

Crisis Communication and Management on Food Recall in the Malaysian Food Industry

¹M.A. Kal-kausar, ²A.R. Norhayati Rafida,
¹N.H. Nurulhusna, ¹A.R. Alina and ¹A. Siti Mashitoh

¹Institute of Halal Research and Management (IHRAM), Universiti Sains Islam Malaysia (USIM),
71800 Bandar Baru Nilai, Negeri Sembilan, Malaysia

²Faculty of Leadership and Management, Universiti Sains Islam Malaysia (USIM),
71800 Bandar Baru Nilai, Negeri Sembilan, Malaysia

Abstract: Food recall is the process of removing the contaminated product which can cause harm to the consumer. The aim is to protect the public health and interest prior to traceability. This research was conducted to identify the perceptions of food industries towards the importance of food recall. A qualitative approach is employed using an interview method on three respondents selected from food industries who were responsible in various departments namely the Quality Assurance (QA) and Research and Development (R and D). The efficiency of the procedure included documentation, communication and the deadline. The food recall activity has significant impact on tracking the product batch that was contaminated. Not only will it reduce the cost and regain the trust from consumers, at the same time it will protect public health. Therefore, this process is essential to be constantly evaluated for continuous systematic improvement. The strengths of food recall activity practiced in Malaysia are found to be the communication among food industries, authorities, media and consumers as well as the strictness of the competent authority such as the Ministry of Health (MOH). This study suggests the use of global networking system in the food recall activity while communication and documentation are to be implemented effectively by the particular food industry and other products in general.

Key words: Food recall • Traceability • Crisis • Communication • Management

INTRODUCTION

Food recall is a procedure practiced by the food industries in which the food products are being taken back when there is a reason to believe that a food may cause consumers to become ill or cause harm [1]. When the products are suspected to being harmful due to safety and quality defects, the product may be subjected to a recall and all related information must be reported to the competent authority [2].

In Malaysia, a food manufacturer or distributor initiates the recall to get the food out of the marketplace and to a certain extent, the food recalls are requested by government agencies, such as the Ministry of Health (MOH), the Department of Islamic Development Malaysia

(JAKIM) and the Department of Veterinary Service (DVS). The recalls have to be done in an orderly and meticulous manner to avoid negative implication and backlash to related stakeholders, such as the industry, general public and related parties.

Malaysia has a brief history of food recalls, as it has not experienced a critical food crisis in its food industry. Malaysia has implemented food recalls which affect the halal food industry as Malaysia aims in becoming a trusted Halal Hub in the next few years. Dating back from year 2010 to March 2012, JAKIM has recalled a total of 39 products and revoked the Halal status of ten hotels and premises and a slaughterhouse [3]. Recently, Fonterra had a food recall incident where some of their batches of milk products were believed to have possible botulism

contamination, in the region of Southeast Asia [4]. Fonterra has developed a system in such a way that the food recall can be done in an efficient and effective way, minimizing or eliminating the chances of error.

Food Crisis: A food crisis refers to cases whenever food products are found to be contaminated and cause harm to the consumers. A food crisis is usually set off by a shock to either supply or demand for food and often involves a sudden spike in other food prices [5]. The world has a history of dealing with food crises. A recent example in Malaysia was the maleic acid contaminant in food produced from Taiwan which occurred in June 2013 [6].

Food crisis is not new, which means that it has existed for a long time. Today, media has successfully increased the public's awareness due to several factors such as the rise in food and fuel prices on the global market. The current food crisis is different from the food emergencies in the past, where it was largely affected by weather or environment related causes such as droughts, storms and floods [7].

The current food crisis is largely affected by the economical and social aspects such as the rising prices of commodities and service, urbanization and the growing of the world population. In fact, it can also cause food product recall, for instance, contamination of maleic acid which involves several batches of the product imported from Taiwan [6].

Hence, the need for a proper system to be implemented to be able to counter the increasing concern of food crisis is tremendous. However, the formula of a food policy approach is easier to state than to implement, especially on a global scale. Hence, the need to identify a more easier and systematic way to curb the food crisis phenomenon is gravely required for the world's food supply continuity [5].

The Food Recall and Traceability: According to the Codex Alimentarius, food recall can be defined as the action for removing of food from the market at any stage of the food chain because of reason related to safety and quality. The major objective of food recall is to protect public health by ensuring that [8]:

- There is rapid removal of unsafe food from all possible stages of the supply chain
- The concerned consumers and related stakeholders are informed
- The food under recall has been retrieved, destroyed and reprocessed

Table 1: USFDA recall classification [10]

Classification	Retrieval level	Effectiveness check	Public warning
Class I	Consumer	100 % at retail	Yes
Class II	Retail or more	90-100% at retail	Yes
Class III	Wholesale or more	Variable	Sometimes
Withdrawal	Company criteria	Company assessment	No

The initiation of food recall process can be triggered by; reports from public health officials, consumer and industry complaints, food-borne illness outbreaks, competent authority inspections and testing and sampling programs, information from other government departments, reports from international partners as well as company-initiated concerns found through its own sampling [9]. As illustrated in Table 1, there are three types of food recalls:

Class I Recalls (High Risk): Class I recall is initiated for a food product when there is a high risk that eating or drinking that product will lead to serious health problems or death. The Canadian Food Inspection Agency (CFIA) issues a public warning for all Class I recall when the product is available for sale or could be in the consumer's home.

Class II Recalls (Moderate Risk): A Class II recall is initiated for a food product when eating or drinking that product will most likely lead to short-term or non-life threatening health problems. The chance of any serious health symptoms is low in healthy populations. The class II recalls is categorized based on the risk assessment and other criteria, such as the severity of symptoms in vulnerable population (children, pregnant women, seniors).

Class III Recalls (Low and No Risk): A Class III recall is initiated when eating or drinking that product will not likely result in any undesirable health effects. Class III recalls can include food products that pose no health and safety risk, but do not follow federal food regulations [9]

In Malaysia the Ministry of Health (MOH) plays a primary role in food recall. But the Ministry of Agriculture (MOA) and Agro-Based Industry-Department of Veterinary Services (DVS) also play an important function in the food recall system though mostly on the farm side and imported meat products. The legislations in place to support the recall system with MOH are the Malaysian Food Act 1983, Food Regulation 1985 and Food Hygiene Regulation 2009.

On the other hand, legislations with MOA (DVS) that sustain food recall are the Animal Act 1953 (Revised 2006), the Animal Rule 1962 and the Custom Act of 1967. Each regulatory agency designated at entry points should ensure that all products entering Malaysia should meet their requirements. Though there are some variations in implementation from department to department, the aim is both to prevent unsafe food from entering the food chain [10].

Crisis Management: Crisis management refers to a process to overcome threats that harm any organization of particular events that involve stakeholders and public related to the organization [11]. Crisis is part of any business organization and it has to be managed.

The way in which the crisis is managed, the process, should foresee both the expected and unexpected outcomes which, in any case of neglects, may damage the image or reputation of the company. Other effective crisis management plan includes the appointment of crisis management team, brainstorming, action plan and assignment of an official spokesperson [12].

Crisis Communication: Organizations are advised to quickly respond to crisis communication literature, in filling the information void created by the crisis [13]. This is to avoid unwanted and wrong speculation and rumors spreading around to the attention of the public. Today, a lot of media can contribute and are constantly being used towards informing the public on current issues and crises. Internet is considered to be the most reliable source for news, especially ideal for generating timely communication, information and interactive conversations. These positive features that the public associate, towards online news, in general and social media in particular are especially essential for organizations experiencing crises [14].

Social media have become part of everyday life for many people, where more than 900 million people are using Facebook and there are more than 100 million tweets daily. Organizations embrace social media as an important communication channel for marketing and public relation as well as crisis communication [15]. It acts as a useful tool during organizational crises because concerned public can be informed quickly and directly and because organizations can engage in a dialog with them.

Acknowledging the high impact of media, researches have been done to analyze the social media role in crises [15]. The usage of social media increases during crises

Table 2: Background of respondents

Respondent	Code	Department	Type of Industry
1	R1	Quality Assurance (QA)	Food supplement
2	R2	Research and Development (R and D)	Poultry
3	R3	Quality Assurance (QA)	Processed food

Note: R1, R2 and R3 are representatives from three different food industry companies

[14]. Interestingly however, research has shown that people preferred to share news from an online newspaper than news from social media such as blog or Twitter during crises. This is due to the perception of the traditional sources such as newspapers being more credible when compared to the social media's. The trustworthiness and credibility of the social media are still debatable [16].

To date, it is found that research that analyzes on food recall procedure from the food industries perspective are still lacking. Therefore, the objectives of this study are to identify perceptions towards the importance of food recall from the view of the food industries and to recognize the strengths and weaknesses of food recall procedure practiced by the industries.

Methods: A qualitative approach was employed using interview method on three respondents from the food industries who are responsible in the department of Quality Assurance (QA) and Research and Development (R and D). The particular respondents are stated as in Table 2.

To maintain the confidentiality of the specific food industries involved, selected respondents were chosen, for the interviews to be conducted, based on the respondents' experience and perception towards communication and management of food recalls. Based on the objectives of this study, a set of questions is designed on the structured basis in which the respondents were given ample time to explain and describe the situation that they were in at that particular time. The questions included:

- How important is the product recall to the industry and to the company?
- How do you measure the efficiency of food recall procedure?
- How do you communicate with the competent authority and consumer if the food crisis occurs?
- How do you manage the problem if the batches of contaminated product cannot be traced?

As the analysis reveals the way in which food recall is communicated and managed, the findings are presented according to the main information for the particular question and then making a comparison across respondents towards their perceptions, measurement of efficiency, communication and management.

The numbers of respondents were seen significant as this study wishes to identify the different issues, strength and weakness of the product recall procedures. This study, thus, interviewed three respondents while the analysis is merely on the basis of descriptive and framing analysis through out the three cases.

RESULTS AND DISCUSSION

The interviews were done with three representatives from different food companies in Malaysia. The finding shows the importance of food recall during food-harm crisis. It was indicated by the recall procedure prepared by each company in case the food crisis happened.

This paper begins with the perception towards the food recall procedure and identification of the several elements that are believed to be a crucial part for food industry during conducting the food recall procedure.

The Importance of Food Recall from the Perspective of Food Industry: According to the R1 perspective, the food company must know the procedures on how to deal with food-harm crisis. Food recall procedure is significant in order for them to survive during the crisis. If the crisis involves severe case which can cause death to the consumer, the product recall guideline would assist them to track which batches are contaminated based on the production date, lot numbers, importation/exportation date, quantity and area distributed with the name and address of clients should be described. Then, the cause of the incident could be traced and solved promptly by identifying on each stage of food chain including raw materials purchasing, processing, packaging and delivery to the consumer.

Besides that, the product recall guideline would minimize the cost of recall activity since the cost is borne by the company. By establishing the procedure, it would aid them to define the optimal batch size to be withdrawn from the market. Certain small and medium enterprise (SME) companies did not have proper record keeping, therefore retrieval of information and documents cannot be done in a timely manner. Therefore, the case is unable to be closed and the company tends to recall the product with no specific batches due to the inability in recognizing the specific batch numbering system.

In contrast, R2 views a series of product-harm crises as a lead to the decreasing of the baseline sales and negatively affect the brand. During the crisis, media coverage and communication via technology have adversely spread the news, affecting the market. Parallel with the research that had been conducted, it has been proved that the product-harm crisis have a negative effect on brand performance [16]. Therefore, by developing the crisis management plan such as recall procedure this will minimize the risk of suffering from financial and reputational loss. In order to enhance the company's reputation, the management has to gain back the trust from the customer and consumer. By conducting product recall and removing the contaminated product batches in the market, this can help the company minimize damage and negative publicity, which are considered as critical situations. Sometimes, the crisis arises due to the rumors or misunderstanding from the consumer.

Meanwhile, the food recall procedure is important to remove unsafe food and food that violate the Food Act 1983 and Food Regulation 1985. For R3, as the food recall procedure indicates the transparency of the company, the company decided to initiate the recall procedure by preparing the fundamental documentation. By identifying the food batch based on their production date, the presence of potentially hazardous food in the market can be recognized. The basis mechanism of the food recall depends on the food company's policies, ethical understanding, regulatory requirement and financial limitation. Food recall justifiably defends both the company and the consumer. A discreet and ethical food recall process can clear up the company's name and avoid negative publicity from the social media.

The Measurement of Efficiency Level of Each Company for Their Respective Recall Procedure: According to R1, food companies that are registered in Malaysia should provide the documentation regarding the food recall guideline to establish the procedure and to ensure the recall activity would be able to be carried out promptly, properly and effectively. It is applicable to all finished product so that the traceability could be done within the allocated time. Product recall can be considered as the response of the company in a product-harm crisis. Product recalls can give a negative impact on the brand and even the companies' reputations. If the company is able to manage the recalls systematically, it would decrease the negative impact from consumer and eventually gain some other benefits to the company.

To validate the efficiency of the recall procedure, mock recall would be done. To meet the requirement, the mock recall must be cleared up within four hours. The objective is to ensure that the entire record keeping such as marketing order, production stock record, quality assurance record and store stock record is parallel with the delivery. Otherwise, the recall procedure needs to be altered and amended. During the melamine crisis occurrence in Malaysia, Ministry of Health (MOH) reported that the crisis management commenced on 22nd September 2008 and successfully closed the case on 7th November 2008. The case took about two weeks to be reconciled, which indicate that, the competent authority in Malaysia is dedicated in implementing food recall mechanism in order to prevent the contaminated food from reaching the market for extended period of time [17].

In measuring the efficiency of the food recall procedure, the food safety member team will provide the detailed mechanism which includes the involvements and responsibilities of each department. As for R2, each department will play their role accordingly to ensure the success of food recall activities and traceability initiatives. For that reason, the food recall and traceability will be carried out together with proper documentation and record keeping. The process starts initially at the procurement and store department where the raw materials are supplied and received. The crucial part will be at the processing to the packaging stage.

There are many chances for the product to be contaminated during the production stage. But sometimes, the contamination may occur during delivery to the customer and consumer. By ensuring the production date, raw material receiving record, production condition and some other requirement specifically for the food, the chain and internal traceability would be execute and the possibility for improving the process control will be increased.

However, R3 insisted that they should have the procedure and enhance validity by conducting mock recall. To measure the efficiency of the food recall procedure, the company must react immediately by following the best practice of recall management with the established plan and the roles and responsibilities of each department when food crisis arise. Conducting the mock recall would ensure that the food recall procedure is effective and applicable.

Communication with the Authority and Consumer: In any case that they have to update, R1 will prefer the QA department to update continuously on the Ministry of Health website. However, if there is a food crisis which involves the company, the press release is the medium to clear up the company's name immediately. In order to keep the public inform on the status of food being contaminated in Malaysia, MOH had updated the report in the media and Food Safety and Quality Division (FSQD) website regularly [17].

Similarly, R2 believes that the communication with the public is the most important element for effective recall process and regains consumer confidence. Nevertheless, the communication with media is depends on the degree of recall. The Ministry of Health assessment of severity will determine the magnitude of the recall and degree of publicity as stated in Table 1.

In comparing with prior respondent, R3 believe that communication in recall process is intended to notify the public of potential risk associated with specific food product. Based on the research conducted among Americans, 66% of consumers heard about food warning on television. Only a small percentage of American visit the government agencies website regularly (21%) and even fewer Americans receive email alert regarding food recalls (8%) [18]. Thus, the media coverage plays an important role on enlightening the issue to the public as well as to overcome the decreased brand performance of the brand performance since since communication is the final and crucial step in the recall process.

Tracing of Contaminated Product: If there is any possibility that the contaminated batch number cannot be recognized, R1 choose to recall their entire product since protecting the public health is the most important priority as well as to clear up their reputation.

In contrast, R2 stated that the food recall and traceability system might not be well-established. Thus, there might be stages where the contaminated batches are unable to be distinguished. As a result, the contaminated product may be released to the consumer. Since Malaysia is concern on the public health regarding food, the government agencies, Ministry of Health (MOH) will conduct continuous monitoring and sampling activity on the food being suspected to be contaminated. Each consignment is required

to be accompanied with a Health Certificate issued by the competent authority and a copy of Certificate of Analysis (COA) from the accredited laboratories by MOH [17].

R3 chooses to inform to Head of each Department (HOD) and the cause of failure will be investigated. Based on R3 experience, the main cause of failure in recognizing batch product is when the First In, First Out (FIFO) system is not well applied. During peak season of production, some of the workers tend to skip one of the crucial documentation and it will disrupt the whole batch production system.

CONCLUSION

This research identified the perceptions towards the importance of food recall from the view of the food industries experience. The strength of food recall procedure in Malaysia is found to be the communication among food industries, authorities, media and consumers. Besides, the strictness of competent authority, Ministry of Health (MOH) had increased the awareness of recall towards food industries and consumer. However, there are some weaknesses that should be overcome particularly in terms of the documentation that have to be prepared by the food safety team. The respective departments in the company have to play the roles and responsibilities so that the recall process will be more efficient. In addition to that, competent authorities in Malaysia, such as MOH, DVS and JAKIM, are strongly recommended to create a global networking food safety system in order to improve the communication and to promote the rapid exchange of information during food safety related event among food industries and competent authority alike The International Food Safety Authorities Network (INFOSAN) practiced by World Health Organization (WHO) and Food and Drug Administration (FDA).

ACKNOWLEDGEMENT

IHRAM conveys the highest gratitude to the funder of this project (PPP/FKP-1-16411), which is USIM for without this grant; this study is not able to be conducted. As well as IHRAM wish to acknowledge Food Safety and Quality Division (FSQD), Ministry of Health (MOH) Malaysia in providing important information related to food safety issues, crisis and food recalls.

REFERENCES

1. Baggarly, J., 2013. Baggarly: Food recalls-what does that mean? The Telegraph. <http://www.macon.com/2013/08/26/2627078/food-recalls-what-does-that-mean.html>. Accessed on 26th August 2013.
2. Drug Office, 2012. Pharmaceutical Products Recall Guidelines. Hong Kong SAR, China: Department of Health.
3. Shafii, Z., S. Shahwan, N.A. Muhamed, H. Hashim, M.F.M. Amin, A.A. Rahim, Y.A. Aziz, K. Jusoff and S.Z.M. Zaib, 2013. Product recall management for Halal product. Middle-East Journal of Scientific Research, 13 (Research in Contemporary Islamic Finance and Wealth Management): 85-92.
4. Bernama, 2013. Danone Dumex Malaysia recalls some of its milk products, possible botulism contamination. The Star Online. <http://www.thestar.com.my/News/Nation/2013/08/04/Milk-botulism--Dumex-recall.aspx>. Accessed on 26th August 2013.
5. Timmer, C.P., 2010. Preventing food crises using a food policy approach. Journal of Nutrition, 140(1): 224-228.
6. Noraini, M.O., 2013. Isu Produk Makanan dari Taiwan yang Dikesan Tercemar dengan Maleic Acid. <http://fsq.moh.gov.my/v4/index.php/component/k2/item/581-isu-produk-makanan-dari-taiwan-yang-dikesan-tercemar-dengan-maleic-acid>. Accessed on 5th September 2013.
7. World Vision, 2009. About the Global Food Crisis. World Vision Organization. [http://www.worldvision.org/resources.nsf/main/GlobalFoodCrisis.pdf/\\$FILE/GlobalFoodCrisis.pdf](http://www.worldvision.org/resources.nsf/main/GlobalFoodCrisis.pdf/$FILE/GlobalFoodCrisis.pdf). Accessed on 26th August 2013.
8. Food and Agriculture Organization of the United Nations (FAO) and World Health Organization (WHO). 2012. FAO/WHO guide for developing and improving national food recall system. Rome, Italy: WHO Press, pp: 68.
9. Canadian Food Inspection Agency, 2012. The Canadian Food Safety System: Food Recalls. Canadian Food Inspection Agency. <http://www.inspection.gc.ca/about-the-cfia/newsroom/food-safety-system/food-recalls/eng/1332206599275/1332207914673>. Accessed on 26th August 2013.

10. Sareen, S., 2010. Food and Agriculture Organization of United Nations. Seminar: Workshop on the Development and Strengthening of Food Recall System for APEC Member economies. 4-6 May 2010. Manila, Philippines. Asia-Pacific Economic Cooperation and Bureau of Agriculture and Fisheries Product Standards. Project No. CTI 55/2009T.
11. Shrivastava, P., I.I. Mitroff, D. Miller and A. Miglani, 1988. Understanding industrial crises. *Journal of Management Studies*, 25(4): 285-304.
12. Hogue, J., 2001. Avoiding Disaster: The Importance of Having a Crisis Plan. <http://iml.jou.ufl.edu/projects/Spring01/Hogue/crisismanagement.html>. Accessed on 26th August 2013.
13. Millner, A.G., S.R. Veil and T.L. Sellnow, 2011. Proxy communication in crisis response. *Public Relations Review*, 37(1): 74-76.
14. Liu, B.F., L. Austin and Y. Jin, 2011. How publics respond to crisis communication strategies: The interplay of information form and source. *Public Relation Reviews*, 37(4): 345-353.
15. Utz, S.F. Schultz and S. Glocka, 2013. Crisis communication online: how medium, crisis type and emotions affected public relations in the Fukushima Daiichi nuclear disaster. *Public Relation Review*, 39: 40-46.
16. Ma, B., L. Zhang, F. Li and G. Wang, 2010. The effect of product-harm crisis on brand performance. *International Journal of Market Research*, 52(4): 443-458.
17. Zawiyah, S., 2008. Special Report-Melamine Crisis. Food Safety and Quality Division, Ministry of Health.
18. William, H., C. Cara and H. Neal, 2009. Communicating with Americans about food recalls: Recommended strategies. *Epidemeology*, 20(6): 144.