Innovation & Failure
The Basis for Building the Future.

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BeEbersberger
• Business School and Engineering School
• Graduate and under graduate programs
• Executive Education
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Innovation & Failure
The Basis for Building the Future
Jonathan
Born in Nov. 2016
Resource usage.
"... the creation and adoption of more efficient and appropriate technologies is a necessary part of any solution."

Foray, Mowery & Nelson (2012, p. 1697)
“... Vor dem Hintergrund großer gesellschaftlicher Herausforderungen [ist] soziale Innovation in den Blick zu nehmen.”

EFI (2016, 21)
“... everyone realizes that the grand challenges can’t be solved by one group [alone].”

Moedas (2016)
You will fail!
Everybody does.
FAILURE forever
What is about to come.

1. Approaching failure
2. Innovation & failure
3. Learning from failure is good
4. Learning from failure is hard
5. What can we do?
Approaching Failure.
Failure describes activities that fall short of expected or promised outputs or outcomes.
Innovation & Failure.
Is failure really the mother of innovation?
Failure and innovation

Analysis of more than 1,200 German innovating firms

Correlation of failure and innovation is inverted u-shaped

- If the failure rate < 20%, failure and innovation are positively related:
  the higher the failure rate the more innovative the firms are.

- If the failure rate > 20%, failure and innovation are negatively related:
  the higher the failure rate the less innovative the firms are.

Ebersberger & Petersen (2016)
Learning is crucial.

We attribute the findings about the positive effects to the fact that failure is a good opportunity for learning.

Learning from failure is even more instructive than learning from success.

Ebersberger & Petersen (2016)

- If the failure rate < 20%, failure and innovation are positively related: the higher the failure rate the more innovative the firms are.

- If the failure rate > 20%, failure and innovation are negatively related: the higher the failure rate the less innovative the firms are.
Learning from failure is good.
Sometimes new perspectives are more powerful than just being smart.

Astro Teller
“Fail fast and cheap. Fail often. Fail in a way that doesn’t kill you.”

Seth Godin
“If you want to succeed, double your failure rate.”

Thomas J. Watson
Secret sauce?

Failure is not the secret sauce for success.

Learning is the secret sauce that might turn failure into success.
Learning from failure is hard.
Biases lead to wrong decisions

- Overconfidence
- Confirmation bias
- Illusion of predictability
How does it feel to be wrong?
It feels like being right!
ENTER HERE TO GROW IN WISDOM
Why am I right and others wrong?

• Ignorance
• Idiocy
• Evil
“Fallor ergo sum” = We all have the capacity to skrew up.

St. Augustin
What can we do?
Failure attracts attention within the organization.
Failure causes negative emotions. These negative emotions are called grief.

(Shepherd 2003)
Failure causes grief.

Because it questions competence, relatedness, and autonomy.
For coping with grief there are two approaches

1. Grief orientation
2. Restoration orientation
Grief orientation

1. Think about the events leading to the failure
2. Build a rationale why this happened
Restoration orientation

1. Distraction from failure = not thinking about it
2. Proactivity for second level stressors
Best results

Oscillating between grief orientation and restoration orientation.
Dilemma:
Feeling grief hampers learning. What can we do?
Three Approaches:

1. Failure part of the culture
2. Normalizing failure
3. Emotionally capable organization
Failure as part of the culture

1. Make it safe to fail
2. Make failure the path of least resistance
3. Enthusiastic scepticism
1. Failure is part of what you do.
2. Desensitize your employees to failure and rejection.
Emotionally capable organization

1. Establish rituals
2. Provide social support
3. Learn to oscillate
4. Be humble and appreciative towards failure
Zotter's graveyard of ideas.

Zotter manufactures chocolates with the most delicious fillings.

- **Failed ideas** (e.g. Café, Flag-Ship)
- **Failed receipes & flavors** (e.g. string bean & onion)
- Successful but **replaced flavors** (e.g. pineapple & pepper)
- **Exhumation is possible** (pink coconut & trout marshmallow)
Summary

- Challenges of the future require innovative solutions.
- Innovation activities have the potential for failure.
- Failure is a great opportunity for learning.
- Failure causes negative emotions.
- Your organization can only learn from failures when it can handle those negative emotions.
Innovative organizations have to be more appreciative and humble towards failure!
As leaders of those organizations take the first steps right away!

Be **appreciative** and humble towards failure!
HOMEWORK
Your CV of failure

1. Retreat to your office
2. Write down a CV with the **failures** you experienced and what you **learned**.
3. Every now and then: **Read it.**
Thank You.

Let me know how you are doing with your CV of failure.

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The megatrends are inspired from https://www.gdch.de/fileadmin/downloads/Netzwerk_und_Sstrukturen/Fachgruppen/Vereinigung_fuer_Chemie_und_Wirtschaft/va_februar_2013/2_eberl.pdf

The information about Zotter’s graveyard is based on personal communication with Zotter.
The introductory quotes are from:


http://www.nature.com/news/europe-s-research-commissioner-lays-out-his-ambitions-1.17165

The research about the correlation of innovation and failure is from Ebersberger & Petersen.

Sources

Some ideas about making failure part of culture are from Astro Teller’s TED Talk (https://www.ted.com/talks/astro_teller_the_unexpected_benefit_of_celebrating_failure#t-916932). So is the quote.

The research about the correlation of innovation and failure is from Ebersberger & Petersen.

The ideas about the emotional effects of failure are taken from Dean Shepherd and his collaborators’ work.


Sources

The discussion of wrongness is inspired by Kathryn Schulz.


Failure as the mother of innovation is a phrase taken from http://www.innovationmanagement.se/imtool-articles/failure-is-the-mother-of-innovation/. And so is the quotation.
Images.

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