Value of Failure
Students Course

Module 7: Learning from failure
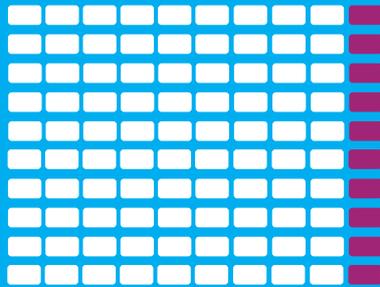
Students Workbook

Learner Name: _____

Assessor/Tutor: _____

value
of
failure

Did you know that...

...in some sectors up to
90 % of new businesses fail
in the first 5 years?

Table of Content

Did you know that...

...the value of failure makes re-starters grow faster and stronger than first-timers?

I Working with this Workbook

Learning without additional working materials does seldom lead to learning success. The Value of Failure Project therefore designed additional workbooks for tutors as well as for learners to support a fast and productive learning environment. Those workbooks follow the structure of the Value of Failure Learning Resources and give additional information and content.

The Students Workbooks for each of the modules should be seen as a helping hand for learners. They provide help, tasks and additional information. Free pages give room for your individual notes.

We also recommend to study the additional literature and online resources provided on the Value of Failure Website and the Value of Failure Pearltrees Account.

Following resources are provided on the project website:

- Tutors Workbooks
- Learners Workbooks
- Presentations

To enrich the learning experience we are looking forward to your feedback:

⬅ www.valueoffailure.com

Legend

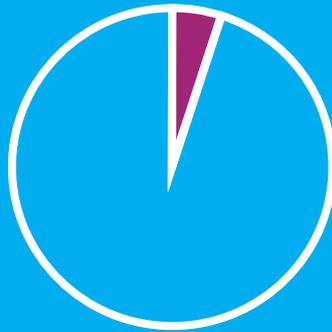| Presentation | |
Workbook	
Example	
Remember	
Digression	
Law	
Learned	
Checklist	
Link	
Video	

Did you know that...

...only about 8 % of failed
entrepreneurs start
over again?

II About the Project

Value of Failure is a European Union funded grass roots initiative to support a better framework for so called failed or second chance entrepreneurs. The idea is to implement a new positive approach to failure in general and to business failure in specific. The project is funded by the European Union within the Erasmus+ framework.

The approach of the project is to address this important topic from two different sides:

1. Regional alliances involve all important stakeholders to set up more a failing- friendly environment and funding framework. The project develops a tool-kit for other regions to develop franchises of the alliances on their own.

2. A set of learning resources addressing students as well as second chance entrepreneurs are set up to implement a seed for a new thinking about failure and providing in depth knowledge about failure and how to cope with it.

All materials produced are open source and can be used by anyone according to the rules provided in the disclaimer at the end of this publication.

More information about the project, the e-learning courses and the regional alliances can be found on the project website

⬅ www.valueoffailure.com

The project is developed, designed and implemented by an experienced international consortium of universities, business development agencies, consulting companies and SMEs (small and medium sized enterprises) coming from Germany, Northern Ireland and Poland:

1. University of Szczecin, Poland (Project Leader)
The University of Szczecin (US) is the most powerful organisation in the West Pomeranian region. Presently over 30.000 students are following full-time, evening & part-time studies in 27 subject areas at 13 faculties. One of the most important objectives of the University is education of students and their preparation for entering labour markets. International cooperation comprises an extremely important aspect of US's activity. The top priorities are joint research and student & staff mobility programs.

⬅ www.english.usz.edu.pl

2. Canice Consulting, Northern Ireland
Canice Consulting is a small yet established private company based in Northern Ireland which operates in the fields of local and regional development, enterprise education and management and technical support to EU networks and programmes.

Canice Consulting provides a broad range of modern learning services to predominantly the EU market place. Services include training solutions, e-learning content creation, learning technologies and learning strategy design and consulting. Learning technologies include learning portals, learning management systems, content development systems, performance support tools, virtual classroom tools and more.

⬅ www.caniceconsulting.com

3. Creo Mind S.C., Poland
CREO MIND (CM) is a civil partnership established from two sole traders: Wojciech Brażuk and Prestige Brand Mariusz Woźniak. The company has wide experience in consulting services in the area of marketing, business development, strategic management and skills development. The owners of CREO MIND have been closely collaborating with the Northern Chamber of Commerce, providing their services for the largest regional chamber of commerce in Poland. Therefore CREO MIND has a strong potential in networking of entrepreneurs and in building relations among various stakeholders of regional market. CREO MIND has elaborated number of analysis and expertise on business and markets. CREO MIND is also recognized on the regional market from elaborating and realizing creative and innovative marketing campaigns and events.

⬅ www.websitecreomind.com

Did you know that...

...31% of projects fail?

4. Enterprise Northern Ireland, Northern Ireland

Enterprise Northern Ireland was established in 2000 to represent the network of Local Enterprise Agencies in Northern Ireland, and is the only membership body in Northern Ireland for organisations providing enterprise support. Enterprise Northern Ireland holds national contracts with various public sector organisations which it delivers primarily though its member agencies. These contracts include the Regional Start Initiative; Social Entrepreneurship, Exploring Enterprise, Tradelinks programme and Business Bootcamp. All of these programmes are further supported by access to finance through the ENI Loan Fund and the Northern Ireland Small Business Loan Fund.

As the only membership body in Northern Ireland for organisations providing enterprise support, Enterprise Northern Ireland is at the heart of a dynamic, high profile network. Enterprise Northern Ireland also represents the interests of the wider small business sector through policy and business development, research and quality assurance, and has a strong lobbying and campaigning remit.

↩ www.enterpriseni.com

5. The visionworks, Germany

The Visionworks is a small company specialized on consulting, coaching, marketing and project management especially for (micro) SMEs and Start-ups. For its clients the visionworks develops investor ready business plans and financing concepts and accompanies founders until the closing of financing. The visionworks has international contacts to public and private investors and has also worked extensively with all relevant regional stakeholders and institutions which are relevant for the regional Second Chance Entrepreneurs Alliance. Despite that the visionworks has great experience in developing learning courses and learning environments for adult education as well as for students.

↩ www.thevisionworks.de

Did you know that...
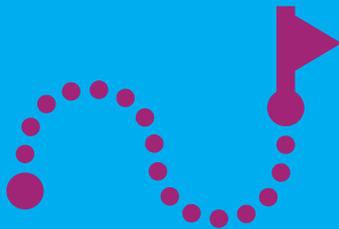
...88% of projects
are past the deadline?

III About this Course

Course Overview

The Value of Failure Course was designed for adult learners, including high-school teachers, undergraduates and the interested public. For teachers and tutors, the course will look at advances in psychological knowledge about failure which helps them to integrate this important topic into their teaching. For adult learners, it will help them to appreciate the positive effects of failure and their potential impact on their everyday life. The goal of the course is to make the existing positive effects of failure accessible to everybody.

The course can be used in a classroom environment as well as a self-contained distance learning course. Distributed free of charge on the Value of Failure project website.

⊙ www.valueoffailure.com

Course Components

The syllabus of the Value of Failure course is divided into seven different units called modules Each of them focussing on different aspects of failure.

Module 1: Basics of failure
Module 2: What is Failure
Module 3: Causes of Failure
Module 4: Preventing Failure
Module 5: How to detect Failure
Module 6: Cooping with Failure
Module 7: Learning from Failure

Each module is divided by sub-sections and can be used as a stand-alone learning session. Therefore each module starts with an introduction about the course which can be skipped if you have studied the previous modules already . All modules include additional resources such as videos and also provides questionnaires, examples and tests where appropriate.

Did you know that...

...the average cost overrun
of projects is 189%?

IV About this Module

Module 7: Learning from failure

Introduction

In the first 6 modules of this course we explored how we can try to prevent failures through effective planning, how we use early signals to see failure coming soon enough to react, if plans did not work out perfectly, and how we cope with failure if it still occurs. The last important question is how we can learn effectively from failure to draw the most out of it.

In this module we explore the basics of learning theory to understand how learning works in the first place. We will have a close look at operant conditioning, social learning and causal theories. This will help to set the basics to analyse personal failures and to find possible learning resources.

But in fact there are many people who actually learned not to learn from failure. This is called learned helplessness. They developed "strategies" that actually prevent from succeeding. We will explore the symptoms of learned helplessness and develop strategies to overcome it.

At the end of this module we will then have a closer look on perfectionism. Failing isn't all bad - but unhealthy perfectionism might be. We should learn to accept failures and being a little less perfect in order to succeed better in the long term.

Additional information can be found on our website and our Pearltrees-Account:

⊕ www.valueoffailure.com

⊕ www.pearltrees.com/thevalueoffailure/

Did you know that...
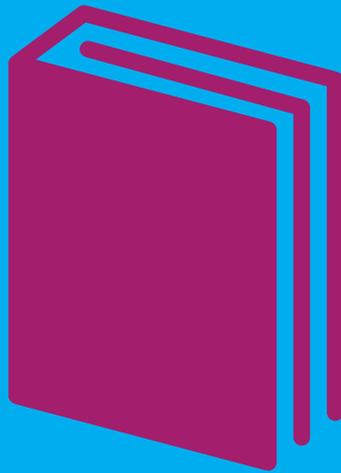
...Stephen King threw away his entire draft of "Carrie"? His wife found it in the trash and the book later launched his career with now more than 350 Million books sold.

V Learning Achievements

In this module you will learn about:

	Achieved	Date

1. Learning theory
You will explore different learning theories and learn to analyse failures with regard to the best learnings possible from failing.

2. Learned helplessness theory
You will learn about learned helplessness theory, it's effects on learning from failure and how to overcome learned helplessness.

3. Perfectionism
You will explore the differences between healthy and unhealthy perfectionism and will understand that being imperfect and learning from failure are more important than trying to be too perfect.

Did you know that...
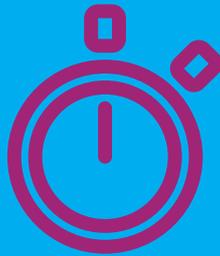
...the average time overrun of projects is 222%?

Module 7: Learning from failure
Chapter 7.1 Learning theory

To draw the best possible learnings from failure it is important to understand learning in general in the first place. Learning theories are conceptual frameworks describing how we absorb, process, and retain information - and how cognitive, emotional and environmental influences, as well as our personal experience influence the learning outcomes.

Learning in a nutshell:
- Relatively permanent change in capabilities
- Process of behaviour change, based on positive or negative experiences
- Occurs only when changes in behaviour happen
- Driven by experience

There are many different learning theories available in science and research. Here we will have a short look on some of the most acknowledged ones:

1. Operant conditioning
2. Social learning
3. Causal learning

1. Learning theories: Operant conditioning

Burrhus Frederic Skinner developed one of the most influential learning theories. Operant Conditioning theory is based on operants - intentional actions that have an effect on the surrounding environment. Skinner set out to identify the processes which made certain operant behaviours more or less likely to occur. It means roughly changing of behaviour by the use of reinforcement which is given after the desired response. Skinner identified three types of responses or operants that can follow behaviour.

• Neutral operants: responses from the environment that neither increase nor decrease the probability of a behaviour being repeated.

• Reinforcers: Responses from the environment that increase the probability of a behaviour being repeated. Reinforcers can be either positive or negative.

• Punishers: Responses from the environment that decrease the likelihood of a behaviour being repeated. Punishment weakens behaviour.

A further important contribution made by Skinner is the notion of behaviour shaping through successive approximation. Operant conditioning can be used to produce extremely complex behaviour if rewards and punishments are delivered in such a way as to encourage move an organism closer and closer to the desired behaviour each time. A simple way to shape behaviour is to provide feedback on performance, e.g. compliments, approval, encouragement, and affirmation. A variable-ratio produces the highest response rate for students learning a new task, whereby initially reinforcement (e.g. praise) occurs at frequent intervals, and as the performance improves reinforcement occurs less frequently, until eventually only exceptional outcomes are reinforced.

Unwanted behaviours can be extinguished through being ignored rather than being reinforced by having attention drawn to them.
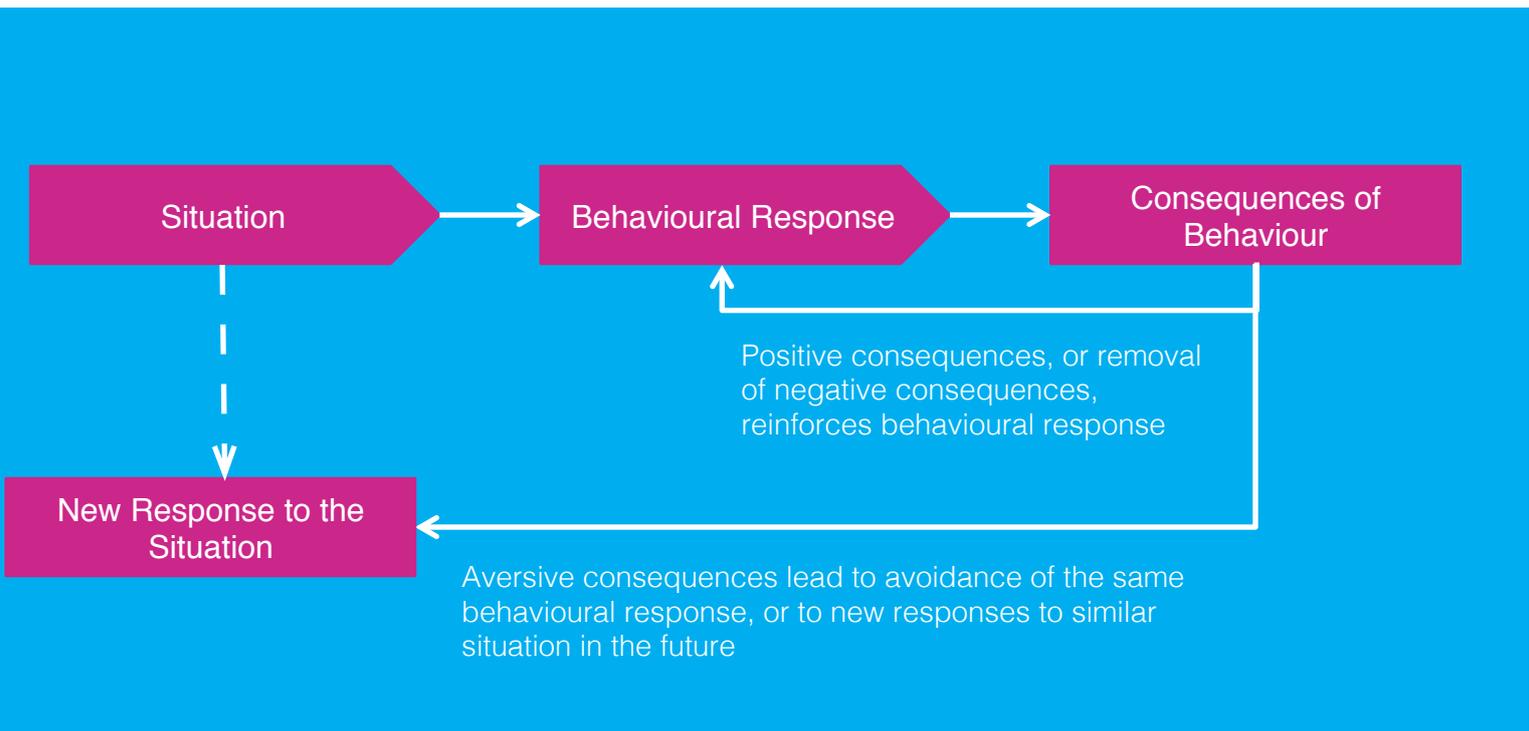
Knowledge of success is also important as it motivates future learning. However it is important to vary the type of reinforcement given, so that the behaviour is maintained.

Did you know that...

...that James Dyson created
5,126 failed prototypes of his
vacuum cleaner before succeeding?

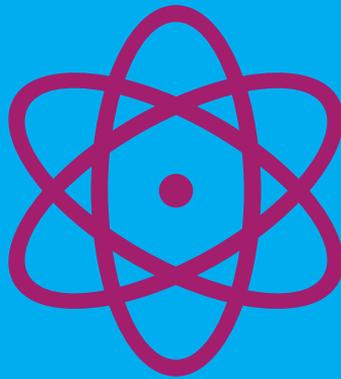Figure 7.1: Learning process in operant conditioning theory

```
┌─────────────┐      ┌──────────────────────┐      ┌──────────────────┐
│  Situation  │ ───> │ Behavioural Response │ ───> │ Consequences of  │
└─────────────┘      └──────────────────────┘      │    Behaviour     │
      ┊                        ↑                     └──────────────────┘
      ┊                        │                              │
      ↓           Positive consequences, or removal           │
┌─────────────────┐   of negative consequences,               │
│ New Response to │   reinforces behavioural response          │
│ the Situation   │ <────────────────────────────────────────┘
└─────────────────┘
           Aversive consequences lead to avoidance of the same
           behavioural response, or to new responses to similar
           situation in the future
```

2. Learning theories: Social learning

In social learning theory Albert Bandura states behaviour is learned from the environment through observational learning. Unlike Skinner, Bandura says that humans are active information processors and think about the relationship between their behaviour and its consequences. Observational learning could not occur unless cognitive processes were at work.

According to this theory we are learning by copying other behaviour and being rewarded (reinforced). Reinforcement can be external or internal and can be positive or negative. Reinforcement will have little impact if the reinforcement offered externally does not match with an individual's needs. Reinforcement will usually lead to a change in a person's behaviour.

Figure 7.2: The framework of social learning

```
              ┌──────────────────┐
              │  Symbolization   │
              │      and         │
              │   Forethought    │
              └──────────────────┘

      ┌──────────────┐      ┌──────────────┐
      │ Observation  │      │ Self-Efficacy│
      └──────────────┘      └──────────────┘
```
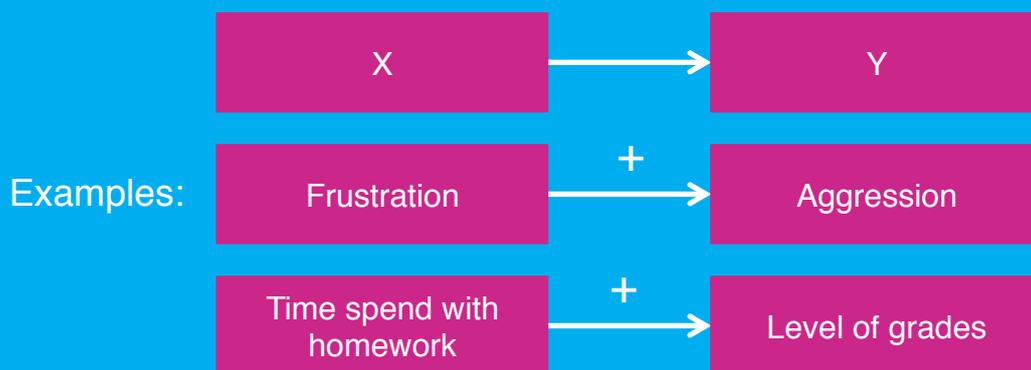
Did you know that...

...Albert Einstein had some communication and learning difficulties in school?

3. Learning theories: Causal learning

Most (but not all) learning theories rely heavily on the concept of causality, i.e., we seek to identify the determinants of a behaviour or mental state and/or the consequences of a behaviour or environmental/mental state. Causal theories can be complicated, but at their core, there are five types of causal relationships in causal theories

- Direct causal relationships: A direct causal relationship is when a variable, X, has a direct causal influence on another variable, Y.
- Indirect causal relationships: An indirect causal relationship is when a variable, X, has a causal influence on another variable, Y, through an intermediary variable, M.
- Spurious relationships: A spurious relationship is one where two variables that are not causally related share a common cause.
- Bidirectional causal relationships: A bidirectional causal relationship is when a variable, X, has a causal influence on another variable, Y, and that effect, Y, has a "simultaneous" impact on X.
- Moderated causal relationships: A moderated causal relationship is when the impact of a variable, X, on another variable, Y, differs depending on the value of a third variable, Z. The variable that "moderates" the relationship is called a moderator variable

Figure 7.3: Direct causal relationships

Did you know that...
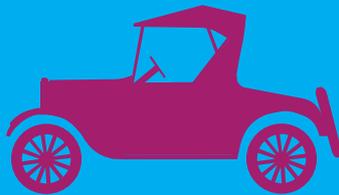
...Henry Ford failed with a couple of automobile businesses before he learned from his failures and revolutionized the automotive industry?
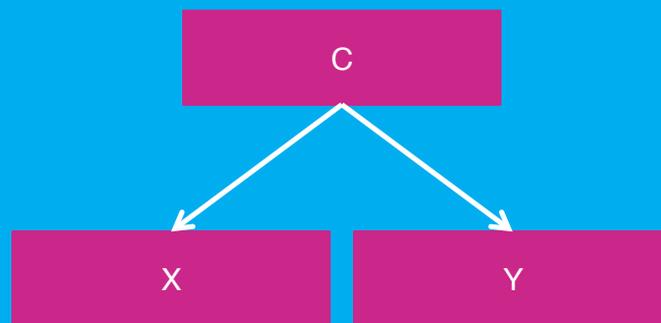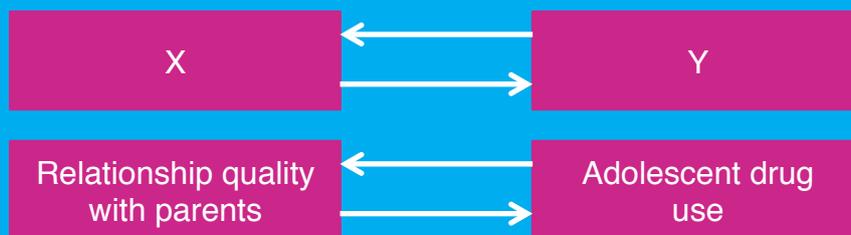
Figure 7.4: Indirect causal relationships

X	→	M	→	Y

Examples:

Relationship quality with parents	—+→	Adolescent school work ethics	—-→	Adolescent drug use
Time spend with homework	—+→	Level of grades	—+→	Likelihood of job offers
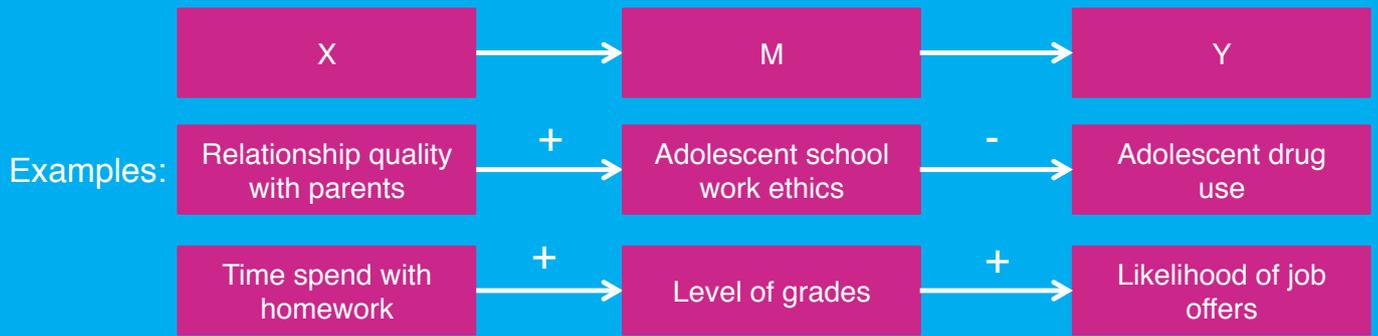
Figure 7.5: Spurious relationships

C → X, C → Y

Figure 7.6: Bidirectional causal relationships

X ⇄ Y

Relationship quality with parents ⇄ Adolescent drug use

Figure 7.7: Moderated causal relationships

Z → (X → Y)
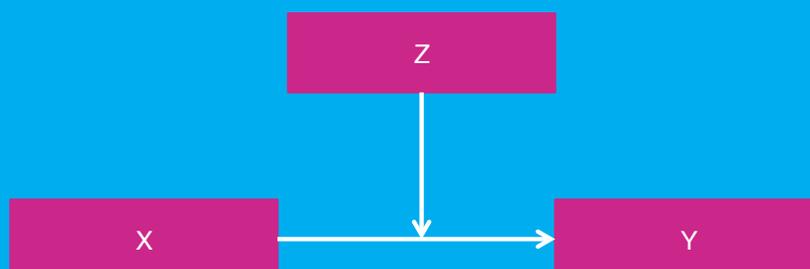
Did you know that...

...Thomas Edison has been told
by his teachers to be "too stupid
to learn" before he invented some
world-changing gadgets and applied
for more than 1000 patents?

Figure 7.8: Causal Map: Example of a sports club
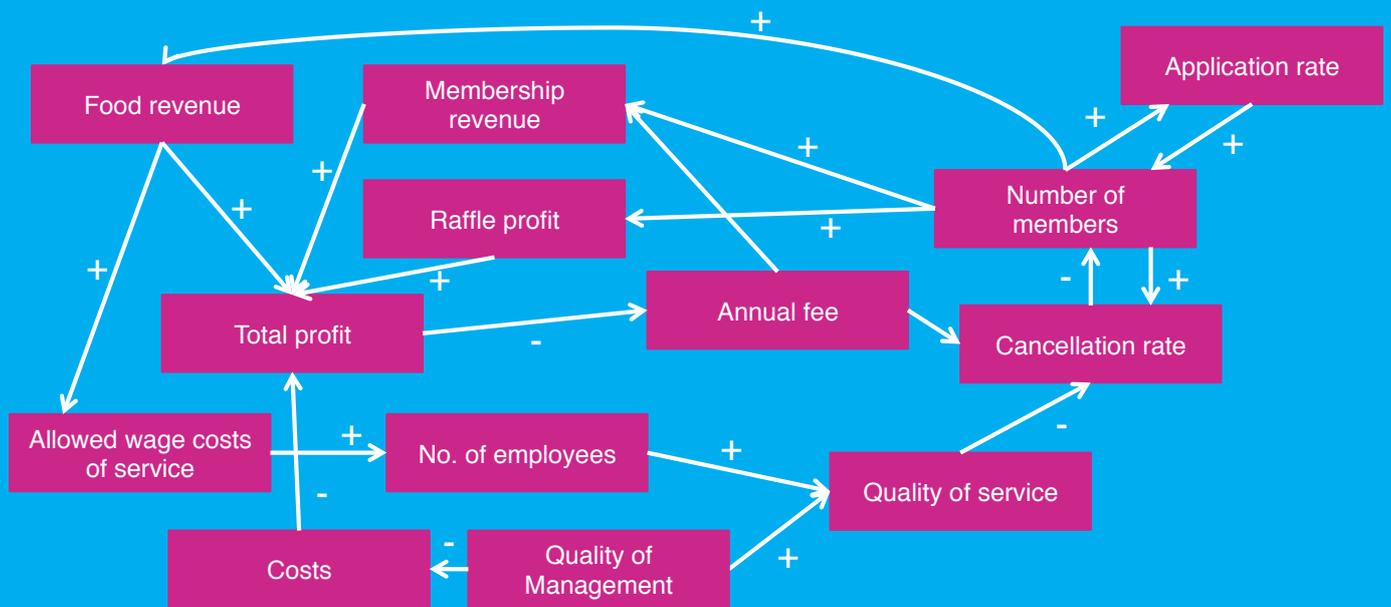
Task 7.1 Learning from failure - Causal Map

A causal map can help you to draw the right learnings from a recent failure. Understanding the causal relationship between the important circumstances makes you understand what went wrong and what you have to change in the future.

A). List all the important factors that where related to a recent failure:

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

Did you know that...
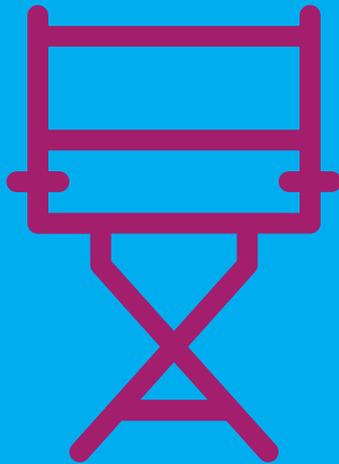
...Steven Spielberg was rejected by the University of Southern California School of Cinematic Arts multiple times before he won three Academy Awards?

B) Draw a causal map including the above listed factors

Did you know that...
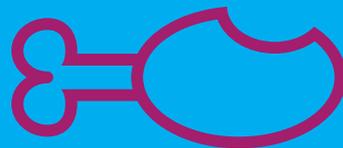
...Colonel Harland David Sanders
was fired from dozens of jobs before
founding KFC - one of the worlds best
known franchise brands?

C) Think about what you can learn from your failure. What would you do different next time?

Did you know that...
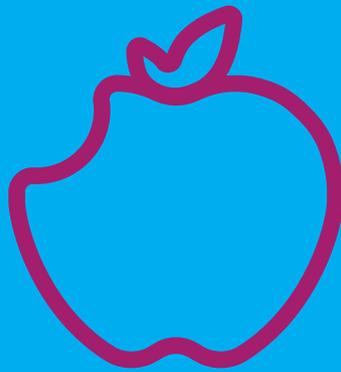
...Sir Isaac Newton failed miserably running the family farm after being pulled out of school by his mother? Later she realized that he was not a farmer at all and she let him finish his education.

Chapter 7.2 Learned helplessness theory

Definition of learned helplessness
Learned helplessness is a behaviour in which a person (or other organism) forced to endure aversive, painful or otherwise unpleasant stimuli, becomes unable or unwilling to avoid subsequent encounters with those stimuli, even if they are escapable. Presumably, the organism has leaned that it cannot control the situation and therefore does not take action to avoid the negative stimulus.

In other words:
Learned helplessness is a condition where you believe that not matter how hard you try, failure will result – and this is why you don't even try or give up very early. Failing actually can make you helpless if you draw the wrong learnings.

Learned helplessness was discovered in 1965 by psychologist Martin Seligman while he was studying the behaviour of dogs.

Watch the video about learned helplessness: https://youtu.be/Vx1dnPMPhl0

Studies of clinically depressed people show that when they fail they often just give in to defeat and stop trying. The average person will look for external forces to blame - depressed people will usually blame themselves and assume they are not good enough.

Signs of learned helplessness:
- you attribute failures to lack of ability rather than controllable causes such as insufficient effort or reliance on an inappropriate strategy.
- you attribute successes to external and uncontrollable causes rather than to their own ability or effort.
- you are following failure and make severe reductions in your estimates of future success probabilities.

Overcoming learned helplessness:
- Attribution retraining:
    - change your tendencies to attribute failure to lack of ability rather than to a remediable cause, such as insufficient effort or use of an inappropriate strategy
    - expose to a planned series of experiences, couched within an achievement context, in which modelling, socialization, practice, and feedback are used to:
        - concentrate on the task at hand rather than worry about failing
        - cope with failures by retracing your steps to find your mistake or by analysing the problem to find another approach
        - attribute your failures to insufficient effort, lack of information, or use of ineffective strategies rather than to lack of ability

- Efficacy training:
    - set goals prior to working on tasks (goals that are challenging but attainable, phrased in terms of specific performance standards & oriented toward immediate short-term outcomes
    - focus personal feedback on how current performance surpasses prior attainments rather than comparing with others
    - reward yourself on actual accomplishments (of milestones and whole tasks)

- Other strategies:
    - experience success regularly (by being sure you can do what you planned, and making sure that you know the criteria by which efforts will be evaluated)
    - try to get recognition for real effort, showing appreciation for progress, and projecting

Did you know that...

...R.H. Macy failed with a couple of businesses before he started Macy's and became Americas No.1 retailer with about 800 stores?

positive expectations
- emphasize personal causation in effort by planning and setting goals yourself, make choices, & use self-evaluation procedures to check your progress

Chapter 7.3 Perfectionism

Perfectionism is - if at all - very hard to achieve. This can be understood directly by looking at the definitions of perfectionism.

Perfectionism can be defined as
- state of being perfect (as freedom from fault or defect)
- state of being saintly
- exemplification of supreme excellence
- unsurpassable degree of accuracy

Following these definitions, we can easily see that a blind quest for perfectionism must directly lead to failure. Therefore we distinguish between two categories of perfectionism:

- Healthy perfectionism
  - Healthy perfectionism is a positive characteristic that drives high effort and accomplishment
  - Healthy perfectionists derive strong pleasure from their concentrated effort
  - Healthy perfectionists can adjust their work level as the situation requires
  - Healthy perfectionism can also be referred to as the pursuit of excellence

- Unhealthy perfectionism
  - strain compulsively toward impossible goals
  - set unrealistic standards for themselves
  - see mistakes as evidence of their own unworthiness
  - live in a constant state of anxiety about making mistakes

As seen in the chapter above, helplessness and pessimism can be learned through failure - if you draw the wrong learnings. But failing can be good. Failing can be productive. Failing can also be happy. We explored that failing is important for learning and personal growth. It is about the balance. If pessimism can be learned, optimism can be learned as well.

Watch the video about learned optimism: https://youtu.be/2hHNq45rEnU

Did you know that...
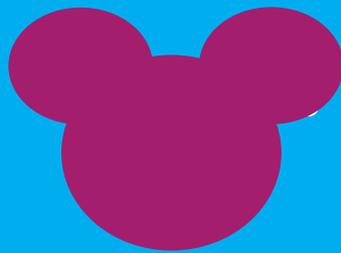
...Walt Disney failed with several busi-
nesses and got fired by a newspaper
because he lacked imagination and
had no good ideas?

🎓 Summary

You successfully finished the Value of Failure Course. In the 7 modules we took a deep look into the theory of failure. You understand how you attribute success and failure, how to plan right and detailed to prevent failure, you now know how to analyse risk and how to track and to asses them.

If it was not possible to prevent failing, you now understand how important failing is for learning and growing and how to cope with the bad emotions concerned with failing.

If you are interested in entrepreneurship or even think about running your own company, you might be interested to take the value of failure intense business course as well.

Additional information, literature and resources can be found on our website and our Pearltrees-Account:

⊖ www.valueoffailue.com

⊖ www.pearltrees.com/thevalueoffailure/

Did you know that...
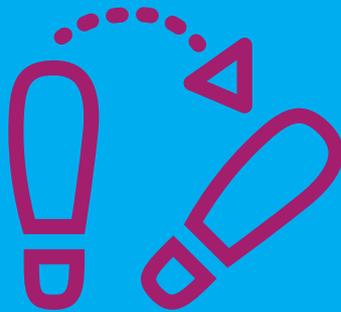
...Fred Astair has been judged as
follows after his first screen tests:
"Can't sing. Can't act. Slightly balding.
Can dance a little."

V Disclaimer

www.valueoffailure.com