

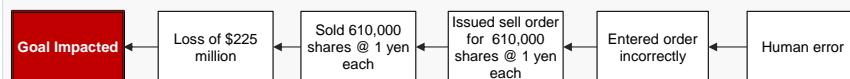
## 1 Problem

What	Problem(s)	data entry incorrect, loss of \$223 million, stock order could not be canceled
When	Date	December 8, 2005
	Time	AM
	Different, unusual, unique	?
Where	Facility, site	Tokyo Stock Exchange
	Unit, area, equipment	Mizuho Securities Co.
	Task being performed	Entering share sell order
Impact to the Goals		
	Financial	Loss of \$225 million (as reported day after incident)
	Frequency	1x? Mizuho Securities Co. at this order of magnitude, other typo errors within industry

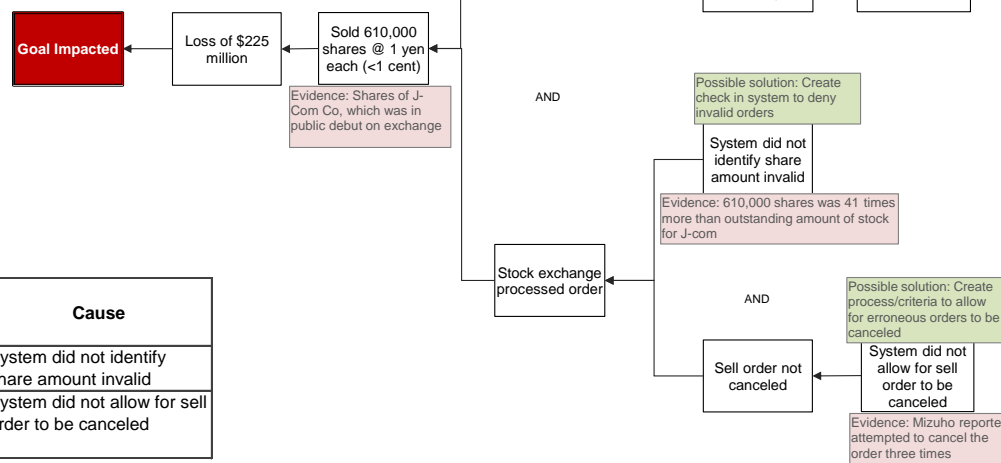
## 2 Analysis

**Basic Level Cause Map** - Start with simple Why questions.

**Basic Cause-and-Effect**



**More Detailed Cause Map** - Add detail as information becomes available.



## 3 Solutions

No.	Action Item	Cause
1	Create check in system to deny invalid orders	System did not identify share amount invalid
2	Create process/criteria to allow for erroneous orders to be canceled	System did not allow for sell order to be canceled

# STOCK MARKET TYPO

Cause Map

In December 2005, an incorrect data entry by an employee of Mizuho Financial Group upset the Tokyo Stock Exchange and Mizuho lost approximately ~\$225 million.

Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

### CAUSE MAPPING®

Problem Solving • Incident Investigation • Root Cause Analysis

- Step 1 **Problem** What's the Problem?
- Step 2 **Analysis** Why did it happen?
- Step 3 **Solutions** What will be done?

### Why?



NOTE: Read the Cause Map from left to right with the phrase "Was Caused By" in place of each arrow.

Possible solution: Checklist?

Mental lapse?

OR

Possible solution: Environment?

Physical slip ("fat finger")?

OR

Possible solution: Training?

Insufficient knowledge?

For a free copy of our Root Cause Analysis Template in Microsoft Excel, used to create this page, visit our web site.

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