Focus on Mutual Interests Draws Specialists

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Some 150 participants from around the world gathered at The University of Texas at Dallas School of Management (SOM) May 21 and 22 to examine issues of risk analysis ranging from estimating the likelihood of terrorists attacks on the ports of Los Angeles and Long Beach to calculating the perils and benefits of nuclear energy.

Hosted by the schools International Center for Decision and Risk Analysis (ICDRiA), the conference, subtitled Convergence Between Finance and Industry, featured four keynote addresses and presentations by 125 international experts, scholars and practitioners from a wide range of disciplines who share an interest in analyzing risk.

David E. Daniel, Ph.D., UT Dallas president and a renowned civil engineer who chaired of a panel of experts who investigated the levee breaches in New Orleans after Hurricane Katrina, delivered the conference keynote dinner address. Other conference keynote speakers were Nassim Nicholas Taleb, Ph.D., an epistemologist and author of the best seller Fooled by Randomness: The Hidden Role of Chance in Life and in the Markets (Random House Trade Paperback, 2005) and the recently released The Black Swan: The Impact of the Highly Improbable (Random House, 2007); Krishnaswamy Kasturirangan, Ph.D., former president of the Indian Space Research Organization (ISRO) and currently a member of the Indian Parliament; and Gregory S. Parnell, Ph.D., a professor at the United States Military Academy at West Point and member of the Technology Panel of the National Security Agency Advisory Board.

Dr. Daniel urged his audience to take note of all the failures before Katrina that contributed to the disastrous levee failures after the hurricane. Anticipating such failures is key to considering the risk that such disasters will occur again, he said. Nearly everything went wrong, essentially at all levels, Dr. Daniel said of the levee failures.

Calling the Katrina disaster the worst engineering failure of his lifetime, Dr. Daniel told his audience post-Katrina analysts needed input from those involved in decision and risk analysis. Somehow we have to break the cycle of not paying attention to extreme events, he said. Decision-making in New Orleans was driven by economic expediency rather than by safety concerns, from the lowest level to the highest level.

Challenges for New Orleans today include recognizing that dealing with issues of risk is a major technological undertaking and that communicating the risks involved to ordinary people is a very difficult task. Integrating risk information into good public policy decisions may be the biggest challenge of all, Dr. Daniel said.

Co-chairs of the conference were SOM Distinguished Professor in Operations Management Alain Bensoussan, Ph.D., who is ICDRiAs director, and Stanford University Department of Management Science and Engineering Chairwoman M. Elisabeth Pat-Cornell, Ph.D., a chaired professor and pre-eminent scholar in the field of risk management.

Most industriestechnology, business, healthcare and othersall have a common thread: risk, whether its the risk of security breach or the spread of disease, explained Dr. Bensoussan, who is the former head of the European Space Agency.

The diversity of various sectors offers opportunities for fruitful synergies, but it also creates some difficulties, Dr. Bensoussan said. The purpose of the conference was to exchange ideas and methods in an effort to develop generic approaches and an understanding of concepts in different domains, which is important for the development of risk analysis methods in specified disciplines, as well as cross-fertilization among sectors.

Conference presentations were divided among four categories: National Security, Supply Chain Risk Management, Financial Risk Management, and Energy and Natural Resources. More information about ICDRiA is available at **ICDRIA**.