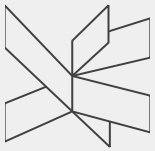
Bring ideas to life
VIA University College



SPR/FPR A21

Lesson 2-
Why & How Projects
Defining the project : Purpose VS Problem

Learning Goals Lesson 2

After this lesson you should know about

1. The outlines of the Course
2. Background and approach of lecturer
3. Why do projects? How to do Projects?
4. Purpose VS Problem

Agenda Lesson 2

1. Intro Course & Lecturer
2. The Basics:
3. What is a project? Why Projects? Why team work?
4. Service session: Am I following the correct course? + Company trip to Århus – FREE Transport + food
5. How projects at VIA are done
6. Presentations - home assignment
7. Next lesson

SPR/FPR Course Descriptions –See: https://en.via.dk/programmes/exchange

Following the course students will be able to:

1. Develop a project description and a problem definition
2. Handle problem analysis, idea generation and decision-making
3. Apply generic tools for project planning and execution
4. Develop a written report including structure, formal requirements, project documentation and process report
5. Work in a multicultural project group

SPR/FPR Course Descriptions –See: https://en.via.dk/programmes/exchange

Project work in groups carried out during 15 weeks of the semester.

Group Size SPR 4-5 students / Group Size FPR 3-4 students
The topic of the project will be chosen by the students, reflecting their area of interest, study focus + eventual requirements from home university

Total expected workload per student is 10 or 15 ECTS.
(1 ECTS is equivalent to 27,5 hours)

SPR = Semester Project = 10 ECTS (275 hours/ student)
FPR = Final Project = 15 ECTS (413 hours/ student)

SPR/FPR - GRADING

SPR

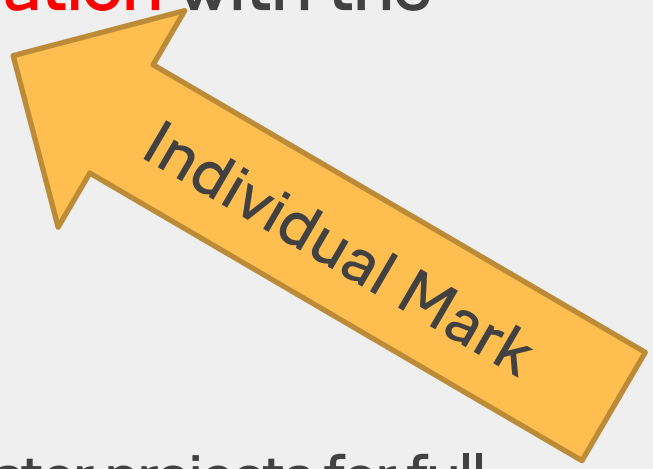
The level of grading will correspond to the level of 4th semester projects for full degree students

FPR

The level of grading will correspond to the level of 7th semester projects for full degree students

Examination

Group presentation followed by an individual examination with the presence of the whole group.



Duration presentation: 20 -30 minutes (SPR/FPR)

Duration questioning: 15 -45 (SPR/FPR) minutes pr student

Grading:
SPR: The level of grading will correspond to the level of 4th semester projects for full degree students.

FPR: The level of grading will correspond to the level of 7th semester projects for full degree students.

Student Responsibilities and Retaliation options

Responsibilities:

Code of Conduct:

Be on time
Lecturers and classmates rely on you and class often starts with important information.

Be active
Take part in discussions and exercises. Which means no Social Media, gaming etc. in class - it disturbs others and takes away your own focus.

Be prepared
Preparation is an essential part of learning. If you are not prepared, you will not be able to participate effectively in the class.

Stay focused
Start the class with the computer closed until the lecturer says it is okay to use computers. Leave your phone and devices in your bag on silent mode

Student Responsibilities and Retaliation options

Retaliation options:

Basically none!

- Attendance is not mandatory
- If absent: More important to inform your group mates than the lecturer

However: the "Shit in – Shit out" rules stands

Background

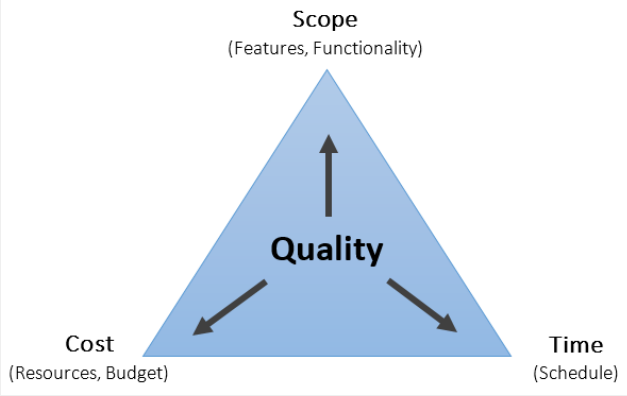

Håndværkerskruen
- kun for professionelle
Nyhed
Multifunktion - Syrefast rustfrit stål - A4
- baseret på den nyeste befæstelsesteknologi
Carl F

Career

Career overview

Title	*Company*
R&D Manager	Viking Life Saving Equipment A/S
Product Manager	Carl F A/S
Product Design Coordinator	Thorn Lighting
Development Engineer	Thorn & Jakobsson A / S.
Project Manager	Hans Agne Jakobsson A/S
Design Engineer	Terma Elektronik A/S
Project Manager/ Design Engineer	Insign R&D A/S

What is a project?



A project involves something not done before

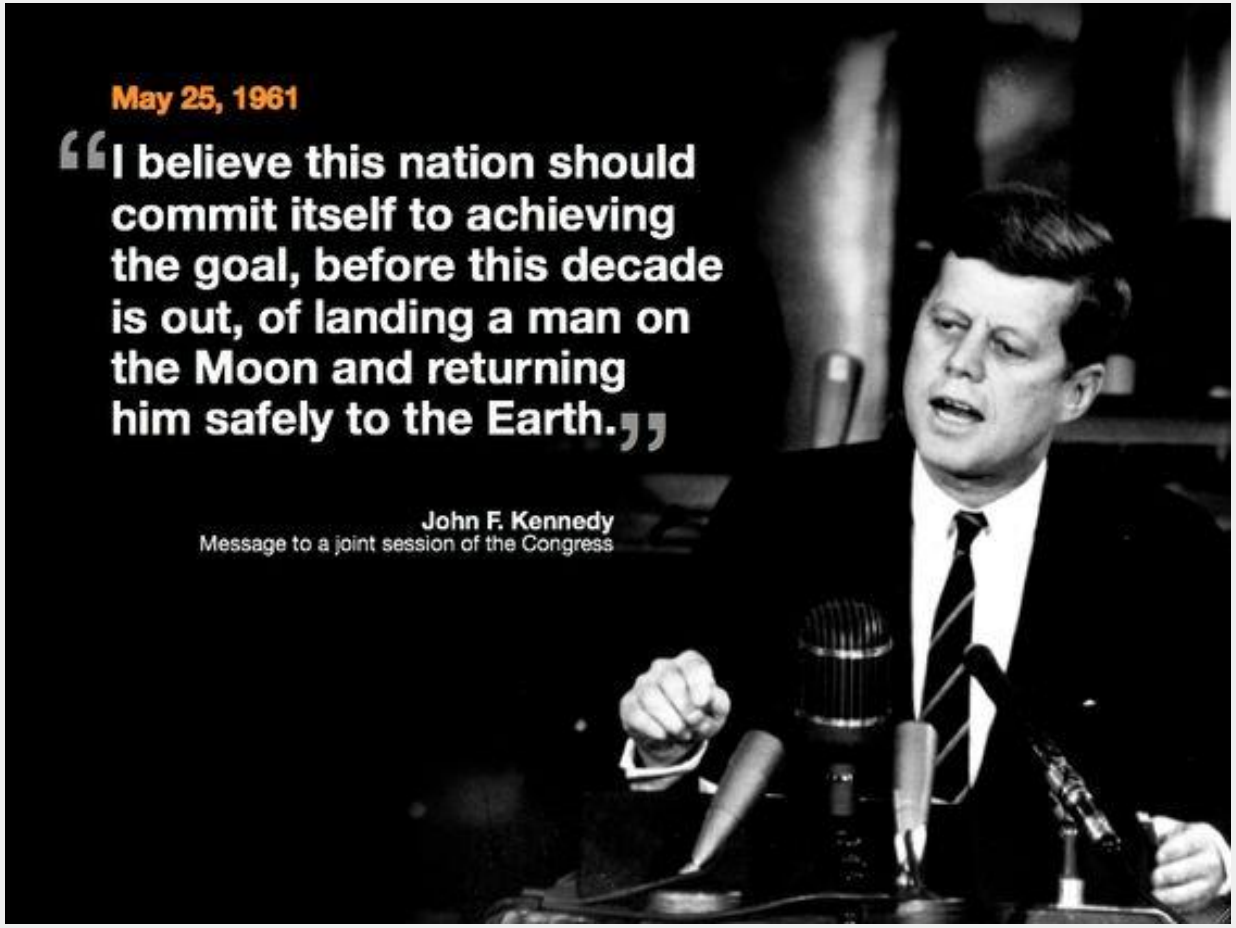
– thus projects have uncertainties and carries risks

All projects must have defined:

What to deliver (Performance specification)
When to deliver (deadline)
At what cost (e.g. labour, equipment and materials)

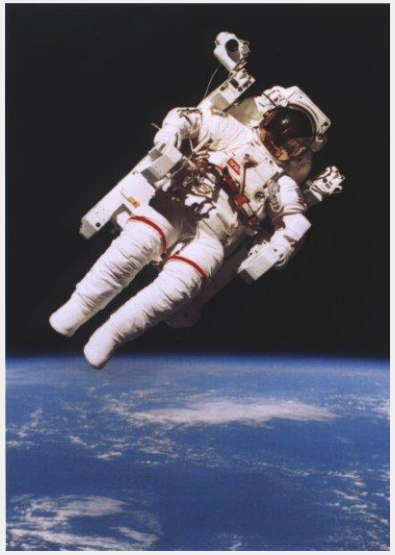
Is this a well defined project?

Source: https://www.pinterest.dk/pin/369998925605772001/



Working in projects in the real world
Project **characteristics**

- Task/problem oriented
- Complex
- Character of development
- Cross organizational
- Multi-disciplinary
- Unique
- Within a particular timeframe
- Always contains uncertainty and therefore risk



Why projects? Working in projects in the real world

- Flexible and effective
- Works across organizational boundaries
- Better chance of reaching target
- On time, on budget, on quality

Groups or Teams

See: https://www.bizjournals.com/bizjournals/how-to/growth-strategies/2013/06/the-difference-between-a-group-and-a.html

Groups VS Teams

A group is a collection of individuals who coordinate their individual effor

On

tea

Members of t

each other. This mutual co

which creates a strong bond and a stro

Team members care about the end product
(and each other)
-
Group members care about their own work

WHY TEAMS?

We all want to participate and contribute in meaningful social environments!

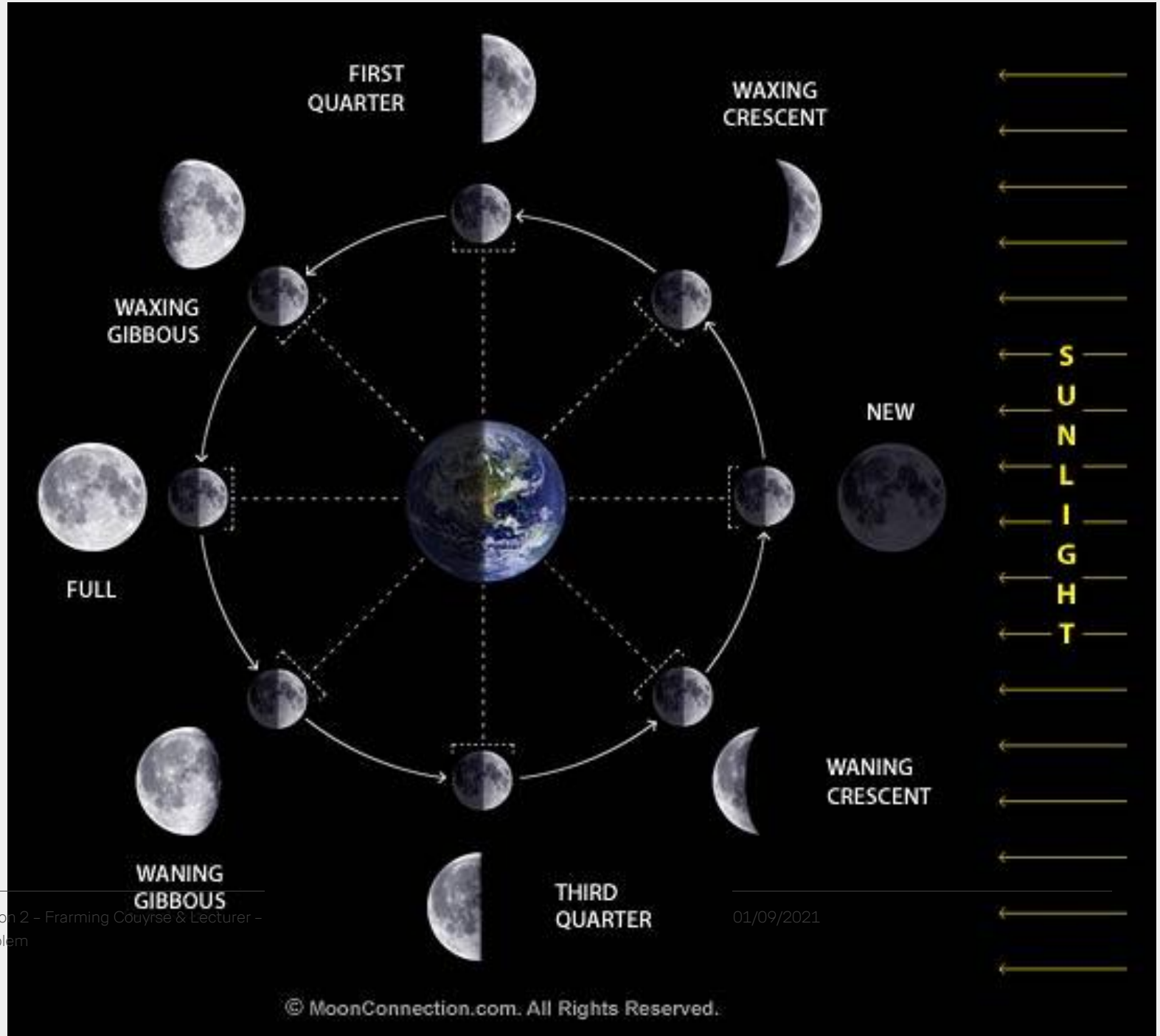
WHY TEAMS?

KILL (YOUR) DELUSIONS
The world is not flat!

WHY TEAMS?

§1

Challenge each other - The world is not flat!


FIRST QUARTER
WAXING CRESCENT
WAXING GIBBOUS
NEW
FULL
WANING CRESCENT
WANING GIBBOUS
THIRD QUARTER
SUNLIGHT
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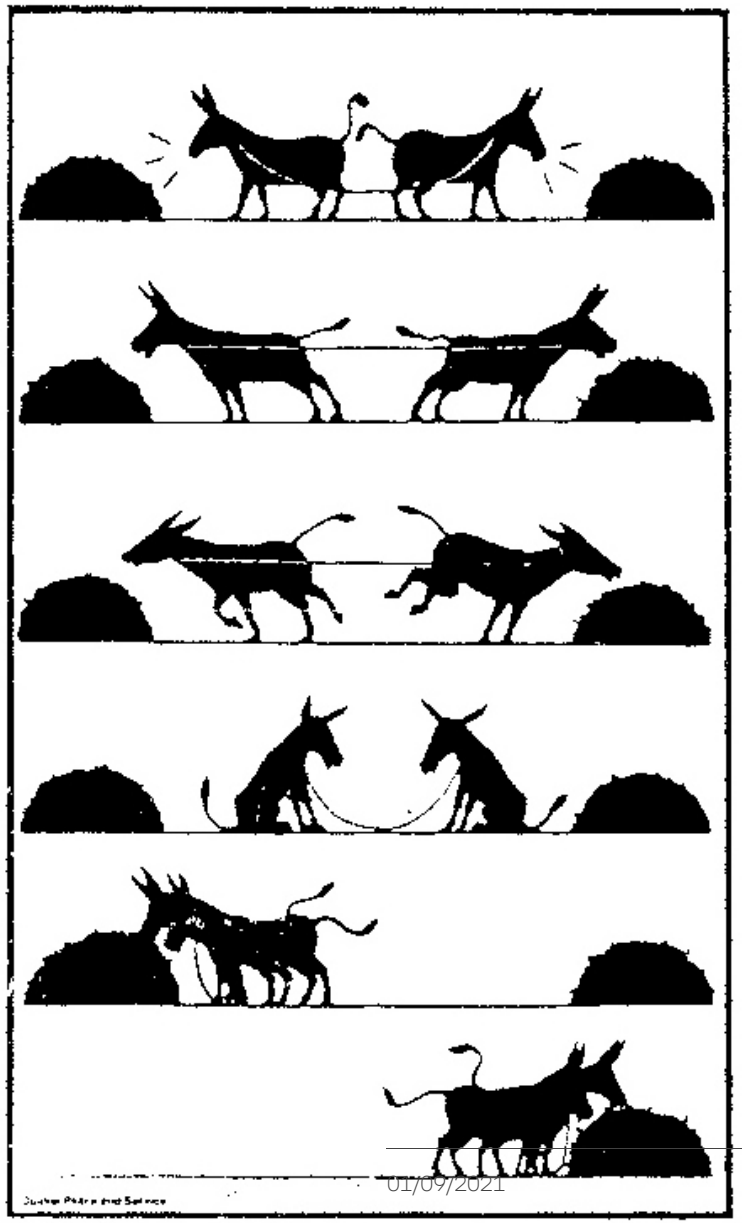
WHY TEAMS?

1 + 1 = 3 = Succes

1 + 1 = (-1) = Failure



WHY TEAMS?

TRUE OR FALSE?
Right = True Left = False

The total cost of a pingpong bat and a ball is 11€.

The bat costs 10€ more than the ball.

The cost of the ball is 1 €?

WHY TEAMS?

TRUE OR FALSE?
Right = True Left = False

The total cost of a pingpong bat and a ball is 11€.

The bat cost`s 10€ more than the ball.

The cost of the ball is 1 €?

Solution:

bAt + Ball = 11 AND bAt = Ball + 10

A = 11 – B AND A = B + 10

11-B = B + 10

therefore 1 = 2 B

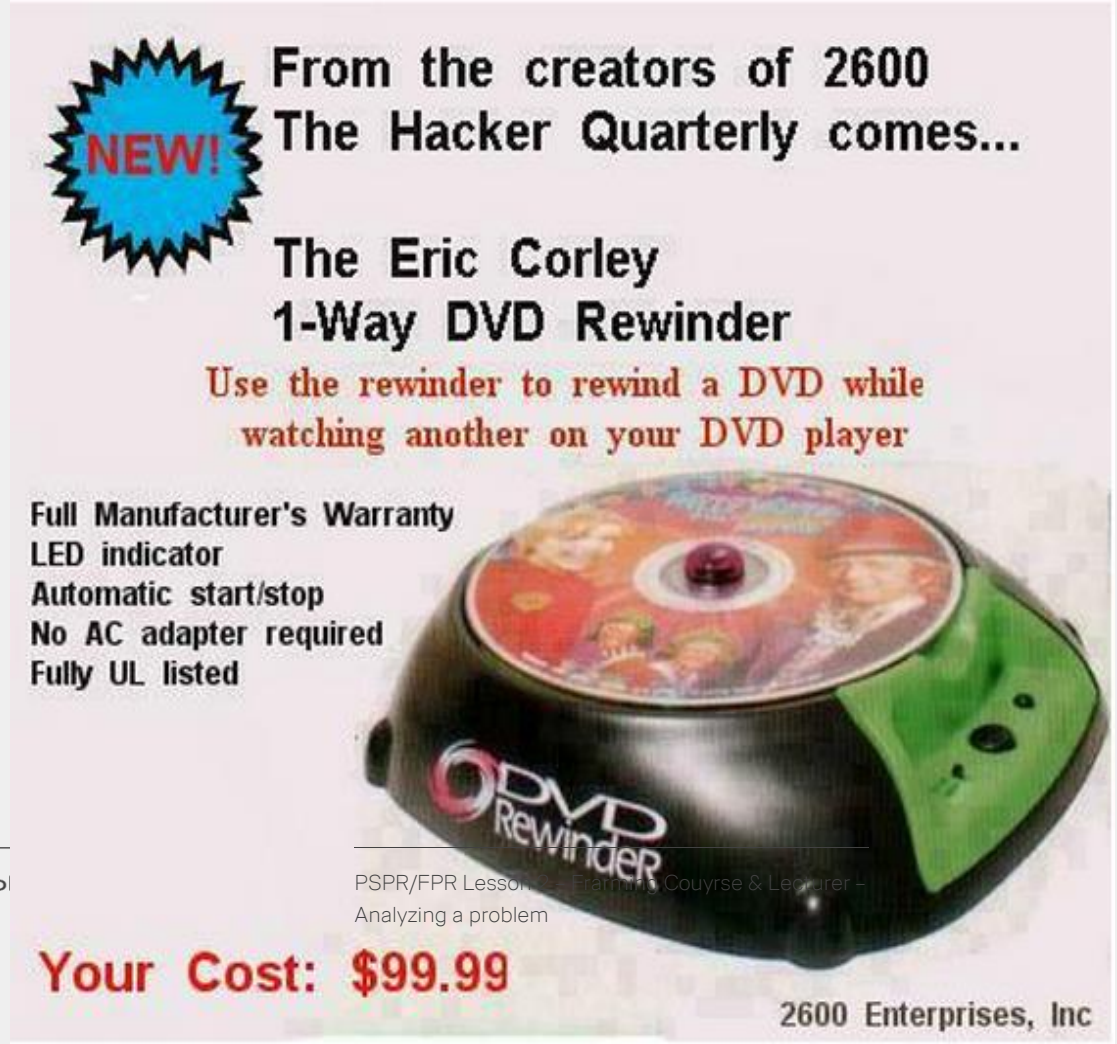
equals B = 1/2

§2

Problem oriented means solution oriented

2. An ingenious solution to the wrong problem is useless.

An ingenious solution to the wrong problem is useless.



HOW PROJECTS

Problem oriented means solution oriented

An ingenious solution not up & running is useless.

An ingenious solution not up & running is useless.

HOW PROJECTS?

Problem oriented means solution oriented

An outdated ingenious solution is useless.

An outdated ingenious solution is useless.

Source:http://www.videoconverterfactory.com/news/nokia-n97-vs-iphone.html

SERVICE SESSION

Everyone has access to ENG-SPRPM-A21?

In doubt about SPR or FPR?

Meaning of life?

SERVICE SESSION

Rambøll Student day 2021

RAMBØLL

Kickstart your career

STUDENT DAY 2021

13 September 2021 from 3:30 - 7 pm
at Olof Palmes Allé 22, Aarhus

INVITING
BRIGHT MINDS

Free bus transfer from Via University, Horsens

Kickstart your career

COME TO STUDENT DAY

13 September 2021 from 3:30 - 7 pm
at Olof Palmes Allé 22, Aarhus

Programme

15.30	Registration
15.45	Welcome to Ramboll
16.05	We work for sustainable change
16.30	Breakout-session: Choose a session that fits your field of study Engineering, Natural Science or Management Consulting
17.15	The secret recipe: How to get the job
17.25	Winners of Ramboll Scholarship 2021
17.35	Find your Ramboll match
17.45	The future is yours!
17.50	Networking, food, and drinks
19.00	Goodbye

When and where

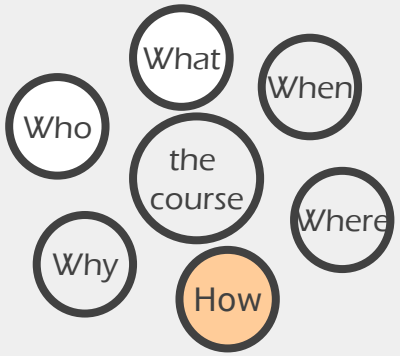
Student Day in Aarhus

13 September 2021, 15.30 – 19.00 pm
at Ramboll's office in Aarhus,
Olof Palmes Allé 22

We'll be serving food and drinks, and provide bus transportation from Aalborg, Esbjerg, Horsens and Lyngby.

Sign up no later than 9 September at www.ramboll.dk/studentday

Setting expectations (How)
The project process /phases



Project start

Problem analysis

Project Description

Problem solving \ Project implementation/Test

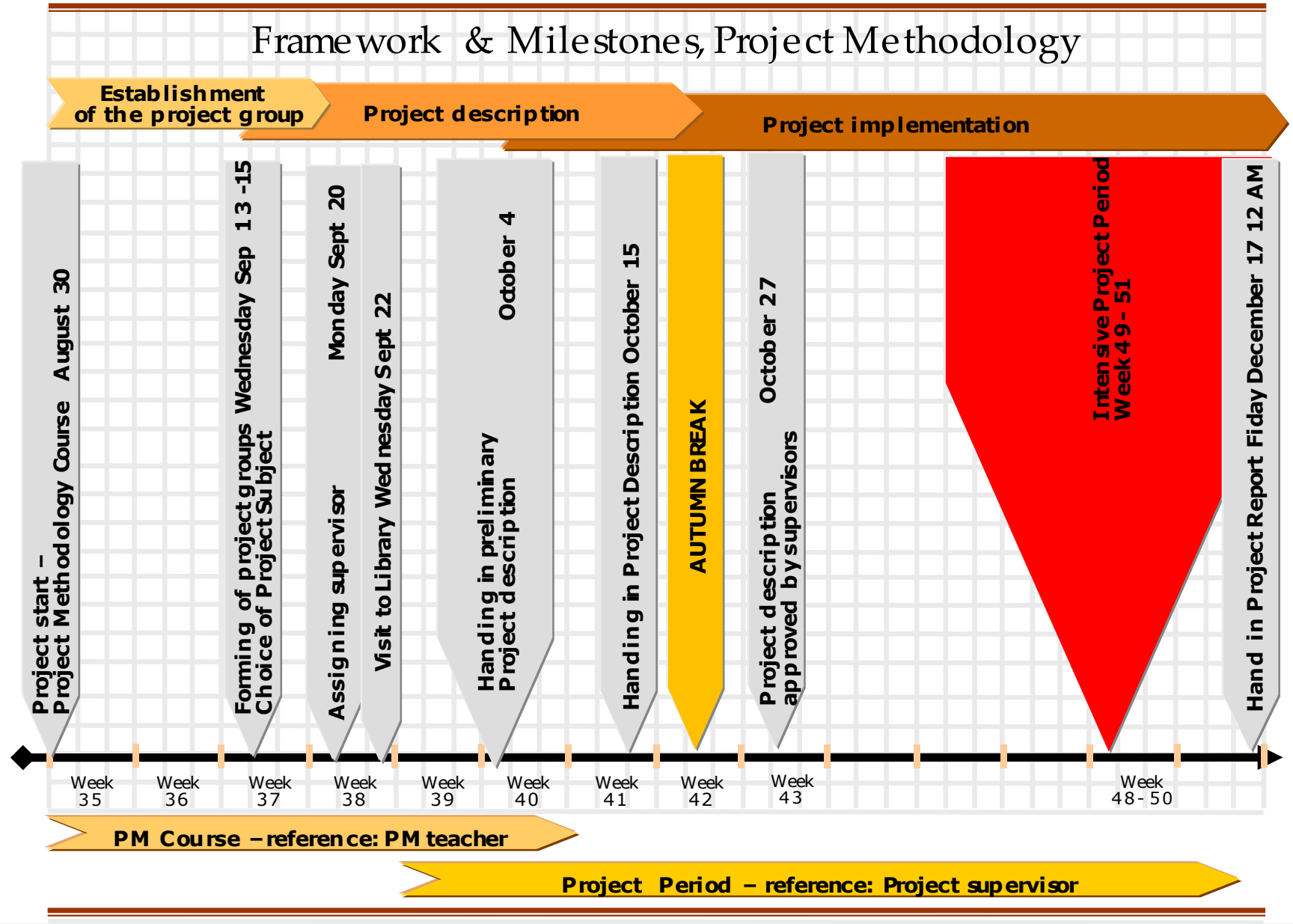
Conclusion and report

Evaluation

Milestones/deadlines

Time

Setting expectations (when) -Important **dates PM A21**



From Project Guidance:

https://studienet.viadk/projects/Engineering__project_methodology/General/Support%20documents/2018%20Doing%20projects%20at%20VIA%20Engineering.pdf

The purpose of doing projects at VIA Engineering College is therefore to teach the students about:

- What to do
- How to do it (Alone and as a team member)
- How to document it
- But also: How to fit into -and exploit- a regime given by others

Project description

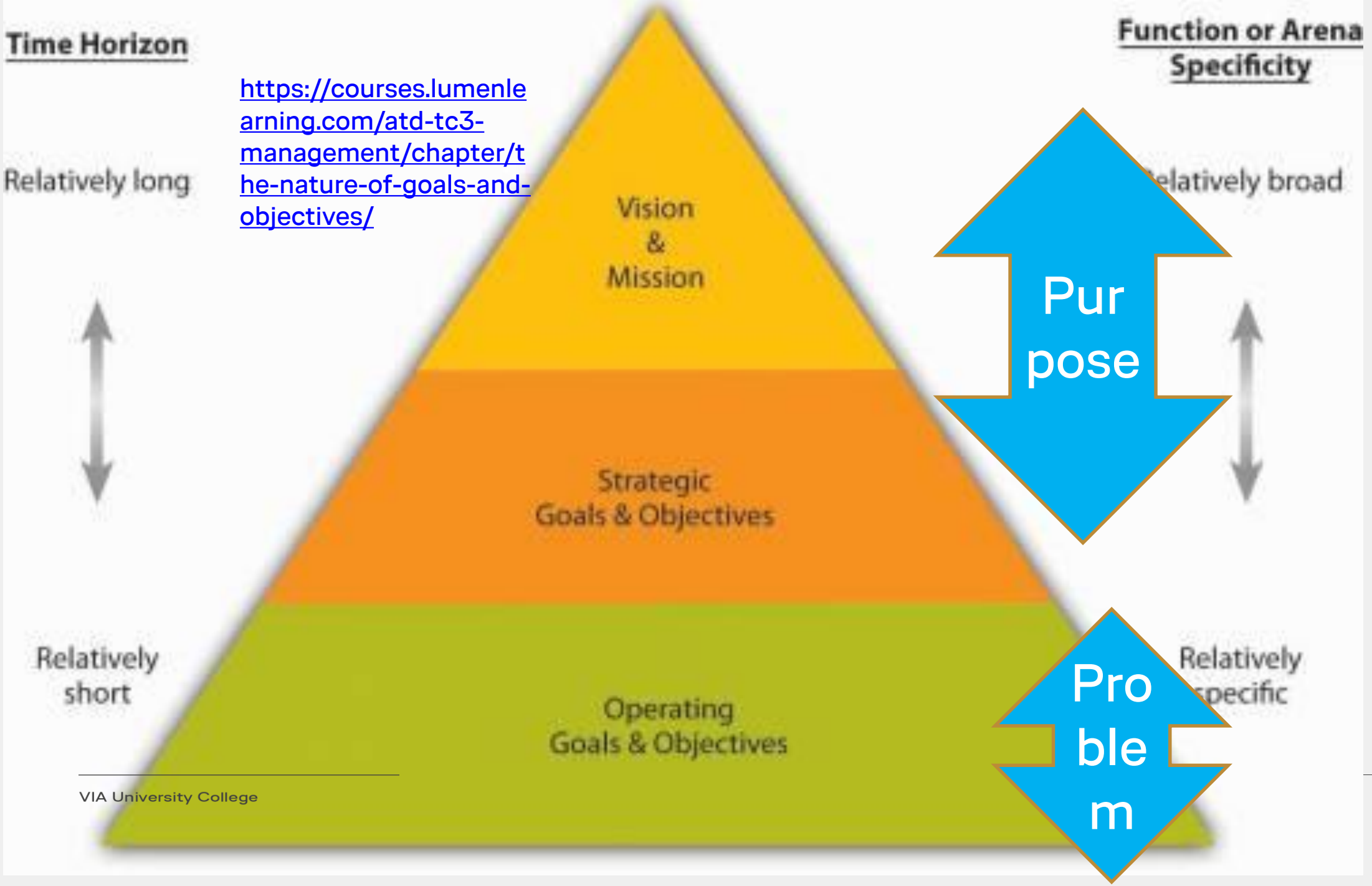
1. Background description
2. Purpose
3. Problem statement
    - Requirement Specification
    - Sub problems
4. Delimitation
5. Choice of model and method, procedure
6. Time schedule /plan
7. Risk Assessment
8. Sources, references and literature

PM - ALL - Lesson 4-5

2. Purpose

- What is the purpose of the project?
- The purpose is **why** you want to achieve something – not what you want to achieve.

The purpose is fundamental to the problem formulation
and must be formulated so that it Frames the project outcome possibilities.
Make it clear and brief. Normally the purpose can be stated in very few lines.
If working for a company The purpose must always be in alignment with the Mission and strategic goals of the company


Time Horizon
Function or Arena Specificity
https://courses.lumenlearning.com/atd-tc3-management/chapter/the-nature-of-goals-and-objectives/
Relatively long
elatively broad
Vision & Mission
Strategic Goals & Objectives
Operating Goals & Objectives
Pur pose
Pro ble m
Relatively short
Relatively specific

What was the purpose in the Egg Drop Assignment?

You are trapped on a deserted Island and concerned about food supplies for the upcoming winter.

You are in a possession of some chickens but the only rooster escaped twenty days ago with its favourite chicken and both has just been observed attacked by a fox – and are now dead.

You have localized their “hide away” nest on a cliff hard to access, containing an egg - presumably fertile, and hopefully containing a rooster. Climbing down with the egg is considered to risky and time is limited before the egg get cold.

Your task is therefore to make a device that can protect an egg falling approximately 7,5 meters without breaking.

What was the purpose of the Egg Drop Assignment?

You are trapped on a deserted Island and concerned about food supplies for the upcoming winter.

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Purpose..... continued

- What is the purpose of the following products:

Lego Corp. Statement:

Mission:
'Inspire and develop the builders of tomorrow'
Our ultimate purpose is to inspire and develop children to think creatively, reason systematically and release their potential to shape their own future - experiencing the endless human possibility.

Vision:
'Inventing the future of play'
We want to pioneer new ways of playing, play materials and the business models of play - leveraging globalisation and digitalisation...it is not just about products, it is about realising the human possibility.


Grundfos Pumps
Ashworth supply the full range
of pumps and accessories
GRUNDFOS

Grundfos Corporation Statement

Grundfos is a global leader in advanced pump solutions and a trendsetter in water technology. We contribute to global sustainability by pioneering technologies that improve quality of life for people and care for the planet

Purpose Suggestion:

Sustainable water supply for people

Purpose:


Cadbury
TOBLERONE
Milka
Cadbury
creme egg
CÔTE D'OR
GREEN & BLACK'S
ORGANIC
Freia
LU
Marabou
Flake
Lacta
Suchard
TUC
FONTANEDA
OREO
belVita
PRINCE
MIKADO
Chiclets
CRACOTTE
SAIWA
OURSON
TRIUNFO
RITZ
Trident
TREBOR
HOLLYWOOD
Chewing Gum
STIMOROL
HALLS
V6
Krema
CARAMBAR
Bubbaloo
Maynards
Bassett's
JACOBS
GEVALIA
Jacques VABRE
MALABAR
Kenco
Maxwell House
TASSIMO
dairylea
PHILADELPHIA
GRAND' MERE
CARTE NOIRE
Caffè HAG
EL CASERIO
Miracel Whip
Royal
Sottilette
SIMMENTHAL
Mirácoli

Kraft Food's Mission Statement

- *Helping People Around the World to Eat & Live Better*

- Kraft's mission is to provide fun, healthy food for people to enjoy. Their mission statement informs us that they care about their consumers. Their values are innovation, quality, safety, respect, integrity, and openness. They strive as a company to communicate with the world reassuring them they're a trusted company with their products.

Background - Purpose -Problem:

Background: Setting the stage

Purpose:
Why something needs to be solved

Problem:
What to solve

Use the purpose as guidance for validating the value of your solution to the problem throughout execution of the project!

Problem statement

- The problem statement must consist of one - and only one - overall problem statement.
- The problem statement must be described in a manner that it can form the basis for a product requirement specification
- Following the requirement specification, a group of sub- and sub-sub problems can be defined and attached. In this way, the problem statement defines all the (unresolved) problems that need to be addressed in order to obtain a useable solution.

The Alfa Romeo - Tonale

https://www.caranddriver.com/alfa-romeo/tonale

Home work for Monday – September 4´th

Individually: read:

1. Watch the two PowerPoint Presentations with sound uploaded on ItsLearning
2. Read guidelines in Project Guidance: Semester & Bachelor Projects (https://studienet.via.dk/projects/Engineering__project_methodology/General/Guidelines/_Semester%20and%20Bacholor%20Projects%20-%20VIA%20Engineering%20Guidelines.pdf)

3. Read guidelines in Project Guidance: APPENDIX 1 Project Description https://studienet.via.dk/projects/Engineering__project_methodology/General/Guidelines/Appendix%201.%20Project%20Description%20-%20VIA%20Engineering%20Guidelines.pdf)

Define three good and three bad things with EACH document

The Alfa Romeo - Tonale

https://www.caranddriver.com/alfa-romeo/tonale

In groups of 4 (different from last time):

You are working in the Front End

Development at Alfa Romeo and have just completed the Tonale

Define Background – purpose and problem for your new Alfa Romeo Development project. Make a One slider and 30 SECOND PITCH!