



ELICITING MILLENNIAL PERSPECTIVES ON ETHICS IN SAFETY PRODUCT RECALLS TO ENSURE CONSUMER PROTECTION AND INDUSTRY SUSTAINABILITY

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Abstract:

The pressure to gain market share in competitive markets plays a role in expedited production, less time in research and development, and minimal product testing; these actions leave the flaws to be pinpointed by consumers instead of the respective companies. Product recalls are an economic threat to suppliers and manufacturers and a main concern to the public's health; the complexity of a globalized supply chain with areas of unregulated safety standards contribute to increase in recalls. The adoption of technology and ease in usage of smart devices equipped with access to social media has provided consumers with the power to report malfunctions to larger audience and government agencies thus directly influencing consumer behavior. The cost incurred by companies after a recall are estimated at \$55.5 billion a year including mortality, productivity losses, and medical expenses; specifically, the direct cost to the food company can go up to \$10 million on lost sales and brand image reputation. The ethics within industries; what motivates industries from not being forthcoming and delaying the recall of products that cause harm to others and need to be recalled? Research focused on eliciting millennial perspectives on safety recalls on significant consumable products, baby products, and technology related recalls with emphasis on the CPSC recall of 1.9 million Galaxy Note 7 and 2.8 million top-load washers for a total of 4.7 million recalled products in 7 weeks a period from September 15 to November 04, 2016.

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1. Introduction

Product recall is a procedure where the retrieval of defective goods from the consumer market occurs; the products are recalled because they are hazardous in one or more of the following: scientific findings confirms danger of content once thought as safe; unintentional contamination; flaw in design; defect in the production; tampering of products; misuse that is unforeseen; inability to comply with safety regulations (Berman, 1999; Gibson, 1995; Kumar & Budin, 2006). Product recall is a threat to profitability and a nuisance for consumers and manufacturers; the recalls can affect safety and health, impact consumer ability to regain confidence in the companies and the products that they manufacture (Chow, 2010; Kowitt, 2016). The major elements contributing to the recalls include weak Hazard Analysis and Critical Control Points (HACCP); non-adherence to Standard Operating Procedures; deficiency in production monitoring (Wallace, 2010). Severe cases of product recalls can lead to law suits and criminal charges against the companies; for example, Infantino baby sling recalled over 1 million slings after 3 infants died from suffocation (Chow, 2010; New York Post, 2010, March 24). Similarly, the safety recall of toys with lead were regulated to the weight of 6000 parts per million of lead by weight or coatings in the 1978 federal ban and in the lead limits were lowered to 90 parts per million in Consumer Product Safety Improvement Act of 2008 (Yerak, 2009). Other recent recalls stemmed down to Galaxy Note 7 that abruptly caught fire and resulted to the American civil aviation regulators banning the device from all United States airlines.

The United States (US) dedicated agencies to address defective, hazardous, and unsafe products within the U.S. government recalls include U.S. Centers for Disease Control and Prevention (CDC) and Consumer Product Safety Commission (CPSC) (CPSC.gov, 2017). CDC and CPSC enforce federal laws and serve a purpose of protecting consumers against arbitrary risks and deaths; yet up-to-date there exits multiple products that cause harm and end up on the path of safety recall (CPSC.gov, 2017). Food recalls cause public health concerns and contribute to a substantial economic loss; the rigorous food production guidelines enforced within the U.S. took decades to be enacted by lawmakers but came after catastrophes that included death thus prompting agencies such as United States Department of Agriculture (USDA) and Food Safety and Inspection Services (FSIS), and Food and Drug Administration (FDA) to be established (Berman, 2016; Food & Drug Administration, 2016).

Product recalls in the U. S. upward trend are linked to the aggressive regulations set forth by the government agencies (see Appendix A) seeking out the recalls; the use of technology has made it simple for customers to be vocal about their distastefulness in the products and the supply chain has become complex for ease in control by manufacturers (Jones, 2016; O'Malley, 2016). Specifically, food recalls have seen doubling figures since 2002 (See Appendix B); these data are confirmed by Food Safety in a Globalised World which also outlines the cost of health for consuming contaminated food as \$15.6 billion per year (Canadian Underwriter, 2015; Clapp, 2016; Machado, 2002). The reasons of food recall include 47% from microbiological contamination and others as show in Appendix C and operational mistakes; for example, the impact of food recalls accounts for 48 million illness annually with global numbers of 25-30 food contaminations such as E. coli, salmonella, and other viruses weekly (Forsythe, 2011; Kowitt, 2016). Specifically, in 2013 there were 9 million sick Americans from food contamination of whom 50,000 were hospitalized and 2,377 were cases of fatalities (Canada Underwriter, 2015, July 15).

The threat of recalls is also evidenced in the global supply chain that has become enormous; take the example of tainted milk that was exported from China with melamine; at the time of detection the milk had already been transported to 47 countries (Kowitt, 2016). As the supply chain continuously moves into the global platform, the strict quality standards in the U.S. have contributed to more cases of recall because of the regulatory scrutiny that raises the possibility of recalls thus creating an economic impact on companies (Larkin, 2002; Lewis, 2015). The cost for recalls could be higher for larger brands because of the ease of access to recall information on social media platforms with nine-in-ten Americans being online and 77% owning smartphones as confirmed by Pew Research Center with data with survey conducted from 2000 to 2016 (See Appendix D) (Smith, 2017). For example, the direct cost to the food company at \$10 million on lost sales and brand image reputation as reported by Food Marketing Institute and the Grocery Manufacturers Association (Heneghan, 2016; Kowitt, 2016; Marler & Clark, 2017). Another research by Ohio State University's Robert Scharff confirmed an estimate of \$55.5 billion a year including mortality, productivity losses, and medical expenses (Kowitt, 2016). The direct cost incurred by companies undergoing recall include notification costs to consumer, supply chain, regulatory bodies, retrieving products, labor costs, storage, destruction, and unsalable products among others (Berman, 1999; Davidson & Worrell, 1992; Pimentel. D. & Pimentel, M. H., 2007). Additionally, Grocery Manufacturers Association confirmed that lost sales from by international companies in 2011 that were correlated to recall could range from \$30 million and \$99 million as reported by 18% and 5% shared that the financial impact to

the company could be over \$100 with steeper price tags on the long-term reputation of the company (Kowitt, 2016).

The increasing cost of product recalls are estimated at \$55.5 billion a year for mortality, productivity losses, and medical expenses; for example, \$10 million on lost sales and brand image can be the direct cost for a food company (Heneghan, 2016; Kowitt, 2016; Marler & Clark, 2017). The ethics within industries; what motivates industries from not being forthcoming and delaying the recall of products that cause harm to others and need to be recalled? Research focused on interviewing and surveying millennial age group of 18 – 34 to elicit their perspectives and understanding the ethics behind product safety recalls with an emphasis on the CPSC recall of 1.9 million Galaxy Note 7 and 2.8 million top-load washers for a total of 4.7 million recalled products in 7 weeks a period from September 15 to November 04, 2016. Gauging and understanding the millennial perspectives on ethics and product safety recalls is essential because the millennials are projected by Fortune to do dominate the workforce by 2020 (Hyder, 2016).

2. Literature Analysis

2.1 Consumable Products Safety Recalls

General Mills Flour Recall. General Mills, an industry leader in providing flour for over 150 years voluntarily recalled flour with an announcement on May 31, 2016 and took initiative to educate consumers on proper protocols to handle flour (Addady, 2016; Fox, 2016). Safety recall on 10 million pounds of tainted General Mills flour that included brand lines Wondra, Gold Medal, Betty Crocker cake mixes, and Signature Kitchens were traced back to the 46 cases of individuals developing E. coli with production dates ranging from November 4, 2015 to February 10, 2016 (Goldschmidt, 2016; Hughlett, 2016, May 31). In an updated report by CDC, 63 people were affected with 17 people hospitalized thus prompting the recall with General Mills educating consumers to take precaution of not consuming raw flour or batter, not allowing children to play with raw flour, bake all items, retailers and restaurants to steer away from raw flour or dough (Beach, 2016; CDC, 2016, September 29). Fox News reported that the General Mills flour recall as confirmed by CDC was linked to the contamination of Shiga toxin-producing E. coli (STEC O121) thus causing individuals to be hospitalized and warned that the flour was not to be consumed as people were hospitalized and a reported case of kidney failure (Fox News, 2016, July 05; John, 2016). The voluntary General Mills flour recall was traced to the wheat grown outdoors and sourced to be milled in the Kansas City, Missouri plant; the possibility of bacteria in the

wheat calls for boiling, frying, or baking the flour to kill the bacteria; after the recall, General Mills educated consumers to follow protocol of washing utensils, surfaces, hands after contact with flour or raw dough products and refrain from consuming raw batter or dough (Painter, 2016; Weise, 2016).

Hillandale Farm Egg Recall. Nationwide recall of Hillandale eggs in 2010 were sold under the brand names Sunny Meadow, Sunny Farms, and Hillandale Farms traced back to the Iowa plant with 52 million laying hens; the eggs contained Salmonella and infected 1900 people with 1 death (Gibson, 2016; Wright, 2015). The 170.4 million eggs recalled for Salmonella was an outrage to the public in 2010 because over 90% of the eggs had a USDA stamp for quality and were certified by inspectors; the inspected eggs which to consumers is an indication for “fit for consumption” had Salmonella (CNN, 2010, August 20; Robinson, 2013).

Menu Foods Pet Food Supplier Recall. The United States pet food industry sales total \$24.01 billion and projected to reach a revenue of \$21575.8 million per store by 2021 with growth sale of 4.2% per pet store per Statista (see Appendix E) (Statista.com, 2017). In March 16, 2007, a North America leading private label pet food manufacturer that also produces for 95 brands that include labels such as Iams and private labels sold my Walmart among others announced a recall (Byron, 2007, April 18; New York Times, 2007, March 25). Menu Foods recalled 60 million dog and cat food after 14 pets died; this was followed by 700 hundred tons of baby milk powder recall in 2008 when over 50 pets developed kidney difficulties and one pet died (Time Magazine, July 02). The main cause was traced back to manufacturers adding melamine; a nitrogen-containing molecule used as a binding agent in plates and cooking utensils or as fertilize in other regions in the world; (Food & Drug Administration, 2009, October 07). Melamine was found in the urine, kidneys, and the food eaten by the cats and dogs that died; melamine was added to food for protein boost and the two men whom China sentenced to death for the role in their unethical conduct (Berman, 2016; Sivaraman, 2007; Time Magazine, 2009, July 02).

Beef Safety Recall. The recall of 25 million pounds of Hudson Foods beef in 1997 was traced back to Nebraska and sparked the tightening of safety standards in the packing plants; the contaminated beef ending up at Burge King contributed to the termination of Hudson Food contract with Burger King and sale of Hudson Foods due to financial strain (Berman, 2016). The address the recall the political team took effort to tackle the problem at hand; the Clinton Administration set a budget of \$43.2 million to improve food safety in the 1998 budget (CNN, 1997, August 21; Janofsky, 1997). Similar incidents of occurred in 2002; the ConAgra beef affected 19 people with others reporting 45 people in 23 states reporting illness that consumed ground beef with; the incidents

occurred in South Dakota, Washington, Wyoming, California, Colorado, and Michigan (Becker, 2002; Graham, 2002; Winter, 2002). The recall affected retailers and the E. coli outbreak was traced to the ConAgra's meat plant in Greeley, Colorado; the Greeley grinding plant confirmed cases of E. coli with 354, 200 pounds of meat recall on June 30, 1997 (Becker, 2002; Holland, 2002). Similar incidents of ground beef contamination with E. coli bacteria strain O 157:H7 occurred in 2007 and was traced to Topps Meat that was in business for 67 years (CNN, 2007, September 30). The Topps Meat recall affected 30 people who consumed frozen ground beef patties and the incident spread to over 8 states with a recall of 11.7 million pounds of ground beef (Roos, 2002). Other recalls included, Westland/ Hallmark Beef recalling of 143 million pounds of beef as told by the USDA in 2008; Humane Society provided undercover video on the processing plants that confirmed the processing of meat without removing sick cows (Berman, 2016). The recall traced to the Macbre California slaughterhouse for the madcow disease and selling to schools; the massive recall contributed to 2 years scrapping of processed meat and \$500 million settlement (Consumerist, 2008, February 17; Martin, 2008).

2.2 Baby Related Recalls

Baby Toy Recall. RC2 Corp a toy manufacturing company that sells Thomas the Tank Engine voluntarily announced in June of 2005 warning parents against the danger of toxins in the lead based surface paint that caused harm if swallowed toxins (Hartman, 2007). Toy maker RC2 Corp. recalled 269,000 of the Thomas & Friends wooden railway toys and another recall in June 2007 for over 1.5 million units that had led on the surface paint (Chow, 2010; Hartman, 2007; Kavilanz, 2007). The recalled RC2 toys were manufactured in China but sold nationwide between March 2003 to September 2007 in the price range of \$10 to \$40; the recall was due to the health problems caused from the ingestion of the lead by young children (Chow, 2010; Hartman, 2007; Kavilanz, 2007). RC2 Corp. was fined \$1.3 million to solve the allegations that were brought against them by the CPSC for the importation and sale of toy trains that contained lead (Greenspan, 2010); later publications that included the Chicago Tribune and Reuters.com reported that the fines were set for \$1.24 million in civil penalty (Reuters. Com, 2009, December 29; Yerak, 2009). Mattel Inc was apologetic as they recalled and addressed the recall problem that included; 800,000 toy recall; 675,000 Barbie accessories sold in the marked in October 2006 to August 2007; 8,900 Big World 6-in-1 Bongo Band toys; and 90,000 Matell's Geo Trax locomotive (D'innocenzio, 2007). Mattel's other affected products were preschool toys such as Big Bird, Elmo, and Dora all made by Mattel's Fisher-price in the amount of 1.5 million units were recalled due to the lead

paint with 967,000 units sold between May and August 2007 in the United States (D'innocenzio, 2007).

Impact to Baby Recalls. The recall of 1 million cribs in 2007 occurred after 2 children got trapped and suffocated; this was followed by the 600,000 cribs recall in September 2008; and 400,000 cribs recalled in July 2, 2009 after the suffocation of an 8th month old baby (Time Magazine, 2009, July 02). The recall was traced back to Chinese-made cribs that had detachable sides where children would become trapped and suffocate when the sides would break and create gaps between the mattress and the crib (Time Magazine, 2009, July 02). The company shared that the change of hardware wasn't successful thus contributing to the recall (Time Magazine, 2009, July 02). Fifty million Roman-style and roll-up blinds were affected and recalled in December 2009 because of the loose cords from the window covering that contributed to toddlers dying from strangulation (Chow, 2010). Over 1 million Infantino's Bellissimo and Wendy models were recalled on March 24, 2010 for being linked to 3 infant deaths; the product design of the baby sling contributed to breathing hazards among babies (particularly those under 4 months) (Chow, 2010; Webley, 2010). The material used and the "C" curve have a possibility of pushing the baby's head in a forward position thus making breathing difficult for the baby (Chow, 2010). Graco's 1.5 million strollers that were contributing to laceration and finger amputation were recalled in in January 2010 (Chow, 2010). The company underwent another recall that was issued by the CPSC for the 1.2 million high chair on their Harmony model on March 2010; a recall that was in direct link to the 24 injuries from the unsafe chair design (Chow, 2010). Similarity, the 2007 CPSC recall on the Hasbro Inc. model of the easy-bake oven was correlated to a 5 year old girls partial amputation of her severely burnt finger, 77 reported burns, and 249 reported incidents of children's fingers or hands getting stuck in the easy-bake ovens (Chow, 2010; D'innocenzio, 2007).

2.3 Technology Related Recalls

Dell Inc. Recall. The August 2006 Dell notebook computer recalls affected 4.1 million units equipped with lithium ion batteries; experts reported that the problem was not linked to the technology but stemmed from batteries that overheated and occasionally caught fire (Goo & Shin, 2006; Graham, 2016, October 10; Hughlett, 2006, August 15). The lack of a mechanism to vent off the heat and cut itself off when the lithium batteries reached the high temperatures was the main contributor to the fires; other companies such as Apple and Hewlett-Packard co also faced similar cases (Goo & Shin, 2006). The incidents of the lithium ion batteries catching fire included Feb 07, 2006 on cargo jet and UPS plane carrying the batteries but with a safe landing Philadelphia, ignition of a Dell

laptop during conference in Japan (Goo & Shin, 2006). Japan's Sony Corp supplied the defective lithium-ion batteries to Dell and were in notebooks sold in the range of April 1 to July 18, 2004 in specific notebooks and models that included Dells' Inspiron, XPS, Latitude, Round Rock (Goo & Shin, 2006; Associated Press, 2006). The complaints included 23 million hits on the website, over 100,000 phone calls, and 77,000 orders; the recall included 284,000 batteries in 2001 (Goo & Shin, 2006; Associated Press, 2006). Analysts from UBS analyst estimated the cost to address the Dell battery recall to be around \$400 million and increase the marketing, shipping, and production expenses to over \$200 million (New York Times, 2006, August 15). In comparison to Hewlett-Packard shares that were at \$33.46 the Dell shares lowered to \$20.97 during the recall (New York Times, 2006, August 15).

Kyocera cellphone Recall. The largest consumer electronics recall dates to October 2004 where over 1 million batteries used in the Kyocera cellphones that were sold by MetroPCS, US Cellular, ALLTELL, Virgin Mobile, Cricket Communications, Verizon Wireless, telemarketing retailers, and various websites; the recalls were voluntarily as the company cooperated with the CPSC (Charny, 2004; CPSC, 2004; New York Times, 2006). The batteries made in China and assembled in Mexico were reported as hazardous with cases of short-circuits, overheating, and susceptible to burn; some of the recalled batteries included K400, 3200, and Kyocera Slider cellphones were reported to be from counterfeit suppliers (Davies, 2004; National Electrical Contractors Association(NECA), 2004). The reported cases included 14 battery failures resulting to smoke, 2 minor burn injuries, and minor property damages (Krazit, 2004; Vries, 2004); history is bound to repeat itself this time with Samsung Electronics in 2016.

Samsung Phone and Washing Machine Recall. Samsung is a well-known South Korean industry with \$194 billion in market value, sales of \$179, and market share of 22.8% in the 2016 second quarter as confirmed by IDC research (O'Brien, 2016; Riley & Kwon, 2016). Samsung's success of 14.1% (5.25 trillion dollars) as recorded in January to March of 2016 was linked to the Galaxy S7 and the Galaxy S7 Edge and direct competitor with Apple iPhone with \$10.5 billion on March 26, 2016 (France-Press, 2016; O'Brien, 2016). CNN Money reported the Samsung projected hard loss after premium smart device Galaxy Note 7 retails for \$850 in the United States contributed to safety concerns (Mullen & Thompson, 2016; Riley & Kwon, 2016).

The reports of Galaxy Note 7 abruptly catching fire resulted to the American civil aviation regulators banning the device from all United States airlines (Olson, 2016; Wright, 2016). An incident that brought alarm to the public was the evacuation of Southwest Airlines flight in the Louisville United States when suddenly a replacement Galaxy Note 7 phone began to smoke; this led to several airlines declining to permit

passengers (Dean, 2016; Smith & Heinz, 2016). The recall specifics included design failure and manufacture defect (Dolcourt, 2017); CNN Money reported the recalls of Samsung phones that amounted to 2.5 million for the Galaxy Note 7 phones; the devices were reported to catch fire and explode (O'Brien, 2016; Riley & Kwon, 2016).

The impact to Samsung's market share (see Appendix F) included a downward trend after the Note 7 was rolled out to the market in August; efforts to rectify the problem at hand took place and included a change of suppliers and software updates (Pash, 2016; Riley & Kwon, 2016). Samsung experienced a 30% loss in profits the third quarter from the Galaxy Note 7 recall; in comparison to other years, the operating profit of 100 billion was the lowest Samsung had seen since the 2008 fourth quarter (Lee, 2016; Olson, 2016). The United Kingdom daily mail reported that Samsung expenses were projected to rack up to \$2.2 billion when all the 2.5 million Note 7's are refunded for the average price of \$850 in the United States (Dean, 2016). On another publication, the Associated Press reported a loss of 5.3 billion for the recall (Jin-man, 2016); while the Nomura analysts estimated a loss of profit for \$5.1 billion and 9.5 billion in sales (Associated Press, 2006; Riley & Kwon, 2016).

To resolve the safety concern, Samsung issued a recall and replacement of the affected phones; the replacement phone still had battery issues thus the exchange program was rolled out and permanent discontinuing of the Note 7 (Moore, 2016; Riley & Kwon, 2016). The United Kingdom market was projected to relaunch the Note 7 and sale for £740 pounds (\$907) in the month of October 2016 before the risk of overheating and even resulting to catching fire this action was halted (Dean, 2016). In China 190, 984 units were recalled; in the United States, phone carriers that included Team Mobile, AT&T, Verizon all halted the sale of the Note 7 devices (Dean, 2017). CNN money reported that Samsung owned the problem and was apologetic for those affected with public message to consumers to cease usage of the phones; this action cost a 8% market drop in shares in the exchange market in Seoul and contributed to \$17 billion loss in market share value (Dean, 2016; Mullen & Thompson, 2016; Riley & Kwon, 2016).

Second half of 2016 wasn't a good year for Samsung with the United States Consumer Protection Safety Commission (CPSC) issued recall in September and October Galaxy Note 7 on the 1.9 million phones catching fire (Wollerton, 2016). Regaining consumer loyalty has been a struggle for Samsung after the recall; but Samsung didn't hesitate they took ownership of the problem by announcing that they are committed to resolve the problem and work closely with all regulatory authorities (Cheng, 2016; Dean, 2016). The batter fire incident was addressed with 10 million users in the United States (Olson, 2016); the Samsung comeback in 2017 was the S8 with voice assistant, advancement in camera, and larger screen display (CBS News, 2017). The

phone market is seeing a growth in profits with emphasis to ensure a long-term growth trend (Reuters, 2016, October 06).

As the phone recall was still taking place; Samsung took another hit a month later and cooperation with the CPSC voluntarily recalled about 3 million top-loading washing machines (Hogan & Petite, 2016; Muschick, 2016; Reuters, 2016, November 04). The top-load machines sold in the range of March 2011 and November 2016 in United States and Canada experienced excessive vibrations during the wash spin cycle and contributed to property damage, and the machine parts could fail or separate (Bailey, 2016; Janeway, 2016; McGoogan, 2016). The U.S. News called the washing machine recall “another black eye” because recall came a month later from the Galaxy Note 7 recall; the consumers who experienced the recall reported bodily injury for the explosion (Bailey, 2016; Reuters, 2016, October 06; Wagschal, Benitez, & Ferguson, 2016). The CPSC documented 733 complaints of the Samsung washing machines detaching and experiencing extreme vibration, and thus the voluntary recall consisted of 34 models (Hogan & Petite, 2016; Muschick, 2016).

Owning the problem at hand, Samsung set strategic measures by reaching out to over 2 million consumers with encouragement to contact Samsung, decreased caller wait time to 20 seconds, and completion of repairs in 7 business days (Rossen & Foster, 2017). The voluntary recall followed a successful repair as administered by Samsung to offer free repairs, smaller payment toward non-Samsung washer, and rebate for new Samsung washer with loyalty incentive of \$150 (Molina, 2016; Sachs, 2017). Lawsuits did evolve where Samsung was accused of delayed and denied repairs (Maas, 2017); with several months passing before the onset of repairs; the consumers who selected the free repairs received them (Hood, 2017; Kieler, 2017; Sachs, 2017). The repairs concluded with some still experienced minor concerns of nondrying clothes after the wash cycle completed; the positive element given after the recalled repairs was the 1 year manufacturer extended warranty on the products regardless of the age of the washer (Zekman, 2017). The CPSC on the recalled products included 1.9 million Galaxy Note 7 and 2.8 million top-load washers for a total of 4.7 million recalled products in seven weeks a period from September 15 to November 04 (see Appendix G) with a downward trend in stock (see Appendix H) (Wollerton, 2016). Samsung today is seeing an increase in their stock market

3. Method

3.1 Purpose and Procedures

The objective of this research as to acquire and understand millennials perspective on ethics, product safety recalls, and the impact the recall can cause the financial health and long-term sustainability of the impacted companies. The increasing cost of product recalls are estimated at \$55.5 billion a year for mortality, productivity losses, and medical expenses; for example, \$10 million on lost sales and brand image can be the direct cost for a food company (Heneghan, 2016; Kowitt, 2016; Marler & Clark, 2017). Research focused on interviewing and surveying millennial age group of 18 – 34 as they are projected by Fortune to do dominate the workforce by 2020 (Hyder, 2016). The research questions that were used to elicit millennials perspectives are listed in Appendix I; these questions were customized from the existing literature on existing peer review research.

The decision to use qualitative case study method with the use of face-to-face interview questions and survey quantitative and mixed method was to understand the information conveyed by the millennials and not systematically understand the numerical form made possible by the quantifiable method (Baxter & Jack, 2008; Burns, 1997; Patton, 2005). The following overarching questions guided the research: The ethics within industries; what motivates industries from not being forthcoming and delaying the recall of products that cause harm to others and need to be recalled? The sample size was limited to 183 total participants that consisted of 79 females and 104 male millennials in the age group of 18 – 34. In attempt to increase the sample size, the researcher sought out to interview and survey available participants from 2 geographical locations in Northeastern New Jersey and Philadelphia, Pennsylvania. The sample size from Northeastern New Jersey was limited to 111 participants of whom 43 consented to face-to-face interviews and 68 agreed to complete the surveys; the sample size from Philadelphia Pennsylvania consisted of 72 millennials of whom 29 consented to face-to-face interviews and 43 completed the survey questions. The raw data collected from the 183 millennial participants was coded as REQ1 to REQ183, cleaned, and analyzed using the qualitative analysis software NVivo 11.

4. Research Findings

Interview question 1: Conduct that includes baby deaths from faulty cribs, baby strangulation from hanging window blinds cords, injuries from high chairs among others (a) Are these actions ethical? (b) What are your views on the companies involved

in selling products that cause harm to humans? Ninety nine percent of millennial participants confirmed that the continuance in sale of products that cause harm to children aren't ethical while 1% of the participant shared that it isn't their fault as the consumers didn't properly know how to use their products. Participant REQ05 shared *"the actions aren't ethical and the companies involved in selling hazardous products have to pay back because the company has to think about actions of the baby completely."* Participant REQ18 shared *"to send a faulty product into the market is unethical, they should report and destroy the cribs; I believe companies who sell faulty products should be charged 3rd degree murderer, if they had no idea they should be fined for the deaths and pay settlements to the families; also, there should be more quality control."* Participant REQ27 shared *"this actions are not ethical but if you don't mean to harm then it was a mistake, I believe that the company does not mean to harm consumer but if they know that it was bad."* Participant REQ49 shared *"it is unethical to sell products that cause harm, if I were the CEO I would recall the dangerous product for the safety of humanity or though it would deliver a huge blow to the company reputation, it is the right thing to do."* Participant REQ67 shared *"no baby deaths are not ethical because that's manslaughter; if they were ignorant of the harm they should recall the product and apologize, if they knew then its involuntary manslaughter."* Participant REQ81 shared *"these actions are unethical and I believe that the companies should either cease to exist or pay Hefty fines to the families,"* and participant REQ96 shared *"it isn't their fault, their client doesn't know how to use their product."* Participant REQ99 shared *"these actions are unethical as it's putting harmless babies in danger, these products should be tested numerous times unit it is absolutely certain that they are 100% baby proof; companies that sell products that have a chance of putting other people in danger are completely wrong."* Participant REQ124 shared *"the actions aren't ethical because these products are dangerous to the society; the companies involved in selling these products are for me clearly unethical because they continue to buy these products even though they are making money out of defective products which are really unethical."*

Interview question 2: Hoverboard explosions contributed to 501,000 product recalls; Samsung phone explosions contributed over 1 million recalls. What motivates CEO and respective employees in a company to wait on announcing their product recall even when they know that their products are or will cause harm to others? All the millennial participants agreed that the financial health of the company was the motivating factor for not recalling or delaying the announcement of recalls; the company objects include seeking out as many sales as possible, steering away from admitting fault to products causing harm, and not forthcoming with their findings until consumers raise concerns. Participant REQ12 shared *"the motivation to sale is profits, because if the company stops the sale of the products the company can't profit, the company doesn't have to stop because the test*

for the product was good.” Participant REQ35 shared “I believe everyone should report as soon as problem is known, some CEO wait because they don’t want to waste and they want money at the expense of others, and participant REQ62 shared “what motivates them is the fact that have spent so much money making these products so they want to make sure if they messed up on all or just one.” Participant REQ78 shared “the desire to get rid of faulty inventory motivates companies to delay recalls,” and participant REQ81 shared “they want to retain as many sales as possible, they could also be holding onto slight chance that the product will be fine, they may also want to avoid the stock plummeting or company losing their reputation.” Participant REQ103 shared “what motivates the CEO and the company to wait on announcing recall is profits, they will rather let money come in than save lives.” Participant REQ168 shared “so they don’t lose too many clients and the company keeps a good image it doesn’t impact branding.” Participant REQ137 shared “companies do not want to admit they messed up on producing a product safely before the consumers find out, they’d rather see if the situation becomes a problem rather than bringing them back before it does.” Participant REQ171 shared “the motivation is money, making more profit as possible is what pushes a company to wait on announcing their product recall to buy some time for customers to buy their product.”

Interview question 3: There exists pressure to meet projected sales and be successful; as a production manager if instructed to continue production on a product that didn’t pass inspection by your CEO or superior what would you do? The results document that 80% of the millennial participants would decline to continue production regardless of their job losses and they would report to news sources and government agencies if production continued without rectification of the concern at hand; the results confirmed that continued production contributes to increased chances of recalled products and direct damage to company financials. On the contrary, 20% of the participant shared that they will continue production as ordered by the CEO or superior as they are obligated to follow orders to keep their jobs, but would report the incident to media sources because consumers shouldn’t be fooled.

Participant REQ9 shared *“I will do what the CEO tells me, but I will report to the media because tomorrow will be fooled,”* and Participant REQ26 shared *“I will continue making the product so I could keep my job, but as soon as I get home I would call news stations.”* Participant REQ58 shared *“I will report him because in the end it will hurt the company,”* and participant REQ74 shared *“I wouldn’t do it, rules are rules.”* Participant REQ93 shared *“even though I will lose my job, I will slow production to ensure the product process regulatory measures by not, by not making good quality products companies are increasing their chances of having to recall their products damaging a company financials.”* Participant REQ106 shared *“I would honestly assume that everything is fine and continue the production, I would maybe check in myself quickly, but this is above my pay grade.”* Participant REQ140

shared *"I would make sure the production is not produced, and if the CEO still pushes, I would report to the government agency."* Participant REQ177 shared *"I would refuse to be a part of the process and if the CEO and the company still went along with the project I would report it to someone who would shut the project down."* Participant REQ181 shared *"I will personally go and see the CEO or supervisor to describe the situation for him to react and find a solution."*

Interview question 4: U.S. Consumer Product Safety Commission (CPSC) has set guidelines and protects consumers against unreasonable risk, injury or death from unsafe products; what else should the CPSC or government appointed body do to ensure that companies are adhering to set rules? All participants agreed that stringent regulations would minimize product recalls, the shared strategies included setting policies to be adhered to; random dispatching of CPSC inspectors to factories to conduct product testing; hiring outside entities to double check products during manufacturing; and holding CEO accountable including penalty and jail terms. The results confirmed that the extra precautions in the production phase with use of stringent checklists would ensure that products are safer to sell and discontinue production or deny access to sell products that don't pass inspection. Participant REQ13 shared *"the government should set an amount of what should be examined, if they do accidents would be on the decrease,"* and participant REQ29 shared *"in a perfect world the CPSC would have an employee in each company to make sure the product is safe to sell."* Participant REQ43 shared *"the government appointed agencies should visit the companies more often to test the product themselves,"* and participant REQ48 shared *"send people to check if they respect the rules."* Participant REQ54 shared *"the CPSC should investigate major new product on the market seem great but have the potential to be dangers,"* and participant REQ67 shared *"government agencies should hold CEO's accountable by enforcing jail time and receiving more funding."* Participant REQ127 shared *"they should send inspectors to inspect products at random times so it's safer,"* and participant REQ146 shared *"first of all, they should test the products to seem suspicious and go to factories to make sure that the guidelines are respected."* Participant REQ183 shared *"they should hire people to go to the factories with checklist of tests the product must pass, if the product passes they have the right to sell, and if they don't they must be reported and denied access to continue."*

Interview question 5: Take into consideration your own individual moral values; as the CEO of a company; what strategies would you introduce to minimize unethical conduct in your company to minimize recalls? Results documented several strategies that included setting new guidelines of product examination; hiring product testers with autonomy to stop production and ensure quality control; integrating use of intricate interviews to select the best of the best candidates; inspection and auditing with use of CPSC regulations; regular meeting to introduce and reinforce policies; and random

audits to ensure component and steps of production are adhered to. Participant REQ06 shared *"I'll decide to recall and I'll make a new rule of examination of products or machine that make product,"* and participant REQ23 *"I would employ product testers and quality control who would have full autonomy to stop production if something, I would also encourage employees to speak up."* Participant REQ38 *"I would do very intricate interview so I can pick the best, I would regulate check to make sure that my products are safe,"* and participant REQ40 *"I would hire people and inspectors to check what my employees are doing and I would create clear and strict rules so I could minimize recalls and unethical conduct."* Participant REQ71 *"I would slow down production to ensure my company is producing goods that meet standards set by CPSC,"* and participant REQ83 shared *"I would recall products, I would not facilitate a hostile work environment, and I would always inspect products."* Participant REQ96 shared *"if there was something wrong I will have them destroyed and rebuild them so it's safe,"* and participant REQ174 shared *"I will test my product several times before starting to sell it and make sure that every component and steps of production are being respected correctly."* Participant REQ181 shared *"I would hold meetings and make it clear to my employees as to what the consequences will be if they were unethical."*

5. Limitations

The research had several limitations that included use of millennials in the age range of 18 – 34 as the sample participants; the use of millennials in the research could impact generalization of the research results to other age groups thus thoughtfulness is required. The sample size was limited to 183 millennial participants of whom 79 were females and 104 males; in attempt to increase the sample size researcher sought out participants from 2 geographical locations in Northeastern New Jersey and Philadelphia, Pennsylvania. The Northeastern New Jersey millennial participants were limited to 111 participants of whom 43 consented to face-to-face interviews and 68 agreed to complete the surveys; the sample size from Philadelphia Pennsylvania consisted of 72 millennials of whom 29 consented to face-to-face interviews and 43 completed the survey questions. The other limitation was the time allowed in the data collection; the time was limited to when the millennials were available and some were only willing to complete the survey question instead of the face-to-face interviews. In summation, the limitations in this research consisted of millennial participants from 2 geographical locations, the gender availability, and time available to collect data of which can contribute to biases in research. The limitations confirm that ample research is required to understand a larger population of millennials and other age groups on

the ethics, product safety recalls, and financial health and sustainability of an organization undergoing a recall.

6. Conclusion / Discussion

The increasing cost of product recalls are estimated at \$55.5 billion a year for mortality, productivity losses, and medical expenses; for example, \$10 million on lost sales and brand image can be a direct cost for a food company (Heneghan, 2016; Kowitt, 2016; Marler & Clark, 2017); the objective of this research was to acquire and understand millennials perspective on ethics, product safety recalls, and the impact the recall can cause the financial health and long-term sustainability of the impacted companies. The questions in Appendix I were used to answer the following overarching question: The ethics within industries; what motivates industries from not being forthcoming and delaying the recall of products that cause harm to others and need to be recalled? The research results from 99% of the sample participant confirmed that companies' actions are unethical for their involvement in safety recalls related to consumable products, baby products, and technology related recalls; participants shared that the products should undergo numerous tests to ensure 100% functionality before sale. Research results also detailed that 1% of the sample participants shared that it isn't the company's fault for product recalls and that consumers were to also blame for their lack of knowledge on how to properly use the products that are later recalled.

Recalls in the United States have been a concern for decades with 5 to 6 recalls announced daily by companies and regulators; the recognizable impact on suppliers and manufacturers within the recent years and the complexity in the global supply chain has contributed to the increase in recalls (Hsieh, 2012; Kumar & Budin, 2006; O'Malley, 2016). The research results confirmed that the participants were all in agreement that when it came to recalls companies aren't forthcoming as they are concerned with the impact on the financial health of the company. Taking the example of food recalls, incident have been traced back to operational mistakes within the industries that includes blatantly ignoring policies and procedures, and not adhering to Global Food Safety Initiative (GFSI) of that would ensure implementation safety standards (Hsieh, 2012; Ramp, 1977). In product recalls like toys, evidence of direct harm is the main objective of initiating recalls; to ensure minimal recall that erupt from publicized incidents like Thomas & Friends wooden railway toy recall contributed to the toughening of federal regulations against manufactures toy production to ensure that lead-in-paint rules are adhered to and reinforcing the CPSC (Yerak, 2009).

Previous research shows that simple mistakes such as incorrect labeling on packaged products can contribute to complexity within the industry and the globalized supply chain thus resulting to millions of losses of the product sales and more importantly company reputation (Handfield, Giunipero, & Patterson, 2015; Maruchek, Greis, Mena & Cai, 2011). In the taking role of a production manager where products haven't passed inspection; 80% of the sample participant shared that they would decline to continue production regardless of their job losses and 20% of the participant shared that they will continue production as ordered by the CEO or superior because of their obligation to the company. Taking individual morals into consideration and assuming the role of an employee within a company that later recalls products; 100% of sample participants agreed they would report the incidents that impact product quality to media sources and government agencies to protect the consumers.

Companies are surprised when their products cause harm thus warranting a recall; the integration of ample tests that should be conducted before the products are made available for sale to consumers and re-tweaking to ensure safety contributes to loyal consumers and financially healthy company (O'Malley, 2016). All participants agreed holding the industries responsible for their actions and setting stringent government regulations along with the aligning of strategies that adhere to CPSC policies would minimize product recalls and thus sustain the respective companies. Additionally, instead of the dealing with recalls more emphasis should be directed in preventing recalls from occurring by use of technology to ensure access points are monitored to ensure authorized people entrance, minimize tampering within production by using video surveillance, and using recorded videos for training purposes to prevent incident reoccurrences and adherence to set standards (Hsieh, 2012; Michalos, 2017). Another route to tackle the possibility of recalls is to select a task force with expertise in the field to provide reviews of the company product designs; checks on quality; checks on product engineering; confirms reliability; completes testing; safety review process with emphasis of asking what could possibly go wrong elements; and even using consumers to partake in product testing (Damary & Hurst, 1982; Hubbard, 2012; Rubin & Chisnell, 2008).

After a recall, SWOT analysis results confirmed that providing replacement items to consumers for recalled products contributes to negative experiences than checking for the issues on the affected unit and repairing the existing product (Hill & Westbrook, 1997). For example, in addressing food contamination incidents, the companies need to be aware of critical elements that impact the business to include warehouse cost, time, and expense; transport and investigating costs; consumer reimbursements; business interruptions; product disposal costs (Souiden, & Pons, 2010;

Williams, S. & Williams, N., 2010). The companies that don't integrate proactive recall strategies suffer a great loss in sales and the consumers don't trust the respective company products or associated brand lines; thus, it's essential to strategically set goals by conducting an analysis of the recalls and the direct and indirect costs incurred (Kumar & Budin, 2006; Ni, Flynn & Jacobs, 2015). The recalls can impact consumer loyalty; consumers report conducted by Harris Interactive confirmed that after products are recalled; 21% of consumers shared they wouldn't purchase any brands associated, 15% wouldn't purchase the recalled product again, and 55% shared they would temporarily use different brands while the recall is taking place (Road Scholar Transport, 2016).

What can help the companies to recover from recalls is the integration of sound risk management procedures and insurance of their industry to lessen financial burden; the offering of product liability risk and products covering recalls can help mitigate losses that are incurred so that companies can continue conducting business (Canadian Underwriter (2015, July 15; Jarrell & Peltzman, 1985; Van Heerde, Helsen, & Dekimpe, 2007). Research confirmed that the companies that embody social responsibility as their motto minimally received negative backlash from its consumers as there existed a positive rapport towards the respective company (Jolly & Mowen, 1985). A good example is the 1982 Tylenol-tampering where the CEO acknowledged the problem while sharing that Johnson & Johnson wasn't anything without its consumers and recalled all 31 million bottles and spending over \$100 million to address the recall (Rehak, & International Herald Tribune, 2002). In contrast Blue Bell ice cream was linked to 3 deaths and 7 serious illness due to the listeria bacteria that was identified in the Texas plant in 2010; Oklahoma plant in 2013 with 16 positive tests between March 2013 and January 2015 continued to package and distribute their ice cream while faced with the listeria problem (Robinson-Jacobs, 2015; WBAP News Talk, 2016, March, 16). The 108-year-old family owned creamery with no recall in its history attempted to deal with the problem quietly without advising consumers but failed since deaths were linked to the listeria (NBC News, 2015, March 14; Food & Drug Administration (2015, June 10; (Larimer, 2015). The Center for Disease Control and Prevention confirmed the 3 deaths to the listeria infections forcing the first recall for Blue Bell ice cream on March 13, 2015; products were pulled from shelves from 23 states and led to \$180 million loss in sales (Ellis & Yan, 2015; Larimer, 2015). The recovery of the brand was linked to apologetic CEO and staff with a promise to ensure that all products are safe before shelving the retail stores; training of employees; intensive cleaning of plants; other help included the \$125 million bailout from a Fort Worth fan and their loyal consumers that

gave the brand a benefit of the doubt for the uncertain circumstances that Blue Bell faced (Larimer, 2015; Halkias, 2015).

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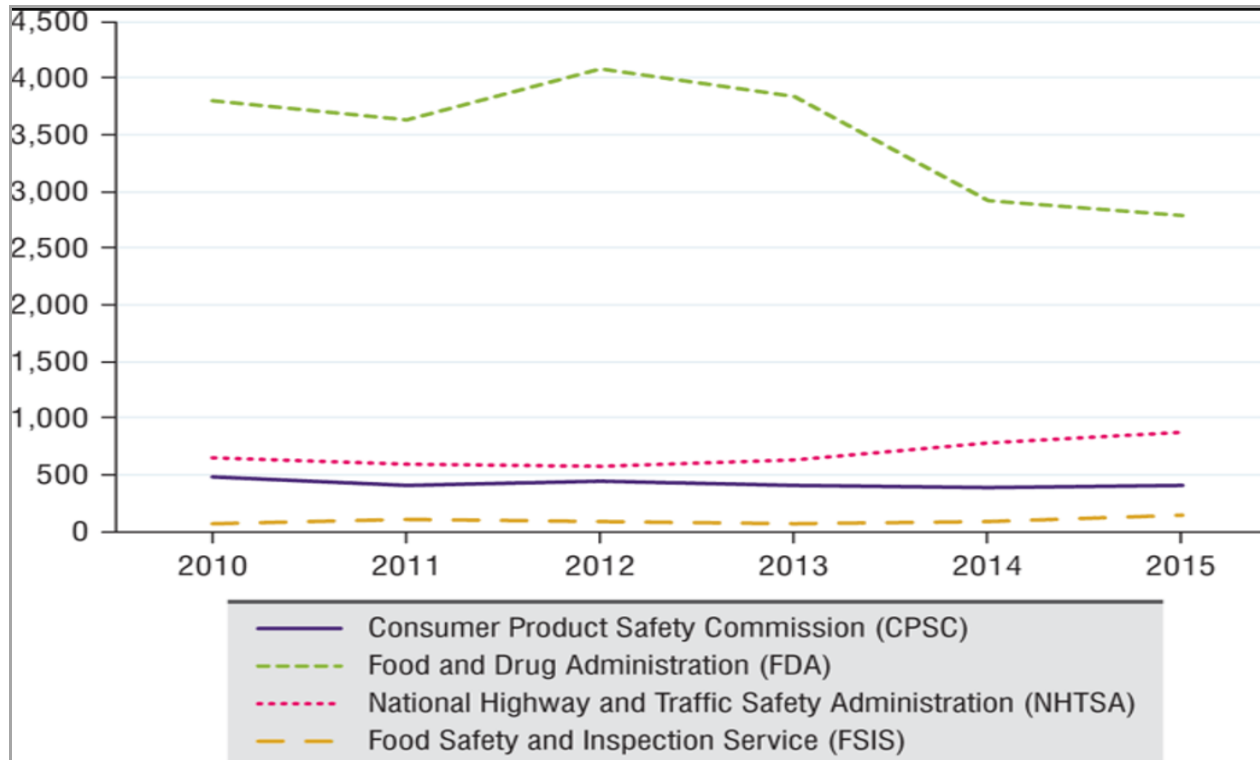
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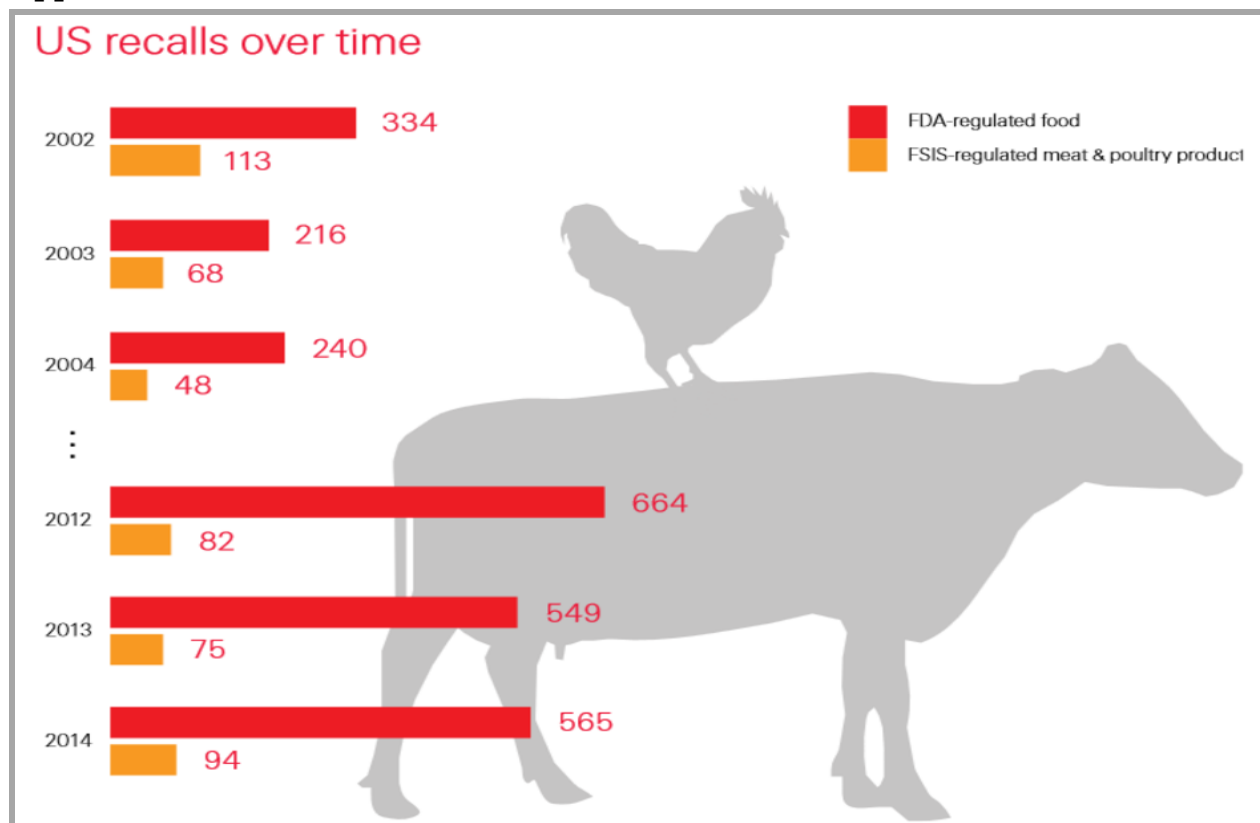
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Appendix A: Annual Recalls Events by Four Federal Agencies, 2010 - 2015



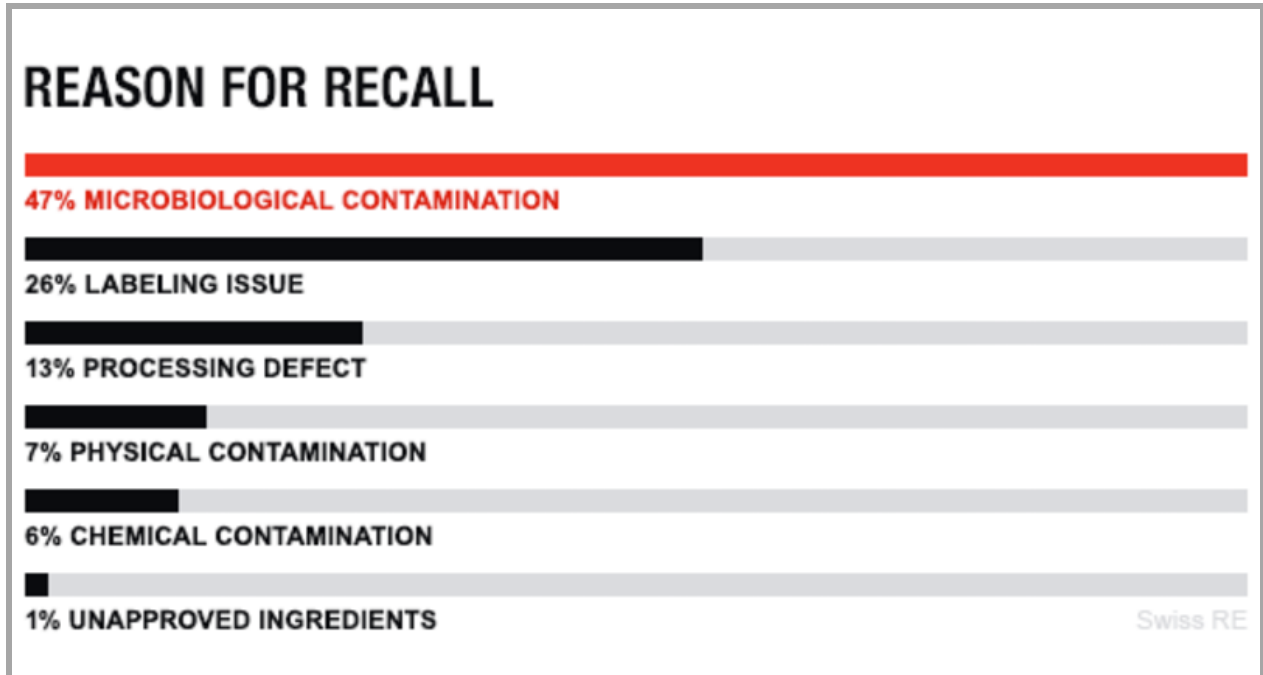
Source: Sage Researcher. O'Malley (2016).

Appendix B: US Recalls Over Time



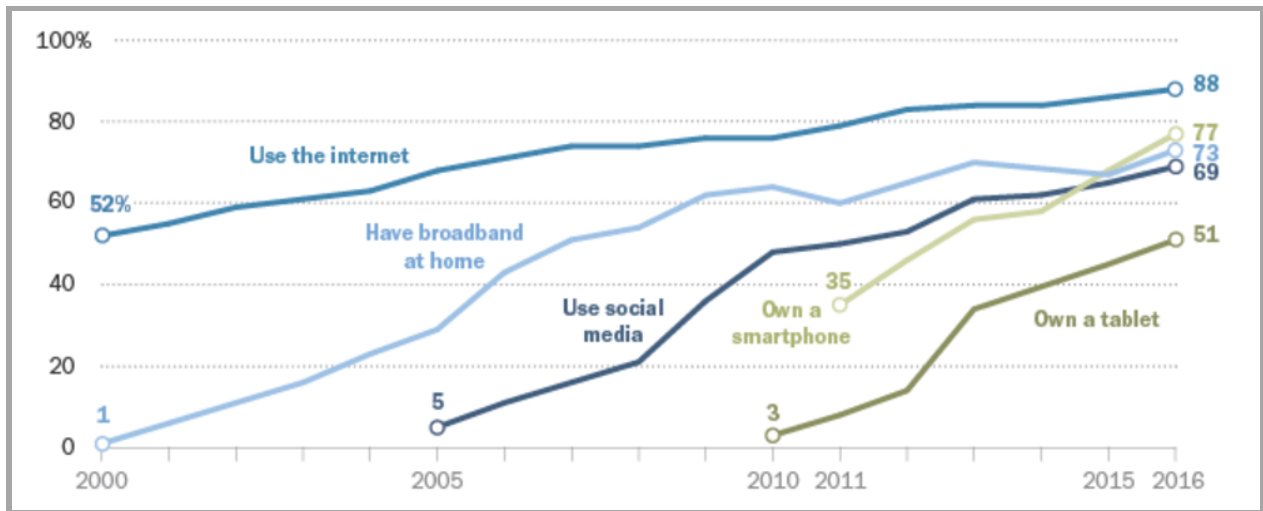
Source: Canadian Underwriter (2015).

Appendix C: Reason for Recall



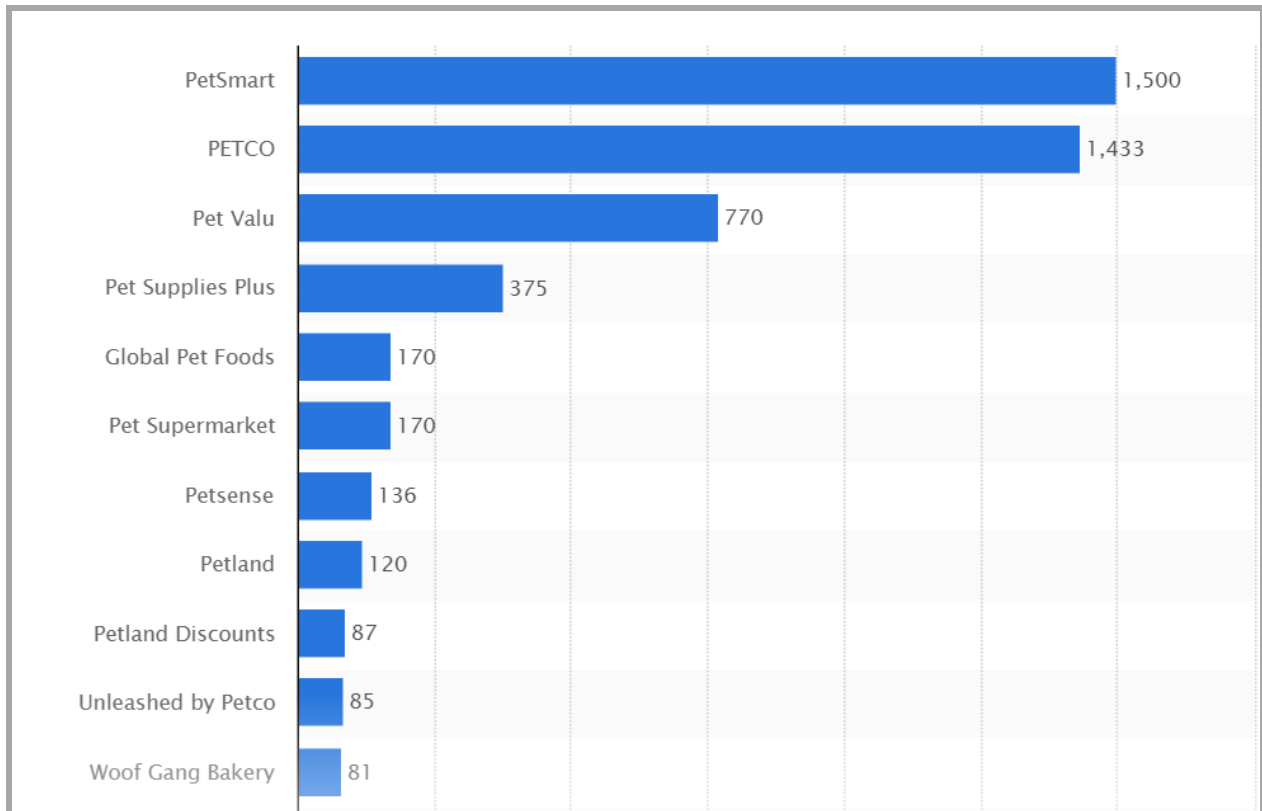
Source: Fortune; Kowitt (2016).

Appendix D: The Evolution of Technology Adoption and Usage



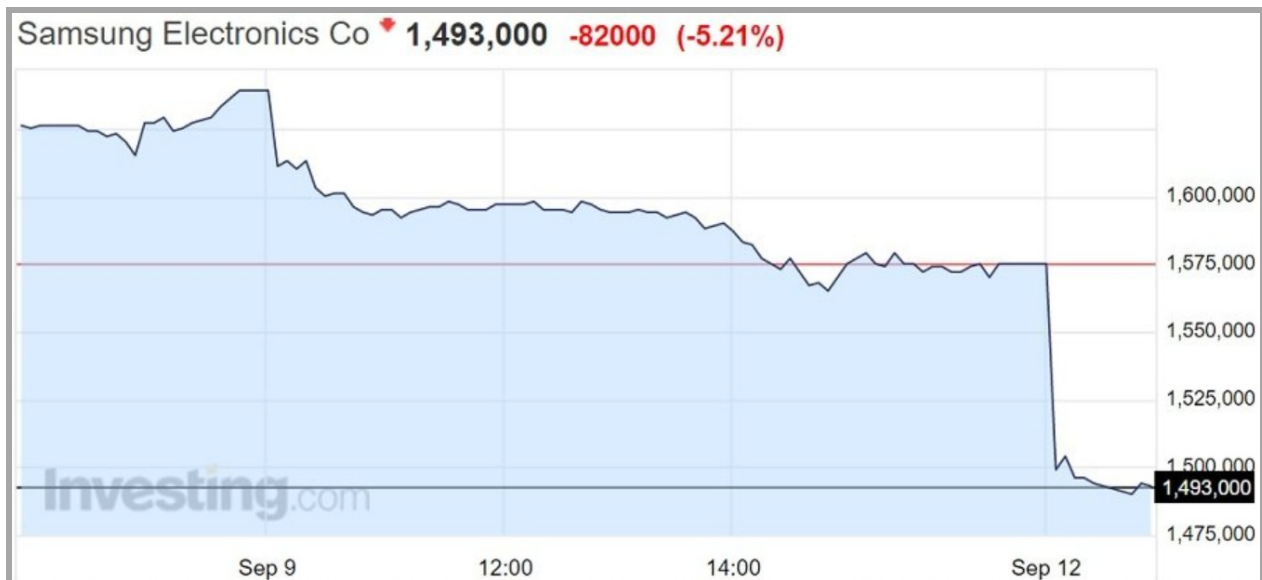
Source: Pew Research Center (Smith, 2017).

Appendix E: Leading pet specialty chains in North America in 2016



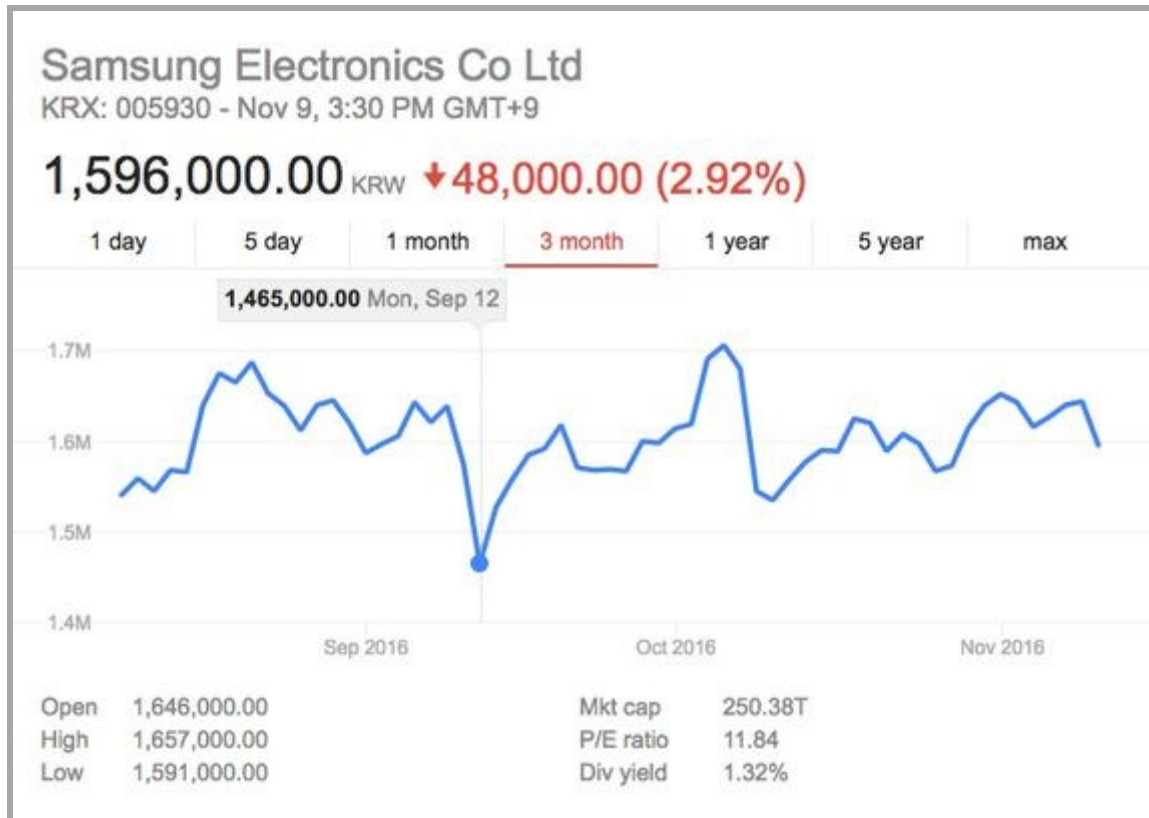
Source: Statista (2016).

Appendix F: Samsung Market Share



Source: Pash (2016) Business Insider.

Appendix G: Samsung Recalled Products



Source: Google Finance – Yahoo Finance (Wollerton, 2016).

Appendix H: South Korea Stock Market



Source: Bloomberg (Lam, 2017).

Appendix I: Interview Questions

1. Conduct that includes baby deaths from faulty cribs, baby strangulation from hanging window blinds cords, injuries from high chairs among others (a) Are these actions ethical? (b) What are your views on the companies involved in selling products that cause harm to humans?
2. Hoverboard explosions contributed to 501,000 product recalls; Samsung phone explosions contributed over 1 million recalls. What motivates CEO and respective employees in a company to wait on announcing their product recall even when they know that their products are or will cause harm to others?
3. There exists pressure to meet projected sales and be successful; as a production manager if instructed to continue production on a product that didn't pass inspection by your CEO or superior what would you do?
4. U.S. Consumer Product Safety Commission (CPSC) has set guidelines and protects consumers against unreasonable risk, injury or death from unsafe products; what else should the CPSC or government appointed body do to ensure that companies are adhering to set rules?
5. Take into consideration your own individual moral values; as the CEO of a company; what strategies would you introduce to minimize unethical conduct in your company to minimize recalls?

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