

# The Necessity of Multi-Discipline Risk Management: Transformation of Mindset and Incentive Pay

By Etti Baranoff

## I. Introduction

Late in 2012, the press in Austin, Texas reported the death of a policeman, Houston McCoy,<sup>1</sup> who was known for climbing together with his fellow officer, Ramiro Martinez, the steps of the Tower at the University of Texas and killing the Tower Sniper.<sup>2</sup> Fourteen people (many of them students) were killed and 32 were wounded in the August 1, 1966 tragedy. The dark day for Austin and the University of Texas is embedded in the history of this city nestled in the hill country of central Texas.

Over 46 years later, the December 14, 2012 shootings at Sandy Hook Elementary School took the lives of 26 children, teachers and administrators.<sup>3</sup>

Is history repeating itself? What has happened in the past 46 years to risk management and prevention? Has very little changed? If this is the case, our lack of both preparedness and understanding of risk management paints a scary picture. We have not done enough through risk management education to transform the public mindset. Nor have we created adequate incentives and systems to uncover and handle risks effectively.

These man-made catastrophes are only two examples among a multitude that illustrate the importance of risk management in all aspects of our society. The nature of risk management is multi-disciplinary. To prevent future tragedies, it is a necessity that this field becomes a core requirement in all management or related programs of study. In order to ensure

that it takes hold in business life once graduates move on, a positive reinforcement mechanism needs to be established; I recommend monetary rewards as an incentive to be effective.

## II. Man-made Risks and Devastation

While McCoy and Martinez, the policemen who killed the Tower Sniper in 1966, were dubbed heroes, many of the heroes in Newtown, Connecticut did not survive the mass shooting. The tragic devastations of 2012 which include the movie theater shooting in Aurora, Colorado,<sup>4</sup> are only a few drops in a stream of horrible losses dating back to the September 11, 2001 terrorism act<sup>5</sup> and longer. All of these tragedies could have been reduced or even eliminated if the public was educated to adopt a risk mitigation mindset up front. Heavy losses in human life and money have always translated into risk management actions after the fact, not as preventative methods.<sup>6</sup> Since a preventative mindset is not endemic to our educational system, we are only able to react. Each catastrophe has led to more regulation and governmental action. The aftermath of September 11 saw the creation of the Department of Homeland Security and long security lines at airports around the world. Unfortunately, many of the security steps were only reactions to publicized, known threats—bombs placed in fluids, shoes and the like—rather than an approach to identify risks systemically.

In the private business arena, we also see reactive or corrective actions instead of thoughtful, full-fledged identification of front-end risks, measurement and development of the

<sup>1</sup> <http://www.statesman.com/news/news/local-obituaries/houston-mccoy-the-police-officer-who-shot-ut-tower/nTgc/>

<sup>2</sup> Charles Joseph Whitman was an engineering student and former Marine who killed 14 people and wounded 32 others in a shooting rampage located in and around the Tower of the University of Texas in Austin on the afternoon of August 1, 1966. Also see more coverage at: [http://www.trutv.com/library/crime/notorious\\_murders/mass/whitman/index\\_1.html](http://www.trutv.com/library/crime/notorious_murders/mass/whitman/index_1.html)

<sup>3</sup> <http://www.cnn.com/interactive/2012/12/us/sandy-hook-timeline/index.html>

<sup>4</sup> <http://www.cnn.com/interactive/2012/07/us/aurora.shooting/index.html>

<sup>5</sup> See: Etti G. Baranoff "Risk Management and Insurance after 9/11" Chapter 10 of "The Impact of 9/11 on business and Economics: The Business of Terror -- The Day that Changed Everything?" Edited by Matthew J. Morgan and Forwarded by James J. Heckman, Palgrave Macmillan, 2009

<sup>6</sup> See Baranoff and Baranoff "Trends in Insurance Regulation" Review of Business, Fall 2003, pp. 11-20

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necessary risk management tools.<sup>7</sup> These are the basic steps needed for risk management.

The two most known recent business disasters are the financial crises of 2008 and the British Petroleum oil rig explosion in the Gulf and Mexico in 2010.<sup>8</sup> For lack of space, I will focus only on the oil spill.<sup>9</sup> At BP, if there had been a warning voice by a risk manager, would he or she have been listened to in a world where profits lead to bonuses and risk warnings have no audience or incentive? If they were able to prevent the oil spill, would they have been rewarded? Not only was there no culture of risk management at BP, there was no mechanism to reward those who could have prevented the disaster. Most business schools at universities in the U.S. do not have even one course in Risk Management, and when they have it, it is not required for all students.<sup>10</sup>

By using risk measurement tools, stress analysis and Value at Risk (a risk measurement method), we create a mechanism to detect and compute the size of a potential calamity. Only in retrospect, large sums of money are spent and a Type I Error of checking millions of people daily for bombs in airports erroneously is permitted. That is to avoid the horrific likelihood that a Type II error will occur and a terrorist will be allowed on a plane as they may not be detected erroneously. Would it not be better to allow Type I errors in other parts

of our society and business community? This is fully implemented in other societies, notably Israel.

### III. Natural Catastrophes

The loss in dollars and lives are not always caused by man-made catastrophes; there are natural ones, too, such as the 2011 tsunami in Japan and the most recent devastation in highly populated areas of the U.S. from Super-storm Sandy in October 2012. Only after much of lower Manhattan and coastal Queens and New Jersey were flooded, did we begin listening to engineers who suggested building safety walls long before the catastrophe.<sup>11</sup>

In the 2005's Hurricane Katrina, the levees that broke and flooded New Orleans<sup>12</sup> had long been known to be vulnerable. FEMA's failure to rescue those trapped in New Orleans in a timely manner was another tragedy that cost 1,800 lives. Today the failed levees have been replaced with state-of-the-art pumping stations that resemble fortresses. Why should resources only be applied to areas that have already sustained the worst damage? Where are the proactive solutions?

### IV. The Need for Risk Management

There is not space to list all catastrophes of major and minor impacts here.<sup>13</sup> Nevertheless, the same theme recurs

<sup>7</sup> See Chapters 1, 2, 3 and 5 of the text book by Baranoff, Brockett and Kahane "Risk Management for enterprises and Individuals" 2009, Flat World Knowledge, Connecticut.

<sup>8</sup> <http://www.cnn.com/2012/11/28/us/bp-suspension/index.html>

Nov 28, 2012 – The U.S. government will block oil giant BP from new government ... "lack of business integrity" stemming from the 2010 explosion and oil spill. It was a tragedy that killed 11 oil workers and dumped 205 million gallons of oil into the Gulf ... " at: <http://www.cnn.com/2012/11/28/us/bp-suspension/index>

<sup>9</sup> For coverage of the need for risk management and actions to eliminate another financial crisis, see the work of The Geneva Association, the Financial Stability Board (FSB) and the Fed's actions in the U.S.

<sup>10</sup> See. [www.ARIA.org](http://www.ARIA.org) for the number of schools that teach risk and insurance. Temple University and St. Johns universities are the only two schools known to the author that require undergraduate students in the business schools to take one risk management course.

<sup>11</sup> <http://www.bloomberg.com/news/2012-11-09/billions-on-flood-barriers-now-might-save-new-york-city-l.html> Or <http://www.pbs.org/newshour/rundown/2012/11/engineers-draw-barriers-to-protect-new-york-from-another-sandy.html> among others.

<sup>12</sup> <http://www.reuters.com/article/2012/08/29/us-storm-isaac-idUSBRE87L0PH20120829>

<sup>13</sup> The reader is invited to review the impact of all the catastrophes of the recent decades and their cost at the Insurance Information Institute Web site at: [www.iii.org](http://www.iii.org)

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each time. Is it our nature to only employ risk management strategies *after* a disaster occurs? As if such risks were not identified already, measured and mitigation strategies could be developed?

In our modern century, with sophisticated predictive models available, why are we not prepared to build the infrastructure that will manage the risks with minimal losses in lives and dollars?

This kind of thinking is needed in all disciplines. A psychiatrist needs to know and evaluate the risks of his/her patients to society. A social media entrepreneur should identify and mitigate risks related to operating costs, privacy, marketing, etc. Otherwise, he will incur financial losses. This mindset should not end with the owners or leaders of

businesses. Every employee and stakeholder should have the same awareness of risks to avoid the agency conflict. These lessons need to be taught in all universities to all students, not just the few in selected business schools.

Incentives for Practicing Risk Management on the Front End  
With man-made and natural catastrophes occurring in increasing frequency, corporations need to develop incentive pay scales for those who identify risks and call for their measurement and mitigation. The question is how to measure these rewards? Since we do stress tests and use software to measure Value at Risk, why not include such measures in the matrix for incentives? Not just the profits. We can transform our reactionary mindset with complete risk management education, a critical step to better safeguard our businesses, communities and broader ecosystem.

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