Managing Errors in Organizations

ESMT Executive MBA

SNOC for the GNAM network

Wednesday, January 10 – Wednesday, March 13, 2024

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Course overview and objectives

The course will provide students with an overview on how organizations are impacted by errors. In business the focus is often on learning from success cases. While failures also provide valuable information they are often not systematically evaluated as they tend to be associated with neglect or sloppy work and are therefore not openly communicated. Silence on errors - which is an underestimated phenomenon in many organizations – may furthermore prevent breaking error chains and leading to big loss events or even catastrophic failures. The course will make students aware of the hurdles that prevent organizations from having an open error communication and introduce them to the concepts developed by high-reliability organizations as airlines, hospitals or nuclear power plants to effectively deal with errors. At the end of the course the students can practice their acquired learning in an engaging group simulation. Most of the case studies used in this course as well as the simulation have been authored and developed by the teaching professor.

The 17,5 sessions of the course will be structured in three parts:

1. The human factor lense – dealing with errors on the individual level (session 1 - 7)
2. The organizational lense – dealing with errors on the organizational level (session 8 - 12)
3. The leadership lense - principles for creating an open error culture (session 12 - 17)

Competencies developed

- Awareness of the human error and silence in organizations
- Introduction to the concept of psychological safety
- Understand the organizational prerequisites for organizational learning
- Introduction to leadership skills for open team interaction
- Application of the acquired skills in a high pressure simulation

Teaching methods

Interactive lectures, group work, case study discussions and simulation

Readings and materials

Students will be provided with the case studies which have to be read in advance from the web page of the ESMT online platform.

Literature recommendations after each session will complete the scope of content. A key element of the literature are the books *Confronting Mistakes – Lessons from the Aviation Industry when Dealing with Error* (2013) and *How Could this Happen – Managing Errors in Organizations* (2018) authored/edited by the teaching professor.

Slides of the lectures will be provided after the sessions.

Participant evaluation

The evaluation of this course consists of two elements:

- 35% weight: Class participation in the discussions.
- 65% weight: Post-modular assignment. Individual essay (maximum two pages):
  Reflect on an error management case – preferably based on personal experience. What lessons can be taken based on the course content?

  To be submitted on Moodle by **Sunday, March 31, 2024, 11:55pm (Berlin time).**

Attendance Policy

Please note that in order to gain the certificate of completion, students cannot miss more than 20% of the live-sessions, i.e. 3.5 hours or (in practice) 2 live-sessions.

Session Breakdown

Session 1: Wednesday, January 10, 2024

2:00 PM – 3:00 PM	**I. Introduction & the Human Factor Lense** Introduction – definitions • Error concepts • Error versus violation • The relevance of human error in organizations
Optional reading:	- Reason, J. (1990). Human error. New York, NY: Cambridge University Press. - Frese, M., & Keith, N. (2015). Action errors, error management and learning in organizations. Annual Review of Psychology, 66: 661–687.

Session 2: Wednesday, January 10, 2024

3:15 PM – 4:15PM	**I. Introduction & the Human Factor Lense** The bad apple approach • Case Qatar Airways 778 • Dealing with failure • The role of accountability
Case (in class):	Qatar Airways 778 (case provided in class)
Optional reading:	Perrow, C. (1984). Normal accidents. New York, NY: Basic Books.

Session 3: Wednesday, January 17, 2024

2:00 PM – 3:00 PM	**I. Introduction & the Human Factor Lense** Dealing with uncertainty • Connection of error tolerance and uncertainty • Consequences for human behavior • Decision making processes

Optional reading:	- Carroll, J. S. (1998). Organizational learning activities in high-hazard industries: the logics underlying self-analysis. Journal of Management studies, 35(6), 699-717.
	- Edmondson, A. C. (2018). The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth. John Wiley & Sons.
	- Grote, G. (2015). Promoting safety by increasing uncertainty–Implications for risk management. Safety science, 71, 71-79.

Session 4: Wednesday, January 17, 2024

3:15 PM – 4:15PM	**I. Introduction & the Human Factor Lense** Silence in organizations • Visual case Academy Awards 2017 (provided in class) • Empirical data from corporates • Factors that encourage silence – and prevent speaking up
Case (in class):	Visual case Academy Awards 2017
Optional reading:	- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. Journal of management studies, 40(6), 1453-1476.
	- Morrison, E. W. (2011). Employee voice behavior: Integration and directions for future research. Academy of Management annals, 5(1), 373-412.
	- Weick, K. E., & Sutcliffe, K. M. (2011). Managing the unexpected: Resilient performance in an age of uncertainty (Vol. 8). John Wiley & Sons.

Session 5: Wednesday, January 31, 2024

2:00 PM – 3:00 PM	**I. Introduction & the Human Factor Lense** Speaking-up - but how • Case study United Airlines 173 • Why speaking-up does not even occur in high stake settings • Group work on what should be changed
Case (to prepare):	United Airlines 173

Optional reading: Helmreich, R. L., A. C. Merritt, and J. A. Wilhelm (1999). The evolution of Crew Resource Management training in commercial aviation. International Journal of Aviation Psychology 9 (1): 19–32.

Session 6: Wednesday, January 31, 2024

3:15 PM – 4:15PM	**I. Introduction & the Human Factor Lense** The relevance of the team interaction • Case study United Airlines 232 • Group work on the differences in team interaction
Case (to prepare):	United Airlines 232
Optional reading:	Hackman, J.R. (1986). Group-Level Issues in the Design and Training of Cockpit Crews. In: Orlady, H.W. and H.C. Foushee (Eds.). Proceedings of the NASA/MAC workshop of cockpit resource management training. NASA CP 2455 (23-39). Moffett Field, CA: NASA-Ames Research Center.

Session 7 & 8: Wednesday, February 7, 2024

2:00 PM – 3:00 PM & 3:15 PM – 4:15PM	**I. Introduction & the Human Factor Lense** Concept of Psychological Safety • Definition • Group work on balancing psychological safety and accountability • Connecting the individual and the organizational perspective
Optional reading:	- Anaicich, E., R. Swaab & A. Galinsky (2015). Hierarchical cultural values predict success and mortality in high-stakes teams. Proceedings of the National Academy of Sciences, 112(5), pp. 1338-1343. - Barshi, I., & Bienefeld, N. (2018). When silence is not golden. In How Could This Happen? (pp. 45-57). Palgrave Macmillan, Cham. - Cooper, G.E., M.D. White & J.K. Lauber (eds) (1980). Resource management on the flight deck. In Proceedings of a NASA/Industry Workshop. - Edmondson, A. (1999). Psychological safety and learning behavior in work teams. Administrative Science Quarterly 44 (2): 350–383.

- Jones, D. G., & Endsley, M. R. (1996). Sources of situation awareness errors in aviation. Aviation, space, and environmental medicine.
- Schein, E. H. (2013). Humble inquiry: The gentle art of asking instead of telling. Berrett-Koehler Publishers.

Session 9 & 10: Wednesday, February 14, 2024

2:00 PM – 3:00 PM & 3:15 PM – 4:15PM	**II. The Organizational Lense** High-reliability organizations • Safety first – really? • Case study Mr. KLM (A) • Dealing with blind spots • Definition • Relevance of managing error in HROs • Principles of interaction
Case (to prepare)	Mr. KLM (A)
Optional reading:	- Carroll, J. S. (2018). Understanding Safety Management through Strategic Design, Political, and Cultural Approaches. In: How Could This Happen? (pp. 129-148). Palgrave Macmillan, Cham. - Perrow, C. (1984). Normal accidents. Princeton university press. - Weick, K. E. (1990). The vulnerable system: An analysis of the Tenerife air disaster. Journal of Management 16 (3): 571–593. - Weick, K. E., K. M. Sutcliffe, and D. Obstfeld (1999). Organizing for high reliability: Processes of collective mindfulness. Research in Organizational Behavior 21: 81–123. - Weick, K. E., & Sutcliffe, K. M. (2011). Managing the unexpected: Resilient performance in an age of uncertainty (Vol. 8). John Wiley & Sons.

Session 11 & 12: Wednesday, February 21, 2024

2:00 PM – 3:00 PM & 3:15 PM – 4:15PM	**II. The Organizational Lense** The role of strategy - Case study Volkswagen über alles (A) - The role of strategic errors - Strategy-as-learning
Case (in class)	Volkswagen über alles (A)
Optional reading:	Edmondson, A. C., & Verdin, P. J. (2018). The strategic imperative of psychological safety and organizational error management. In: How Could This Happen? (pp. 81-104). Palgrave Macmillan, Cham.

Session 13: Wednesday, February 28, 2024

2:00 PM – 3:00 PM	**II. The Organizational Lense** Error reporting in organizations - Case study The Dana-Faber Cancer Institute - Dealing with litigation - Just culture
Case (to prepare)	The Dana-Faber Cancer Institute
Optional reading:	- Bohmer, R (1998). Complexity and Error in Medicine. HBS Industry Background Note 699024. - Morath, J., & Johnson, M. (2018). Open Error Communication in a High-Consequence Industry. In: How Could This Happen? (pp. 173-193). Palgrave Macmillan, Cham.

Session 14: Wednesday, February 28, 2024

3:15 PM – 4:15PM	**III. The Leadership Lense** Motivation and empowerment - Case study Turn the ship around (A) - The role of motivation - The impact of leadership styles
Case (to prepare)	Turn the ship around (A)

Optional reading:

- Berti, M., & Simpson, A. V. (2021). The dark side of organizational paradoxes: The dynamics of disempowerment. Academy of Management Review, 46(2), 252-274.
- Marquet, L. D. (2015). Turn the ship around!: A true story of building leaders by breaking the rules. Penguin UK.
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review. Journal of applied psychology, 96(5), 981.

Session 15& 16: Wednesday, March 6, 2024

2:00 PM – 5:30 PM **180 minutes**!	**III. The Leadership Lense** Practicing Error Management (simulation) • Simulation Leadership Under Pressure • Team interaction in a complex and time pressured environment • Making high consequence decisions

Session 17: Wednesday, March 13, 2024

2:00 PM – 4:15 PM	**III. The Leadership Lense** Simulation debrief and closing • Group debriefing and reflection • Summary of the course, introduction to final assessment, farewell