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Year 25 Final Report

Grant Number: DTRT13-G-UTC31

Project Title:

Teaching Case Study on Korea Ferry Disaster of April 2014

Project Number:

HVDE25-38

Project End Date:

05/31/2017

Submission Date:

07/28/2017

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The New England University Transportation Center is a consortium of 5 universities funded by the U.S. Department of Transportation, University Transportation Centers Program. Members of the consortium are MIT, the University of Connecticut, the University of Maine, the University of Massachusetts, and Harvard University. MIT is the lead university.

Project Overview and Problem Description

This project produced a two-part teaching case study intended, in general terms, to focus graduate students and practicing professionals on safety and emergency management considerations in the transportation industry. Specifically, the case describes the circumstances surrounding the April 2014 sinking of the South Korean *Sewol* ferry, which led to the deaths of more than 300 people (many of them high school students), and then recounts the badly bungled emergency response and the far-reaching political fallout from the tragedy, which eventually resulted in the resignation of the country's prime minister.

In prompting the reader to think critically about the actions taken by the ferry company, the *Sewol* crew, and the South Korean government prior to and during the disaster, the case exposes students to a complex set of public management challenges, including: (1) the adequacy and incentives of safety regulatory regimes, (2) safety procedures and emergency preparedness within the transportation sector, and (3) the effectiveness of rescue methods involving multiple organizations and stakeholders – and the political ramifications of inadequate preparedness and response.

The case may prove useful in courses that cover regulatory policy and practice, emergency management and homeland security, and transportation politics.

Approach and Methodology

Principal Investigator Arnold M. Howitt, who serves as Faculty Co-Director, Program on Crisis Leadership, and Senior Adviser, Ash Center for Democratic Governance and Innovation, Harvard Kennedy School (HKS), oversaw all aspects of case development. Under Dr. Howitt's supervision, the case was authored by Kirsten Lundberg, an experienced case writer who formerly directed case programs at both HKS and Columbia University and who now regularly produces cases in collaboration with HKS faculty through the Lundberg Case Consortium. Soryoung Park, an HKS graduate (MPP '14) and founder of the South Korean media startup, PUBLY, also made significant contributions to the project, particularly during the research stage.

The project followed standard Harvard Kennedy School case study development practices and procedures. Initial research consisted of gathering background information from news accounts (from both South Korean and English-language sources), government reports, academic materials, and other public sources about the *Sewol* disaster. This was followed by an analysis of the assembled data sources to develop an outline and, subsequently, a full draft of the case study. Contacts with expert knowledge of the event and of politics and governance in Korea were asked for their feedback, and the case was subsequently revised based on this feedback.

To test its suitability as a teaching tool for conveying key learning objectives and themes in the classroom, Dr. Howitt taught the case multiple times in a graduate-level management course at Harvard University (E-5090: Crisis Management and Emergency Preparedness). These initial teaching experiences helped inform subsequent revisions to the case and sharpen the associated teaching plan and learning objectives, which are described below.

Findings, Conclusions, and Recommendations

1. Case Summary

[This section is an adaptation of a summary of the case study that was published in the January 2016 issue of the “UTC Spotlight” newsletter:

Arnold M. Howitt, “Case Study of Maritime Disaster Yields Learning Tool” *UTC Spotlight*, U.S. Department of Transportation, January 2016, available at <https://www.transportation.gov/utc/case-study-maritime-disaster-yields-learning-tool>]

The first part of the case study describes how the Sewol tragedy unfolded in a matter of hours. On April 15, 2014, the Sewol car ferry departed the port of Incheon, South Korea, on its twice-weekly, 300-mile overnight passage to the vacation island of Jeju. Of the 476 on board, 325 were 11th graders from Danwon High School in Ansan, accompanied by the vice principal and 13 teachers.

At 8:52 the next morning a student sent an initial distress call from the ship—it was listing badly. Other urgent calls followed—from the captain and crew, from students, and from the vice principal and teachers. These alerted various government agencies, Korea’s National Security Council, and the ferry company. But help arrived slowly and when on the scene proved inept.

Although the boat was sinking rapidly, for the next 90 minutes the captain and crew repeatedly advised passengers to remain below decks. Most complied; there was no order to evacuate. Only 1 of the 46 lifeboats on board deployed. Within an hour, a single Korean Coast Guard vessel and three helicopters arrived. The Coast Guard crew did not board the ferry, while tide and wind prevented smaller fishing boats from drawing alongside.

At 9:46 a.m., the ferry’s captain climbed into the Coast Guard boat along with other crew members. Passengers had still not been instructed to evacuate. At 10:31 a.m., the boat slipped under the surface.

The families, Administration, Korean Nation, and the world watched in anguish as rescue attempts continued to founder. Official updates changed constantly. The Korean Coast Guard put out inaccurate information about rescue attempts.

An early report erroneously claimed all aboard had been rescued. Then officials confused the “missing” with the “rescued” list. By the next morning, however, the grim numbers were clear: of the 476 on board, 172 were rescued. Of the 325 students, only 75 survived, and only 3 of the 14 teachers. However, of 33 crew members, 22 were rescued.

The second part of the case study, which tracks events following the incident, encourages classroom discussion on a range of questions. The search for a cause began instantly. Had the ship been overloaded? What was the safety record of Chonghaejin Marine and the history of the Sewol? Why was a third mate in charge during the trickiest part of the trip? Why did the captain abandon ship? Why did no one evacuate the passengers? What led to a situation in which rescue efforts were so inadequate? Who was or should have been in charge? Why were post-accident public information efforts so confused?

An investigation led to the arrest of the captain and several crewmembers 3 days after the incident. President Park’s administration and the regulatory framework for domestic maritime services also came under scrutiny. No single, stand-alone cause for the incident exists. The

ferry's owners bought the vessel used and renovated it in ways that left the vessel unstable. The company had neglected safety training of the crew, ship preparations, and briefing of passengers for emergencies. It had significantly overloaded the ship. Dockside workers and the crew had not secured cargo properly. An inexperienced officer was in charge during crucial maneuvers before the accident. Meanwhile, the Korean maritime safety regime had failed to deter or detect these problems.

Public outcry began immediately, harshly critical of President Park's administration. Newspaper editorials, civic associations, politicians—and, quite prominently, the parents of the deceased high school students—denounced the company and the government for the failures that led to the accident and to the bungled rescue attempts.

Criticism increased when the President was perceived as too slow to express her concern and to accept responsibility for the government's failures of regulation and rescue. Moreover, questions emerged around whether or not the country's high-octane business culture played a role in the Sewol's sinking.

In analyzing these defects, students can consider how a new safety regime might be constructed to ensure that vessels are compliant with regulations and prepared for emergencies. They can also consider how the emergency response system might function more efficiently, with more streamlined communications. For US- based and other non-Korean readers, lessons learned from a disaster halfway around the world and the flawed response to that disaster may help prevent a similar maritime tragedy closer to home.

2. Case Learning Objectives and Class Discussion Questions

Through several rounds of teaching the case to graduate-level students at Harvard University, the project P.I. developed the following learning objectives and discussion questions to support the use of the case in the classroom:

Learning Objectives:

The case study describes a horrifying example of poor emergency response and weak organizational coordination in the critical moments of an unfolding crisis. Analyzing the elements of that severely inadequate response is worthwhile, but the Sewol story is important also for showing how the seeds of crisis lay in decisions and actions that occurred before the accident. No single cause may have been sufficient to trigger the accident, but together they were more than enough to explain what happened.

The Sewol story also illustrates how major disasters almost inevitably become political events. As we see time and time again, in the aftermath of crisis individuals in government are held to account – sometimes fairly, sometimes not – for the circumstances of the event and for the actions that followed. That political dimension is an important part of the overall picture of crisis response.

Discussion Questions:

1. How did actions taken long before the Sewol capsizing affect the likelihood of an accident?
2. What flaws in emergency preparedness and response did the Sewol capsizing reveal?

3. Why and how did this emergency turn into a crisis for the government?

Outputs

Publications:

Arnold M. Howitt, "Case Study of Maritime Disaster Yields Learning Tool" *UTC Spotlight*, U.S. Department of Transportation, January 2016, available at <https://www.transportation.gov/utc/case-study-maritime-disaster-yields-learning-tool>

Kirsten Lundberg, "Sinking of the Sewol: South Korea's 2014 Ferry Disaster (Part A)" (Program on Crisis Leadership, Harvard Kennedy School, 2017). Available upon request by contacting crisisleadership@hks.harvard.edu or arnold_howitt@hks.harvard.edu [Will also be made available through the Harvard Kennedy School Case Program's online catalogue at <https://case.hks.harvard.edu>]

Kirsten Lundberg, "Sinking of the Sewol: South Korea's 2014 Ferry Disaster (Part B)" (Program on Crisis Leadership, Harvard Kennedy School, 2017). Available upon request by contacting crisisleadership@hks.harvard.edu or arnold_howitt@hks.harvard.edu [Will also be made available through the Harvard Kennedy School Case Program's online catalogue at <https://case.hks.harvard.edu>]

Presentations:

Shortly after project completion, the case was used to inform a June 2017 research workshop and conference on the Sewol accident in which Dr. Howitt participated: "The Sewol Ferry Disaster: Perspective, Analysis, and Action," June 24-26, 2017, organized by the Korea Advanced Institute of Science and Technology (KAIST), Seoul, South Korea.