

## **ANALYSIS RELATIONSHIP BETWEEN PRODUCT RECALL AND CORPORATE REPUTATION**

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### **Abstract**

In this study, it is investigated that the relationship between product recall and corporate reputation. A Questionnaire has been used in the research. There are two main scales. Product recall (Magno, 2012) and corporate reputation (Fornbrun et. al 1999) are scales. Data collected from Faculty of Economics and Administrative Sciences students. The outcomes demonstrate that there is a relationship between product recall and corporate reputation

**Keywords: product recall, corporate reputation, customer-oriented marketing**

## **Introduction**

Depending on the customers' demands, the product range is also increasing. Products have increasingly complex technologies. It is becoming increasingly difficult to reduce error rates. Products are controlled by specific standards. Product recalls incidents are encountered when the standards are exceeded. Recalls are emerging as a new management area. Which is called "Recall Management". Recall decisions are not always easy. Recalls can be quite costly. The non-recall of problematic products can lead to corporate reputation loss in the medium and long term. Internal and external groups can manage the recall process. The recall process has mainly 3 stages. They are "Listen, Analyze and Act" stages (Capgemini, 2015). Each stage should be customer oriented. Well-managed recall process has many positive effects. With effective management, the problem can be identified early. This makes enable to act fast. PR communication for recall process can be well positioned with effective recall management.

In the study, we have analyzed the relationship between product recall and corporate reputation with a case in the automobile sector. We had chosen focus on recalls of automobiles. Because each yields a good-sized sample of recalls and because we could obtain associated data on some elements of the direct costs of most of this recalls. Important examples of the recall occur in Volkswagen Company nearly.

## **Literature Review**

Choi and Lin (2009) analysis of consumer responses to the Mattel product recalls posted on online bulletin boards revealed that consumers experience a range of emotions from a crisis. In their study, they made regression analysis. In analysis result, they suggest that crisis responsibility is an important predictor of anger, fear, surprise, worry, contempt, and relief. These indicate are attribution dependent emotions. Alert and confusion were independent emotions. In this study, a significant negative relationship was found between alert, anger, and organizational reputation. Marsh, Schroeder, and Mintert (2004) analysis the impact of meat product recall events on consumer demand in the USA. The general negative effect observes a shift out of meat towards non-meat good. Kumar and Budin (2006) examine the US Food and Drug Administration reported a total of 1307 processed food product recalls during 1999–2003. There are many areas of the processed food supply chain where significant exposure to risk

exists. Companies should consider recall insurance, depending on their size and market dominance. Findings from analysis suggest that potential reduction of product recalls through recommended preventive measures. Gibson (1995) argues that product recalls are quantitatively and qualitatively significant, product recalls vary widely in effectiveness, numerous variables appear to influence recall effectiveness, despite the great variance in recall outcome, and the plethora of variables, it is possible to identify a series of hypothesized communication tactics likely to enhance recall success. Cheah, Chan, and Chieng (2007) analysis of the Pharmaceutical Journal and U.S. Food and Drug Administration enforcement reports about product recall during 1998- 2004. Two countries responded to news of product recalls in marked differences in the way market participants. U.S. investors penalized firms according to the severity of product defects while U.K. investors were indifferent. While U.K. investors rewarded product recalls by firms, U.S. investors punished firms that performed recalls. Research results show that the drug companies will have difficulty operating in both countries. Hoffer, Pruitt, and Reilly (1988) apply to the automobile industry with several modifications, for the purpose of strengthening their approach in terms of its agreement. The result of the study that share prices are significantly affected by automotive recalls.

Rhee, Haunschild (2006) in their study, they analysis of the how organizational reputation affects market reactions to product defects. They focused good reputation could be a disadvantage. They tested product recalls in the U.S. automobile industry. They have used automobile industry data from 1975 to 1999. Their results that reputation can be an organizational liability in those highly reputed firms suffer more market penalty as a result of their product recalls. However, they propose that the reputational effects are moderated by two important factors. These important factors are substitutability and generalism/specialism. Their results show that having few substitutes with an equivalent level of reputation buffers the negative market reactions to product recalls.

Jarrell and Peltzman (1985) analyzed the effect of automobile and drug product recalls on the shareholders of firms within these industries. They found that for manufacturers of automobiles and ethical drugs, capital markets penalized shareholders far more than the direct costs of the recall campaign. Further, they concluded that in both industries, shareholders of competitor firms

are subject to wealth losses. Interestingly, in 1975-81 period the shareholders of General Motors bore greater wealth losses from the recall of a Ford or Chrysler product than they did from the recall of a GM product.

Haunschild and Rhee (2004) investigate automakers learning from voluntary versus involuntary product recalls. Using data on all recalls experienced by automakers that sold passenger cars in the United States during the 1966-1999 period. They measured the effects of voluntary and involuntary recalls on subsequent recall rates. They find that voluntary recalls result in more learning than mandated recalls. This effect is at least partly because of shallower learning processes that result from involuntary recalls. The effect of volition, however, is different for generalist and specialist automakers. The results of the study suggest determinant of the rate and effectiveness of learning-volition. The results also add to their knowledge of the different learning processes of generalist and specialist organizations.

Crafton, Hoffer, and Reilly (1981) and Reilly and Hoffer (1983) found that severe automobile recalls have a significant short-term impact on demand. In the result of their study, recalls affects adversely sales of automobiles. Chun (2005) examines corporate reputation have been caused by the interdisciplinary nature of much of the earlier work in the area. With a clearer understanding of the construct of corporate reputation and the allied constructs of image and identity. Researchers test the relationships between corporate reputation and other variables. These other variables are commercial performance and employee and customer satisfaction. The review ends that can be assessed on the basis of a clearer conceptualization of reputation and its measurement.

Nguyen, Leblanc (2001) analysis of the relationship between corporate reputation and corporate image and their effect on the customers' retention decisions. The results of the study reveal that when perceptions of both corporate reputation and corporate image are strongly favorable, the degree of customer loyalty has a tendency to be higher. Further, the addition of the interaction between both constructs contributes to better explain customer loyalty.

Balmer, Greyser (2006) examined the nascent area of corporate marketing. The study updates the case that corporate identity, corporate branding, corporate communications, and corporate reputation should be integrated under the umbrella title of corporate marketing. The paper defines the 6Cs of corporate marketing.

Gotsi and Wilson, (2001) define the concept of corporate reputation and identify its relationship with the corporate image. They argue that there is a dynamic, bilateral relationship between a firm's corporate reputations and corporate images.

Wartick (2002) examined existing definitions and data sets, investigated the current state of efforts meditated to measure corporate reputation. Both definitions and data are found to be missing, and it is argued that many deficiencies in definition and data can be charged to the fact that theory development related to corporate reputation has been insufficient.

## **PRODUCT RECALL AND CORPORATE REPUTATION**

Reputation has been defined as “*a perceptual representation of a company’s past actions and future prospects that describe the firm’s overall appeal to all its key constituents when compared to other leading rivals*” (Fombrun, 1996: 72). A product recall is an example of a product-harm crisis. A product recall defined as a distinct, well-publicized occurrence wherein products are found to be imperfect or dangerous (Dawar and Pillutla, 2000:215). A product harm crisis occurs when products include hazardous materials, can modify serious injury or death if used improperly, violates safety standards (Pruitt and Peterson, 1986).

Product harm crises and subsequent product recalls are among a firm’s worst nightmares (Heerde et al., 2007: 230). Dislike the growing number of product crises, companies are still often unprepared to cope them strategically and the number of studies investigating this issue is still scarce. In general, a company could act to the product crisis in several alternative ways ranging from denial to the assumption of responsibility and unconditional product recall and super effort (Siomkos and Kurzbard 1994). Therefore, when a product crisis such as a product recall becomes, one of the most important tasks is to protect the equity of the brand. Recent research

has shown that product recall can severely damage the strength of a brand (Van Heerde et. al., 2007:235).

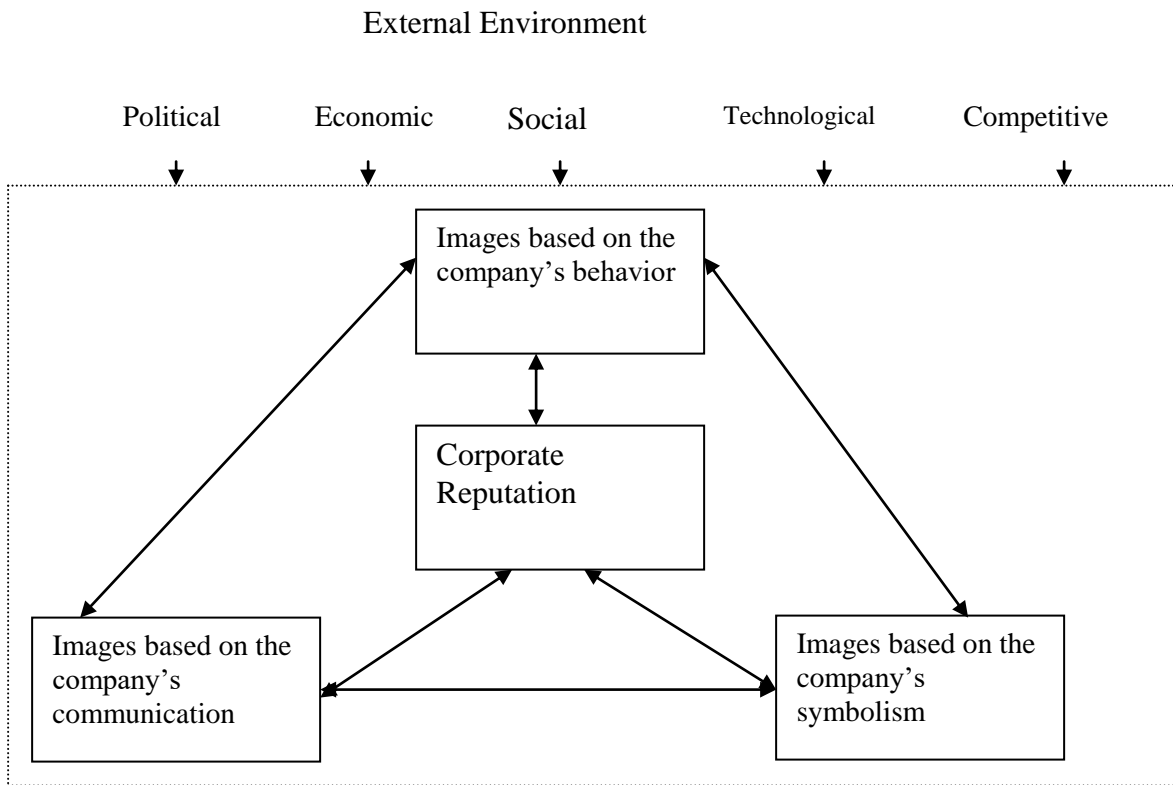
Although estimating the long-term damage of product recalls on brand equity and company reputation is difficult, the short-term impact on shareholder wealth is nevertheless admirable through the use of event study methodology. The underpinnings of event study methodology state that, in an efficient market, the financial impact of an unanticipated event will be immediately indicated in stock prices (Fama, 1970).

During a product crisis, exposure to marketplace information is likely to be more wide-ranging and negative. One of the reasons why product recall garners so much media attention in particular cases is the potential harm to consumers from defective products. Logically, the greater the product harm, the greater the expected fall in the brand's equity (Korkofingas Ang, 2011: 962).

Corporate reputation, the collective opinion of an organization held by its stakeholders, has been identified as a construct of growing importance (Kitchen and Laurence, 2003; MacMillan et al., 2002). Weigelt and Camerer (1988) provide a rather acquiescent definition contending that corporate reputation is a set of economic and noneconomic attributes imputed to a firm, inferred from the firm's past actions.

Corporate reputation sometimes seems as synonymous with the corporate image (Dowling, 1993). Spence (1974) maintains that it is the outcome of a competitive process in which firms signal their key characteristics to constitutive to maximize social status. This seems to show clear status goals and concluded control over signals emitted by a dynamic firm.

Figure 1 shows that definition of corporate reputation

**Figure 1:** Definition of Corporate Reputation

**Source:** Manto Gotsi Alan M. Wilson, (2001), “Corporate reputation: seeking a definition”, *Corporate Communications: An International Journal*, Vol. 6 Iss 1 pp. 24 - 30

### Methodology

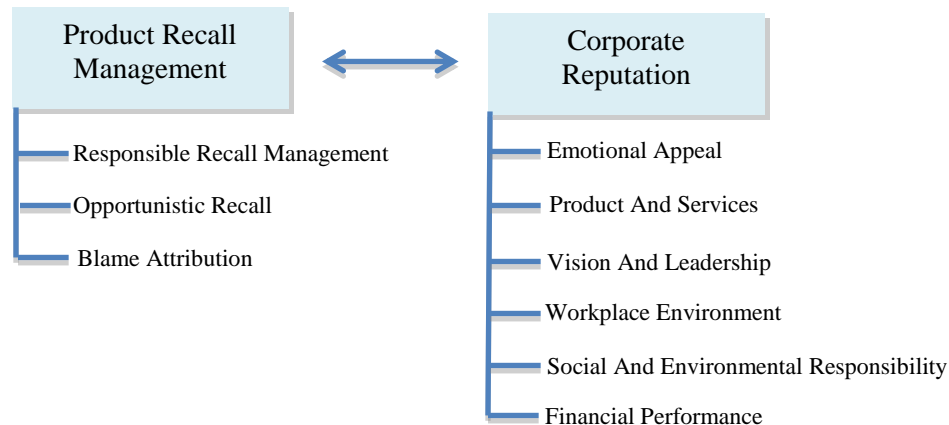
The survey has conducted to the study. The survey form was prepared in Turkish. It is translated from English one which is addressed in the literature review. Survey form has mainly four parts. In the first part, there is real news of a product recall event. It is conducted from Volkswagen’s Emission situation. It is aimed that giving information to participants about the event and product recall. In the second part of the survey, there are scales for product recall and corporate image. In this section, there are 32 scales in the form. The last section includes demographic data.

Collected data from the survey were analyzed using SPSS 21 program and the results were evaluated according to hypothesis.

Studies of Magno (2012), Fornbrun et. al (1999) were used as references while preparing scale expressions in the survey form. The survey included 32 items, 13 of which were based on the recall management scale Magno (2012), 19 items which were based corporate reputation scale were taken from the Fornbrun et. al (1999). Survey items were rated on 5-point Likert scales (1 = strongly disagree to 5 = strongly agree). The study applied on university students in İzmir. Participants can be classified as young people. The random sampling method took into account as a research sampling method. This research aims to understand the relationship between product recall and corporate reputation. In total, 412 questionnaires were distributed and 377 valid questionnaires were received. The overall rate of return was, therefore, 91 %.

According to the scales, they are identified in two groups. They are “Product Recall” and “Corporate Reputation” as shown Figure 2.

**Figure 2:** Research Model



Hypotheses derived from analysis of the main object.

H1: There is a relationship between environmental awareness and brand loyalty. The relationship between -Product Recall and -Corporate Reputation was examined with correlation analysis.

### Findings of the study

Product Recall and Corporate Reputation scales have been examined with reliability analysis. The result of average scale's Cronbach Alpha value is 0,8227. Accordingly Kurtuluş (2010), the value is indicating a high reliable scale ( $0.80 < \alpha < 1$ ). It can be identified as an acceptable value.



The demographic characteristics subject to the survey can be grouped under 3 headings. First, it is possible to talk about the gender of the volunteers involved in the survey. 55 percent of the participants were male while 45 percent were female. The average age of participants is 21. Secondly, we can inform about participants' car ownership. While 30 percent of the participants have their own cars, 75 percent have at least one car in their family. Thirdly, the survey has based on the real case. On the survey, paper participants have been informed about the case. The number of participants who got information about the case before responding to the survey is 75.

**Table :** Correlation Analysis Results

|                      |                     | Brand Loyalty | Environmental Awareness |
|----------------------|---------------------|---------------|-------------------------|
| Product Recall       | Pearson Correlation | 1             | ,46**                   |
|                      | Sig. (2-tailed)     |               | ,000                    |
|                      | N                   | 377           | 377                     |
| Corporate Reputation | Pearson Correlation | ,46**         | 1                       |
|                      | Sig. (2-tailed)     | ,000          |                         |
|                      | N                   | 377           | 377                     |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

As shown in Table, the correlation between two factors is 0,46. It means that correlation is significant at the 0.01 level (2-tailed). Hair et. al. (2002) classified correlation values as their power of explanation. The correlation analysis shows that the correlation between questions is moderate ( $\pm .41$ - $\pm .60$ ). As a result, there is positive relationship between Product Recall and Corporate Reputation.

## Results

The product recall process is an issue that is on the agenda all over the world. Therefore, how to manage this process is also a question mark. There are many successful and unsuccessful examples to date. One of the companies that have decided to product recall is Volkswagen.

Product recall is detailed examine in customer oriented marketing approach. Errors in the product line are not easy to fix. But with a good product recall management, businesses can take advantage of this situation.

Study results show that there is a relationship between product recall and corporate reputation. With the awareness of the customer, the issue becomes sensitive. Especially new communication channels like social media, errors in products are heard in a short time. Customer losses can be experienced if the company does not correct the mistakes. This leads directly to the company's image loss.

### **Discussion**

Together with new trends, error-free production goals have begun to come to the forefront. These applications have led to the updating of quality control mechanisms. At the same time, they are trying to get optimum cost while they are carrying out the management control mechanisms. The applications differ according to the type of faults that can occur in products. While some faults do not lead to product returns, some serious faults go to the product recalls.

Volkswagen has opted to go on the road to recall its products after the emerging emission problem. According to the survey, this behavior did not lead to loss of image for Volkswagen. On the contrary, it was seen as a positive move for the company. No significant difference was found between those who own vehicles and those who do not. The management processes of the companies do not end with the delivery of the product only. The return of the product after the delivery of the customer is very important. Depending on the feedbacks, the company may go from design change to production stoppage. Customer-centered marketing understanding pays attention to the opinions of the customers.

Future research can be examined by considering different sociocultural dimensions separately. Thus, the relationship between product recalls and corporate reputation can be demonstrated in different cultures. In addition, the product returns can be examined by grouping them into sectors.

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