

## Lab profile

Laboratory of Organizational Management  
 Professor Kenichi Takano  
<http://lab.sdm.keio.ac.jp/ogi/>

Former principal research scientist, Central Research Institute of Electric Power Industry  
 Areas of expertise: Risk management and human factors in large technological systems  
 Publications (translations): "Managing the Risks of Organizational Accidents," "Managing Maintenance Error" (JUSE Press) etc. Extensive practical and consulting background in organizational safety, analysis of fundamental causes and other aspects of safety management.



## 1 Overview

Figure 1 contains a general overview of the lab's activities, which look at large complex systems, for example, energy production systems or petrochemical plants. The two primary focuses are: 1) creating organizational atmospheres and cultures that better suited to the operation of large, complex technical systems because they are healthier and therefore less susceptible to accidents and problems; and 2) improving the quality and operational reliability

of the software and computer systems that control large technological systems. The first encompasses a broad range of policies and programs, including more effective governance and commitment all the way to the organization's management levels, as well as better teamwork and motivation at the employee and management levels. Below are some of the specific research themes currently being studied.

- 1 Research on cultivating a culture of safety that transforms organizations so they do not allow accidents and compliance problems to occur
- 2 Research on the development of safety management systems for large-scale plants that are designed to prevent accidents from occurring
- 3 Studies and research on the creation of organizational atmospheres and cultures that attempt to balance safety and performance
- 4 Studies and research on strategies to improve employee motivation and re-energize organizations
- 5 Studies and research on strategies to improve group dynamics and re-energize organizations
- 6 Research on software development and improvements in system operational reliability to ensure the soundness of large systems

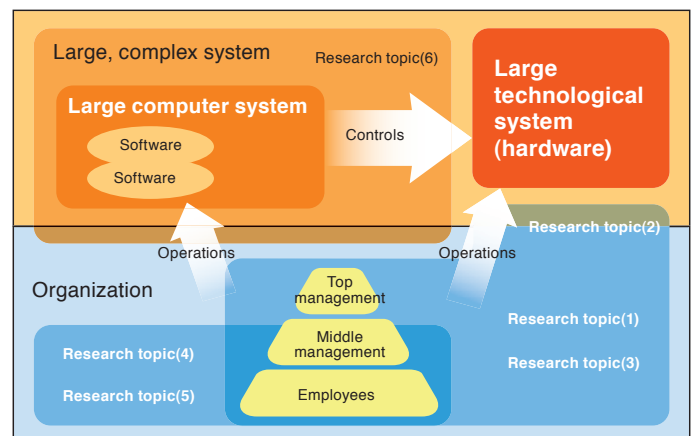


Figure 1. Research topic application domains and interrelationships

## 2 Collaboration with outside organizations

The lab currently enjoys collaborative relationships with the following organizations.



### Japan Nuclear Technology Institute

Research into plant safety culture diagnostics for the nuclear power industry



### Japan Society for Safety Engineering (research consignment from the Ministry of Economy, Trade and Industry)

Research on security improvements for the petroleum refining industry



### Chiyoda Advanced Solutions Corporation

Development and application of safety culture diagnostic techniques for operations in the chemicals industry



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