Why Safety Culture Affects Human Behavior

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Safety Culture

Slogans

• Safety Culture is how we do business around here.
• Safety Culture is how people behave when no one is watching.

Formal definition (Montijn & de Jong, 2009)

• Safety Culture is the set of enduring values and attitudes regarding safety, shared by every member of every level of an organization.
Content

One view on safety culture
- How safety culture creates patterns of (safe or unsafe) behavior

Another view on safety culture
- How safety culture shapes the way we perceive the world

A positive safety culture
- Maturity level
- Characteristics

Summary

When Kweku Adoboli was arrested for an illicit trading scheme that cost his employer... $2.3 billion in losses, he was instantly labeled a “rogue trader”, suggesting he was an unprincipled scoundrel acting alone.

UBS moved swiftly to distance itself. Mr. Adoboli had engaged in “unauthorized” and “fictitious” trades that “violated UBS’s risk limits,” the bank claimed in a statement.

Mr. Adoboli remains in jail, his trading activities under investigation. UBS no doubt hopes they prove to be aberrational, an isolated instance of wrongdoing within the ranks of its approximately 65,000 employees worldwide. But the unauthorized trading is only the latest in a series of egregious ethical and legal lapses at UBS that have badly damaged the bank’s once-sterling reputation. In this broader context, how aberrational were Mr. Adoboli’s suspected lapses? Is the UBS culture at least partly to blame? And what if anything is UBS’s board going to do?

Mr. Adoboli, 31, a soft-spoken native of Ghana, worked his way up from a back-office accounting function to UBS’s vaunted Delta One derivatives trading desk. His circumstances bring to mind Société Générale’s Jérôme Kerviel in France. Mr. Kerviel is serving a three-year prison sentence for his unauthorized trading, which cost the bank about $7 billion in losses.

Mr. Adoboli’s lawyer told the court this week that he “is sorry beyond words for what has happened here. He went to UBS and told them what he had done and stands appalled at the scale of the consequences of his disastrous miscalculations.”

Like Mr. Kerviel, whose trading bears a strong resemblance to that of Mr. Adoboli, there’s no evidence that Mr. Adoboli stood to profit directly from his trading. Mr. Kerviel has steadfastly maintained he acted only for the benefit of the bank, pressured to distinguish himself by a rigid hierarchical culture in which he was the only trader from a working-class family who didn’t attend one of France’s prestigious grandes écoles. His superiors, he said, knew of and condoned his trading — as long as it was profitable.

Mr. Adoboli hasn’t offered any such justifications, but his immigrant status may have set him

Possible Attitude: It’s ok to deviate from regulation in order to reach more important objectives.
One View on Safety Culture

- An organization needs to implement a safety culture.
- That leads to more safety.

Safety Culture
  - Attitudes
  - Values

Safety
  - Patterns of safe / unsafe behavior

(Nævestad, 2009)

Culture's Influence on Human Behavior

Behavior = Context × Person

- Tasks / Resources
- Rewards / Sanctions
- Models / Management
- Knowledge
- Skills
- Attitudes

Culture Creates Patterns of Behavior
Safety Culture and Intentional Rule Violation

- In more than 50% of flights with deviations the direct cause of the deviation is an intentional violation of rules.
- Normally, these violations lead to no consequences.
- However, crews who intentionally commit violations are twice as prone to additional errors (Helmreich, 1998).

„Everything that can go wrong usually goes right, and then we draw the wrong conclusions."

(Langewiesche, 1998; after Dekker, 2011)

Possible Attitude: It’s ok to deviate from regulation in order to reach more important objectives – even management does so.

65'000 Times of Non-Airworthyness

- In April 2008, pilots of an United Airlines aircraft shortly after takeoff in Denver had to shut down one engine and to return to the airport, because oil pressure was too low.
- An investigation revealed that the cover of the oil inlet was missing.
- Instead, mechanics had just wrapped two towels around the opening.
- Thus, the plane had been traveling for four months. It flew 200 times in "non-airworthy state".

(www.tagesschau.de, 2010)

Possible Attitude: It’s required do deviate from regulation in order to safe myself / avoid sanctions.
Possible Attitude: It worked last time, hence it will work again this time.

Possible Attitude: Customer satisfaction has number one priority.
One View on Safety Culture  FUNCTIONALIST

• An organization needs to implement a safety culture.
• That leads to more safety.

(Saevestad, 2009)

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Another View on Safety Culture

- We (all of us) are embedded in a culture
- The way we conceive the world is influenced by that culture
  - What we consider to be risky
  - What we consider to be safe

(Naevestad, 2009)

Culture’s Influence on Perception

- Perception A: “This will never ever happen here.”
  - “Japanese did a really bad job.”
  - “Everything the Japanese did wrong, we do right.”
  → Distancing through differencing (Cook & Woods, 2006)
- Perception B: “Could something unexpected happen here too?”
  - “What can we learn from Fukushima?”
  - “Is there something we failed to see?”
  - “Is it possible at all to consider all possibilities?”
  → Things that never happened before happen all the time (Sagan, 1993)
Culture’s Influence on Perception

The way we perceive the world influences the way we act in the world.

Perception A: „This will never ever happen here."
- Negative reaction: Justifying, neglecting, denying
- Positive reaction: Trying hard to be prepared by identifying hazards, mitigating risks (Reason, 1997)
  - Objective: To be prepared
Perception B: “Could something unexpected happen here too?”
- Questioning, mindfulness (Weik & Sutcliffe, 2007)
- Objective: To be prepared and to be prepared to be unprepared (Pariès, 2011; Hollnagel et al. 2011)

Another View on Safety Culture: INTERPRETATIVE

- We (all of us) are embedded in a culture
- The way we conceive the world is influenced by that culture
  - What we consider to be risky
  - What we consider to be safe

(Saevestad, 2009)
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Safety Maturity-Level

(Hudson, 2007)
Six Characteristics of a Positive Safety Culture

Commitment: Do we (really) recognize the importance of safety?

Awareness: How aware are we of risks?

Information: Does the management know, what the people know? 
Do the people know, what the (safety) management knows?

Adaptability: Do we learn from experience? 
Are we ready to change?

Behavior: Do we do everything for maintaining and improving safety?

Justness: Do we encourage safe behavior? 

(Montijn & de Jong, 2009)

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Safety culture
• Shapes people’s attitudes
• And hence creates patterns of behavior

Safety culture
• Shapes people’s perception of the world
• And hence what they consider risky or safe
• And hence creates patterns of behavior

Maturity level and characteristics of safety culture
• We all believe to be safe (especially when we are on a low maturity level)
• A positive safety culture helps to find problems before they create accidents
• A positive safety culture makes us mindful and keeps us alert

Literature

Many Thanks for Your Attention

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