

THE ROLE OF TRUST IN THE FOOD SUPPLY CHAIN

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Abstract

Dimensions of supply chain relationships such as trust, commitment, co-operation, communication and adaptation play a vital role for a successful and efficient flow of products and/or services. As recent scandals in the field of food industry have shown, this phenomenon has not received enough attention. Namely, studies of supply chain relationships have primarily focused on relationship processes as such, but have failed to acknowledge their impact on all relevant parties or the overall reputation. Hence, in light of relevant studies the present paper aims to identify and discuss problems in relationships between different parties in food supply chain in Slovenia, from the consumers' viewpoint. More specifically, the objective is to examine the role of trust as seen in Slovene consumers' reactions to food scandals in Slovenia (and Europe) covered by different media. The findings indicate that consumers not only mistrust the institutions responsible for food safety and quality assurance, but also the claims on products.

Keywords: food supply chain, trust, food industry, consumers.

1. INTRODUCTION

The new food economy is characterized with greater concentration of farms into smaller number with large sizes, increased emergence of contract farming, and the evolution of integrated supply chains linking producers and consumers. Such developments bring about new characteristics, which create new challenges for sustainable production and

processing practices that promote a balanced approach to the food quality, safety, and good environmental stewardship issues (Opara, 2002, p. 101). In recent years, much media attention has been given to the area of food supply chain (FSC), particularly following the new food politics and growing public concern over the manipulation of foods, which have led to a drastic fall in public trust. Following the most recent horse meat scandal, public trust in the food industry was found to have dropped by 24%. Moreover, 30% of those polled indicated that as a result they are buying less processed meat and fewer ready meals with meat in or are choosing vegetarian options. In addition, confidence in food safety was also found to have dropped quite drastically, from 92% feeling confident when buying food products in the supermarket prior to the scandal being revealed in the press to 72% feeling confident now. (Thomas, 2013)

Such events have a negative impact on relationships within the food supply chain with resulting levels of inter-organizational mistrust (Stevenson and Pirog, 2013, p.2). However, in line with the fierce global competition in this area companies seek to buy as cheaply and sell as lucrative as possible. The dimensions of FSC relationships such as trust, commitment and communication between consumers, on the one hand, and other FSC players such as suppliers, processors, retailers and the like, on the other hand, are becoming increasingly important. Here, the media play a key role, in that they hold food scandals (from BSE scandal, GM food scandals, horse meat scandals etc.) in their recurrent focus (cf. Siipi and Launis, 2009; Bohm et al., 2009).

This paper explores the perception of trust by the consumers and its role in FSC. More specifically, in this article theoretical knowledge will be used to understand the nature and functioning of FSC with the objective to identify and discuss the role of trust in relationships between different parties in FSC, i.e. between consumers, on the one hand, and suppliers, processors, retailers and the like, on the other hand. The main objective is, therefore, to examine which players the Slovene consumers find least trustworthy following a particular food scandal.

This paper is structured as follows: first a theoretical overview is provided, followed by a description of the methodology used. Then, based on recent scandals in the area of food consumption (potential) trust issues in FSC relationships between the aforementioned parties will be discussed. In conclusion, implications of the findings will be drawn.

2. THE CONCEPT OF FOOD SUPPLY CHAIN (FSC)

According to the Global Supply Chain Forum, supply chain management (SCM) is defined as: “the integration of key business processes from end user through original suppliers that provides products, services, and information that add value for customers and other stakeholders” (Lambert and Cooper, 2000, p. 66). In this respect, Stevenson and Pirog (2013, p. 1) define FSC as “a network of food-related business enterprises through which food products move from production through consumption, including pre-production and post-consumption activities”. Typical links in the supply chain are: inputs → producer → processor → distributor → wholesaler → retailer → consumer. For example, a FSC featuring pork products might include feed suppliers or veterinarians, a cooperative of farmer producers, meat packing and fabrication plants, food distributors/marketers, supermarkets and consumers, whereas preproduction activities might include university-based R&D. Similarly, post-consumption activities could include waste disposal and recycling, while government regulations would likely be engaged throughout the chain.

Furthermore, supply chain analyses have been increasingly focusing on examination of pre-production links such as agricultural research (e.g. genetics) or post-consumer links (e.g. waste disposal and recycling).

The nature of relationships between various participants in the FSC in general has been explained in a number of different theoretical approaches: transaction cost theory, political economy theory, social exchange theory and resource dependence theory (Robicheaux and Coleman, 1994). The primary focus of these approaches has always been on the nature of relationship processes rather than the effect of these relationships.

According to Dwyer et al. (1987), relationships evolve through five general phases: (1) Awareness; (2) Exploration; (3) Expansion; (4) Commitment; and (5) Dissolution. For the purpose of this study, we are particularly interested in commitment, as it is influenced by co-operation which arises from the presence of trust. As the relationship develops and expectations continue to grow, the parties in FSC begin to bond so as to encourage maintenance or facilitation of a relationship (i.e. they become committed). More specifically, the focus will be on the way, in which trust issues may arise from the reactions of readers (i.e. potential consumers) on reports about food scandals.

3. THE CONCEPT OF TRUST

There are a number of definitions of trust (cf. Anderson and Narus, 1990; Geyskens and Steenkamp, 1995; Moorman et al., 1992; Shapiro, 1987 etc.) Lewin and Johnson (1997, p. 28), for instance, define trust as the “willingness to rely on an exchange partner in whom one has confidence”. This means that a party that trusts other parties has confidence in them and relies on them what leads to higher levels of loyalty and long-term benefits (cf. Lindgreen, 2003, p. 313). Moreover, levels of trust are influenced by the accuracy and degree or amount of open, honest and clear information exchange that takes place in those relationships. Icasati-Johanson (1999) was one of the first to develop a definition of trust in the context of supply chain relationships, defining it as the belief that in an exchange relationship, under conditions of risk and interdependence, trust is a voluntarily accepted duty that will prevail ensuring that no party exploits the other’s vulnerabilities (Icasati-Johanson, 1999, p. 9). In this respect, aspects of communication behaviour, especially accuracy, adequacy and credibility of information exchanged between the players are crucial to the success of relationships, and communication has been found to be of utmost importance in the development of trust (Icasati-Johanson, 1999). It is, therefore, not surprising that food scandals frequently dent public trust in food and parties on the other end of the food supply chain. Hence, trust needs to be repaired. Given that trust develops over time, this process is not likely to be easy.

To avoid potential losses of trust that may occur for various reasons, greater transparency and food traceability from producer to consumer are needed. Traceability, in particular, can help detect and prevent food safety hazards and preserve the identity of novel foods, and has become an essential element of a quality assured FSC management system. Namely, traceability has been identified as a preventative strategy in food quality and safety management, particularly when hazards or food scares occur, in which case a good traceability system will facilitate timely product recall and determination of liability. The capability for a comprehensive traceability at any stage in the FSC is considered critical to addressing decreased consumer confidence and general public concern about the series of food-related incidences. Technological advancements such as data capture, storage

and retrieval, non-destructive testing, geospatial science and technology provide opportunities as well as challenges in this area and have greatly contributed to the development of technological innovations for traceability throughout the FSC (Opara, 2002). Opara (2002) further asserts that from a consumer perspective, traceability helps to build trust, peace of mind, and increase confidence in the food system. For other FSC players, traceability is part of an overall cost-effective quality management system that can also assist in continuous improvement and minimisation of the impact of safety hazards, by rapidly determining and isolating its sources. Furthermore, it facilitates prompt and effective recall of products (Opara, 2002).

Here, various institutions and the government (at national and EU level) also play an important role in this process, in that they monitor various parts of the FSC process or enforce industry wide standards concerning food quality control.

4. METHODOLOGY AND BACKGROUND

Following a series of food scandals throughout Europe and worldwide in the past decade, consumer trust in the safety and quality of food have been challenged. To examine, which players have lost most credibility from the consumers' viewpoint, we have selected a number of media reports on food scandals in Slovenia (and beyond). Data were taken from the two largest national news website portals 24ur and RTV Slovenija.

- (1) In February 2011, the maximum permitted level of sulphur dioxide for dried apricots (produced by Noberasco) was exceeded. Comments on one article reporting about the event were analysed
- (2) In February 2011 traces of glass have been found in apricot marmalade. Retailer announced a warning for those who have already bought the product and the marmalade has been removed from the shelves. Comments on one article reporting about the event were analysed.
- (3) In June 2011, has the world medical organization announced the news about the new strain of bacteria E.coli which is highly contagious. Scientists have not yet discovered the source of infection, but they suspect mainly fresh vegetables within EU. Comments on one article reporting about the event were analysed.
- (4) In February 2012, an animal feed scandal broke out, when aflatoxins were discovered in the milk of cows that fed on mouldy grain on some of Slovene farms. Drinking such contaminated milk can have serious health implications. Comments on five articles that reported about the event were analysed.
- (5) In June 2012, has been found the presence of bacteria in French cheese, which causes listeriosis. This is a serious disease which can last up to eight week. Comments on one article reporting about the event were analysed.
- (6) In January 2013, tea for weight loss was subject to a recall from the market, since it contained dangerous sibutramine, which can cause heart disease and even stroke. Comments on one article reporting about the event were analysed.

The data are qualitative in nature. The dataset consists of a total of 100 readers' comments, which appeared underneath the online versions of the articles about a particular food scandal. The selected comments were analysed and coded independently by three researchers to identify and overcome potential differences and difficulties in interpretation of the content and categories. The categories were developed based on descriptions, which

were grouped and labelled by the researchers on the basis of similar features. Any disagreements between the researchers were resolved in discussions.

The number of comments by the readers was much higher; however, we chose to investigate only those user responses that specifically addressed trust issues towards one of the players in the FSC. To this end, communication among users themselves that did not address any trust issues has not been taken into account in this study.

5. DISCUSSION

Table 1 shows the frequencies in each category for a specific “breakdown of trust” that was reported by the reader when commenting on the story that covered a particular incident. Regardless of the type of scandal that occurred, the most widespread breakdown of trust was found to be in the institutions, especially the government and the legislation adopted at the level of the European Union, followed by the breakdown of trust in corporations and global market chains. On one occasion, corruption of inspectors was brought to light. Here, distrust in the pharmaceutical corporations and the industry as such was frequently emphasized. Several readers blamed the profit-driven manipulations of particular actors.

Table 1. Categorised frequencies of breakdown of trust obtained from readers’ comments

Category	Indicator name	Frequency	Percentage
FOOD SUPPLY CHAIN	Breakdown of trust in the entire agri-food chain	4	11,5%
	Breakdown of trust in one of the national FSC players (farmers /manufacturers/ national food industry/retailers)	10	
		14	
INSTITUTIONS	Breakdown of trust in national institutions (VARs)	3	53,2%
	Breakdown of trust in the government and the EU	32	
	Breakdown of trust in corporations and global market chains	25	
	Corrupt inspectors	1	
	Other manipulations (profit-oriented)	7	
		65	
MEDIA	Questioned credibility of the article	7	
	Breakdown of trust in the media (misleading information etc.)	12	15,6%
		19	
IMPORTED FOODS	Breakdown of trust in imports from China	2	11,5%
	Breakdown of trust in imported products	12	
		14	
OTHER	Breakdown of trust in consumer rights	1	
	Hampered competitiveness of Slovene farmers	4	
	Breakdown of trust in claims on product labels	3	8,2%
	Reference to other malpractices	1	
	Terrorism	1	
			10
	TOTAL	122	

6. CONCLUSION

Food industry is faced with severe challenges as customers are making new demands in products and becoming more self-assured, therefore putting pressure on suppliers. Because of various food scandals consumer trust has been even more undermined. FSC therefore reveals major challenges in culture and behaviour of each individual party in FSC in food industry.

Based on the findings it becomes quite clear that consumers are highly sceptical about the safety of food products and that confidence of Slovene consumers in the food industry has been seriously dented. This calls for an improvement of relationship with consumers, a more transparent food supply chain, and the need to source more of the products locally when reasonable.

FSC and its every interdependent party requires redesign, especially in the field of communication, transparency, ethics and especially guilt and responsibility acceptance in order to provide superior customer value at the lowest possible costs. The latter must of course help the government, the legislation and competent services.

A significant opportunity exists to better meet demands through developing better information systems and tailoring service provision.

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