elements of the marketing mix, namely, product promotion and non-human communication as well as sales force, the more important driving factor of brand equity is sales force. Mohammad & Mahsa (2012:36~41) also share a similar view.

As mentioned earlier, both advertising and sales enhance brand value. Considering all these, we may formulate the following hypotheses:

H(2)-1: Advertising has a positive influence on product quality perceived by business customers.

H(2)-2: Advertising has a positive influence on cost perceived by business customers.

H(2)-3: Advertising has a positive influence on delivery perceived by business customers.

H(2)-4: Advertising has a positive influence on service perceived by business customers.

H(2)-5: Sales has a positive influence on product quality perceived by business customers.

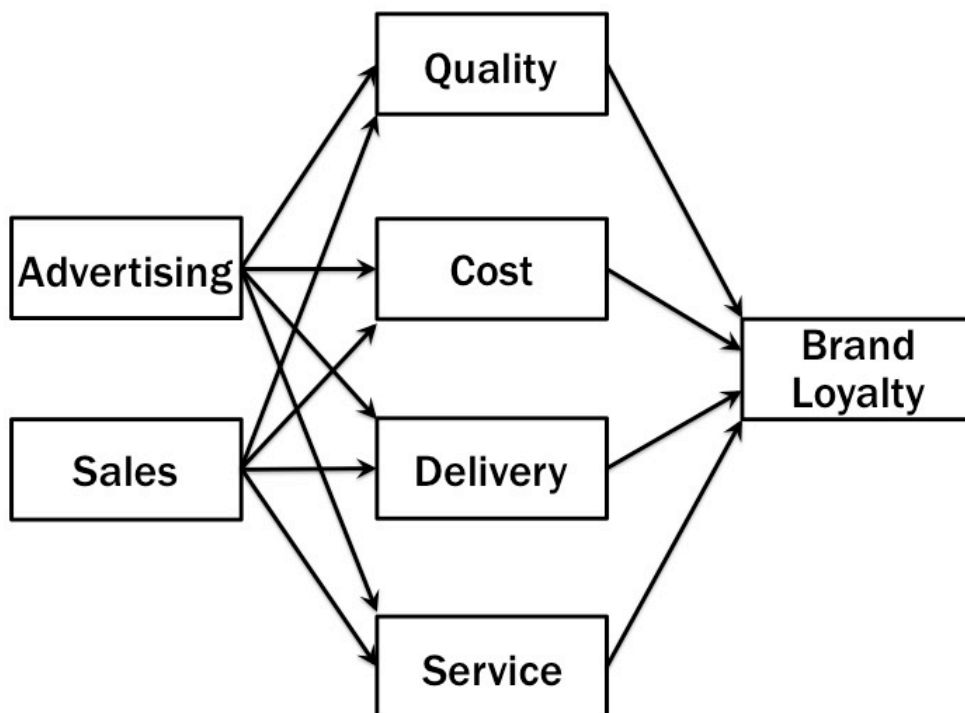
H(2)-6: Sales has a positive influence on cost perceived by business customers.



H(2)-7: Sales has a positive influence on delivery perceived by business customers.

H(2)-8: Sales has a positive influence on service perceived by business customers.

Table-4 Hypothetical model



Source: Author.

### 3.2 Methodology

Samples were collected at business seminars and via websites. The investigation period was from 19 September through 1 October 2015. The sample size was 301 respondents (valid respondents: 201).

This research demonstrated the relationship between the variables using structural equation modeling with seven observed variables such as brand loyalty, product quality, cost, delivery, service, sales to business customers, and advertising to the general public. Questions with respect to observed variables were made based on prior research (Choi, 2014; Morioka, 2015; Van Riel et al., 2005), and respondents' answers were recorded on a five-point Likert scale.

Using brand loyalty as a performance measure, we set three question items reflecting the general customer satisfaction of products, the recommendation of products to others, and the intention to continuously purchase these products. With regard to various items of perceived QCDS of buyer companies, the respondents answered how they perceived the products (Product X) and buyer company (Company Y) on the basis of a product that the respondents' company purchased from the other companies. With respect to advertisements and sales, we set question items asking whether the buyer companies actively advertise to the general public or whether the buyer companies actively do sales. To verify the hypothetical model, every component of the question items was assigned a principal component score.

#### 4. Analysis and Results

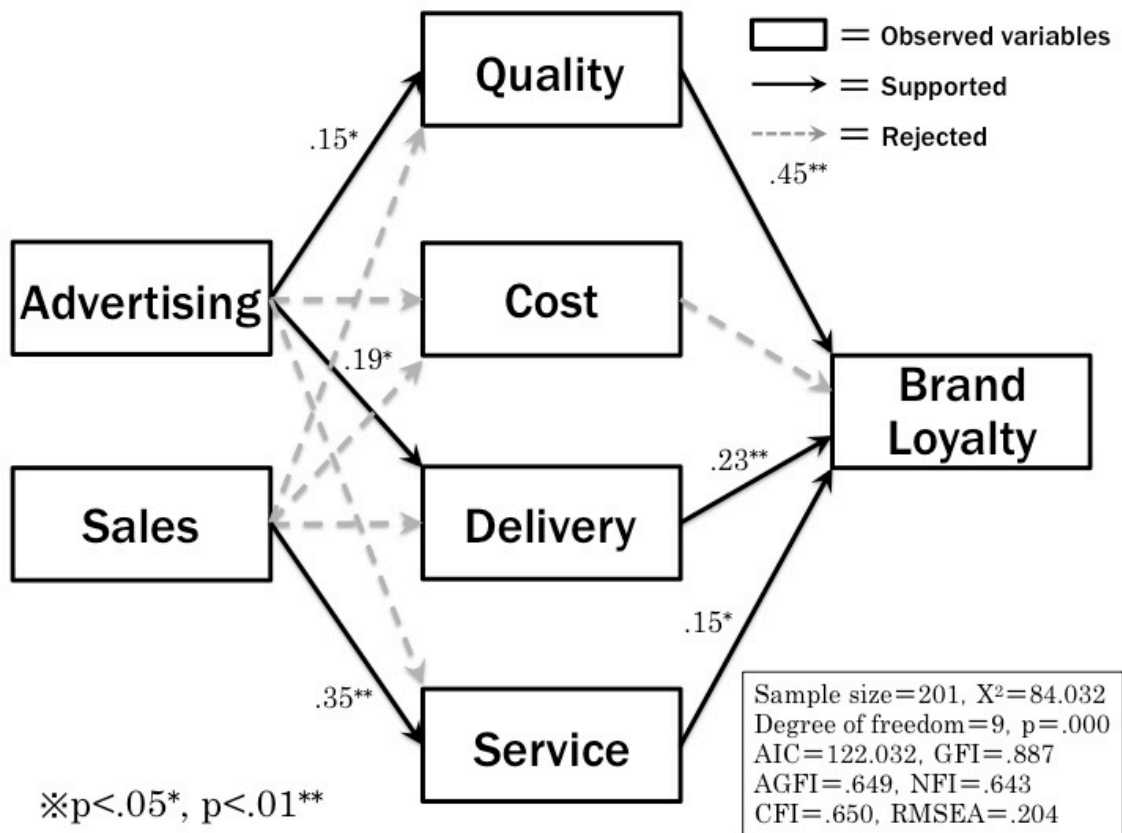
Table-5 suggests the results for the hypothetical model<sup>5</sup>.

The hypotheses (H(1)-1, H(1)-3, and H(1)-4) stating that business customers perceive product quality, delivery, and service to have a positive influence on brand loyalty is significant (i.e., H(1)-1, with  $\beta = 0.45$ ,  $p = 0.01$ ; H(1)-3, with  $\beta = 0.23$ ,  $p = 0.01$ ; and H(1)-4, with  $\beta = 0.15$ ,  $p = 0.05$ ). However, the hypothesis (H(1)-2) stating that business customers perceive cost to have a positive influence on brand loyalty is not significant (i.e.,  $\beta = 0.08$ ,  $p = 0.05$ ). Thus, H(1)-1, H(1)-3, and H(1)-4 were supported and the results confirmed the findings of the previous research. However, H(1)-2 was not supported.

Next, the hypotheses (H(2)-1 and H(2)-3) stating that business customers perceive advertisements to have a positive influence on product quality and delivery is significant (i.e., H(2)-1, with  $\beta = 0.15$ ,  $p = 0.05$ ; and H(2)-3, with  $\beta = 0.19$ ,  $p = 0.05$ ). However, the hypotheses (H(2)-2 and H(2)-4) stating that advertisements have a positive effect on cost and service, as perceived by business customers, is not significant (i.e., H(2)-2, with  $\beta = 0.03$ ,  $p = 0.05$ ; and H(2)-4, with  $\beta = 0.00$ ,  $p = 0.05$ ). Therefore, H(2)-1 and H(2)-3 were supported, while H(2)-2 and H(2)-4 were not supported.

Finally, the hypotheses (H(2)-5, H(2)-6, and H(2)-7) stating that business customers perceive sales to have a positive influence on product quality, cost, and delivery is not significant (i.e., H(2)-5, with  $\beta = 0.15$ ,  $p = 0.05$ ; H(2)-6, with  $\beta = 0.18$ ,  $p = 0.05$ ; and H(2)-7, with  $\beta = 0.04$ ,  $p = 0.05$ ). However, the hypothesis (H(2)-8) stating that sales has a positive effect on service, as perceived by business customers, is significant (i.e., H(2)-8, with  $\beta = 0.35$ ,  $p = 0.01$ ). Therefore, only H(2)-8 was supported, while H(2)-5, H(2)-6, and H(2)-7 were not.

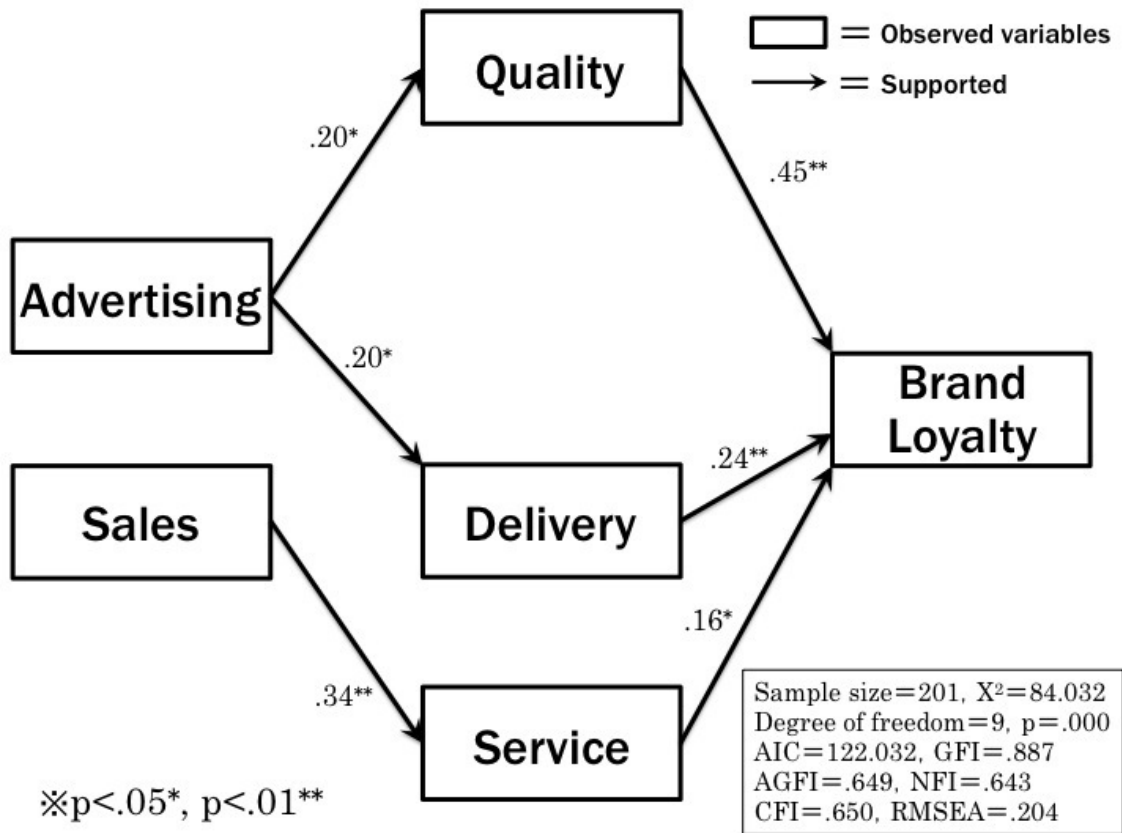
Table-5 The results of hypothetical model



Source: Author.

However, this hypothesis model was rejected because GFI and AGFI values that showed a degree of conformance with the entire model were materially low. Hence, we adopted a model using AIC value for a comparison of general statistical model with repeating analysis and delete insignificance pass (Table-6). Since we deleted the insignificance pass, “cost” variable was excluded from the revised model because pass to cost was totally deleted.

Table-6 Revised model



Source: Author.

As a result of the analysis, both GFI and AGFI values of the model improved. We confirmed that the relationship between product quality and brand loyalty (i.e.,  $\beta = 0.45$ ,  $p = 0.01$ ), delivery and brand loyalty (i.e.,  $\beta = 0.24$ ,  $p = 0.01$ ), and service and brand loyalty (i.e.,  $\beta = 0.16$ ,  $p = 0.05$ ) was significant. Moreover, we revealed that the relationship between sales and service (i.e.,  $\beta = 0.34$ ,  $p = 0.01$ ), advertisements and

product quality (i.e.,  $\beta = 0.20$ ,  $p = 0.05$ ) and advertisements and delivery (i.e.,  $\beta = 0.20$ ,  $p = 0.05$ ) was significant.

The next section develops the discussion about all passes of the hypotheses models, validates the deleted insignificance pass in the revised model, and draws implications from the revised model.

## **5. Discussion**

### **5.1 Results of replication studies pertaining to QCDS and brand loyalty**

Primarily, we discussed replication studies pertaining to QCDS and brand loyalty. This research can confirm the findings of prior researches because product quality, delivery, and service have a significant correlation with brand loyalty. With respect to the relationship between product quality and brand loyalty, the value of the standardized partial regression coefficient was particularly high in all models. This is because product quality is generally recognized as the most important factor in QCDS. Low-quality products are not accepted in the market, even though a company produces them at the lowest cost, within the shortest delivery time, and with highest quality supporting systems. Shibuya's (2009:285) study states that product quality is the most

important element taken into consideration when buyers make purchasing decisions.

This fact remains to hold true since the 90s.

However, we cannot confirm a significant correlation between cost and brand loyalty. This is because we set the variables that affect brand loyalty in terms of important factors for purchasing decisions. In other words, cost is certainly a factor that has a great influence on purchasing decisions, but is not directly connected to brand loyalty. For example, brand-loyal customers are willing to pay premium prices (Narayandas, 2006). Essentially, the higher the brand loyalty, the less the consideration of the cost is, which goes against the hypothesis of this research. Moreover, Aaker (1991:40) regards buyers with the lowest loyalty as price-sensitive buyers. We can infer the dilution of the relationship between cost and brand loyalty from Aaker's statement.

## **5.2 Effects of sales to business customers**

Next, we consider whether sales to business customers affect QCDS. The result shows that only service has a significant correlation. As for product quality, cost and delivery, there was no significant correlation.

The reason that only service has a significant correlation is as follows. It is difficult for buyer companies to make rational decisions because service cannot be quantified



easily, unlike product quality, cost, and delivery. Therefore, criterion of service efficacy has a strong tendency to depend on the impression particularly of personal contact in sales, and such impression strongly affects its relation between sales and service.

### **5.3 Effects of advertisements to general public**

Finally, we discuss effects of advertising to QCDS. In this study, we recognized that both product quality and delivery have a significant correlation with advertising, while cost and service do not.

Product quality has a significant correlation with advertising because it has the highest appeal among the factors in QCDS when B2B companies directly advertise to the general public. Therefore, the number of people who evaluated product quality positively increased. With the background that product quality is the highest appealing factor, product and service of B2B companies have low publicity, which means that the B2B products and services have less opportunity to reach the general public (Yoda, 2006). Therefore, it is quite natural for B2B companies to advertise to make their products appealing to the general public, in order to convey the nature of its business. Moreover, active advertising increases the chances that buyer companies are made aware of the

products and accept them. As a result, we can assume that the number of people who positively evaluated the quality of a product increased.

We discuss the reason that delivery has a significant correlation with advertising. It is believed that advertising to the general public leads to high reliability. If products were not delivered on time and where it is required, buyer companies would face serious setbacks. Missing delivery dates would lead delays in administrative action of buyer companies, thus causing them to face losses. As a result, advertising to the general public is associated with financial stability and subsequently leads to high reliability. Moreover, publicity through advertising also produces a high degree of trust. Hence, advertising to the general public has a significant correlation with delivery.

In contrast, cost and service did not have a significant correlation. It was assumed that advertising expenses directly influenced commodity prices, and buyer companies acknowledged these prices. Regarding service, the reason for the insignificant correlation lies in the way service is perceived.

As we mentioned in the preceding paragraph, the impression that a service was fulfilled is largely based on the experiences of buyers owing to personal contact with sales personnel. Thus, we assumed that the impression that was formed by advertising to the

general public did not enhance the perception regarding service because the impression was not based on buyer experiences.

According to the above consideration, we were able to judge that the revised model provided rational explanations and had a specific validity. In the next paragraph, we indicate inferences from the revised model.

#### **5.4 Implications to B2B branding**

When the revised model was comprehensively judged, it turned out that sales enhanced the perception of service that business customers had. On the other hand, advertising enhanced the perception of quality and delivery that business customers had. These findings suggested that sales were effective for B2B companies which wanted to appeal service, while advertising was effective for B2B companies which wanted to appeal quality and delivery.

However, it turned out that quality and delivery had stronger effects on brand loyalty while service showed a weak correlation to brand loyalty. Therefore, the finding suggested that advertising was more effective than sales in terms of enhancing brand loyalty.

## 6. Conclusion and Limitations

In this study, we discussed the efficacy of advertising activities to QCDS, which buyer companies perceived, compared to its sales activities. This research revealed that advertising to the general public is more effective than sales to business customers in building a brand with concrete factors such as QCDS.

There are mainly two potential limitations to this research. First, respondents of the questionnaire included non-purchasing managers. The questionnaire essentially targeted businesspersons and executives who work for buyer companies. However, there were also many people who were not involved in the purchasing decisions. According to Yoda (2006:63-76), the lower the intellectual level and involvement levels of people with the products, the more likely it is to be susceptible to subjective attributes. Therefore, respondents of questionnaires might evaluate the QCDS of products incorrectly. Furthermore, empirical research is needed to narrow down respondents of questionnaire to purchasing managers in order to further refine results.

Second, the coverage of products used in empirical research was wide. In this research, we regarded products that buyer companies purchase from other companies such as B2B products. However, B2B products can be distinguished from capital goods in terms of production facilities and intermediate goods such as materials and machine

parts (Takashima & Minami, 2006). Therefore, it is difficult to grasp the concept of B2B products comprehensively because even B2B products are of various types. This research does not consider this point. Further research is needed to enhance the thoroughness of this research focusing on the diversity of B2B products by examining every type of product in this category.

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<sup>1</sup> All of the comments written in *Italics* are based on interview through e-mail and telephone on 8 and 15 October 2015.

<sup>2</sup> In this study, sales activities to business customers mean having exhibitions, distributing catalogues and sending direct e-mails. While advertising activities to the general public include mass advertising through TV, radio, newspaper and magazine, as well as using the world wide web or internet.

<sup>3</sup> Keith et al. states that “dealer proximity,” and not “delivery,” determined whether dealers could rapidly supply parts and services in the event of that a machine breaks down. However, we have used “delivery” because it also encompasses “dealer proximity” in this research.

<sup>4</sup> However, we could not get substantial results on the complete validity index in this study.

<sup>5</sup> We used “IBM SPSS Amos 23.0”.

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