IDEA TO INNOVATION – INNOVATION TO PRODUCT

ITP Process @ E-T-A → Idea to Profit

Ralf Dietrich // 29.09.2024

ENGINEERING TECHNOLOGY

AGENDA

1 Introduction ITP Process

2 Value Proposition Design

3 Early buy-in, Co-creation

4 Fast ramp-up after market introduction

5 Examples

6 Summary

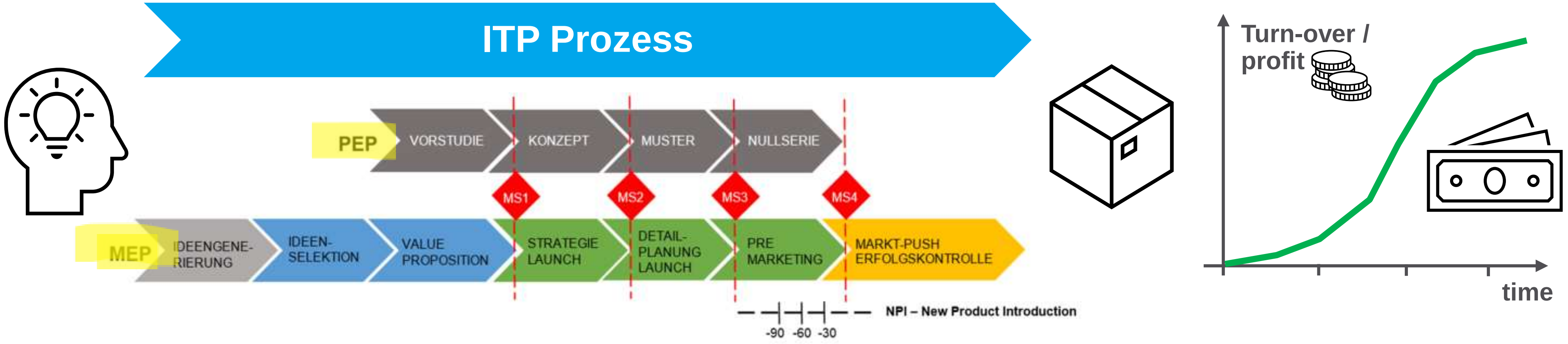
01

INTRODUCTION ITP PROCESS

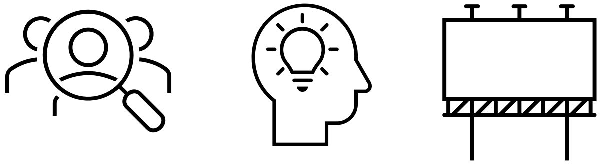
ENGINEERING TECHNOLOGY

ITP PROCESS

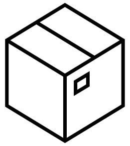
Process overview



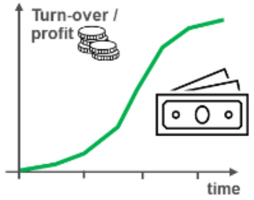
MEP → Market Development Process



PEP → Product Development Process

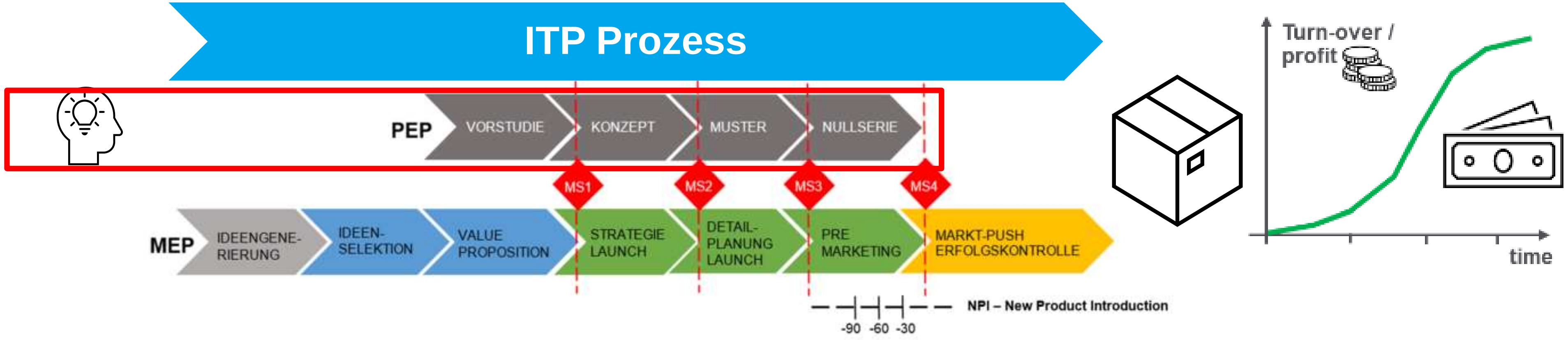


ITP → Idea to Profit Process, includes both, the MEP and the PEP



ITP PROCESS

Technology Push versus Market Pull 1 / 2



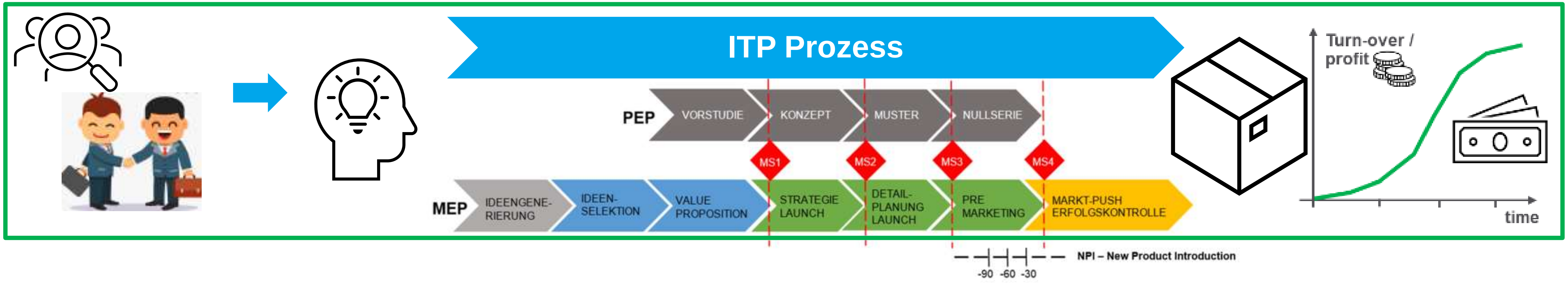
Technology Push → **<u>we</u>** have a great Idea and are looking for potential customers which have a certain problem

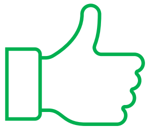
We have a solution and searching for the one with the problem!

→ interesting, possible approach, but not the usual one!

ITP PROCESS

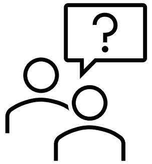
Technology Push versus Market Pull 2 / 2





Lead Customer approach → Technology Leader, main driver in its industry, to create for us with his engagement a **market pull**

Market Pull → we have **a large group of pot. customers**, which have all the same problem and we have an Idea how to solve this!

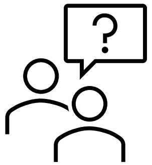


Customer specific project → we have a **single large customer**, who wants a specific product development so solve an issue

We understand a problem and provide a solution!

LEAD CUSTOMER APPROACH

Our approach to the market with ITP 1



1. Large Single Customer = LEAD Customer / Technology-push

- A single large customer with high potential **(smaller customers are interesting but will not provide the pull!)**
- This customer is looking for technology or good partner
- Is a “beacon” in its industry, so that in its industry segment or market segment he is looked at
- Creates a so-called **market pull effect** in his industry because others follow him!!!

2. Market Pull Effekt, due to the need for

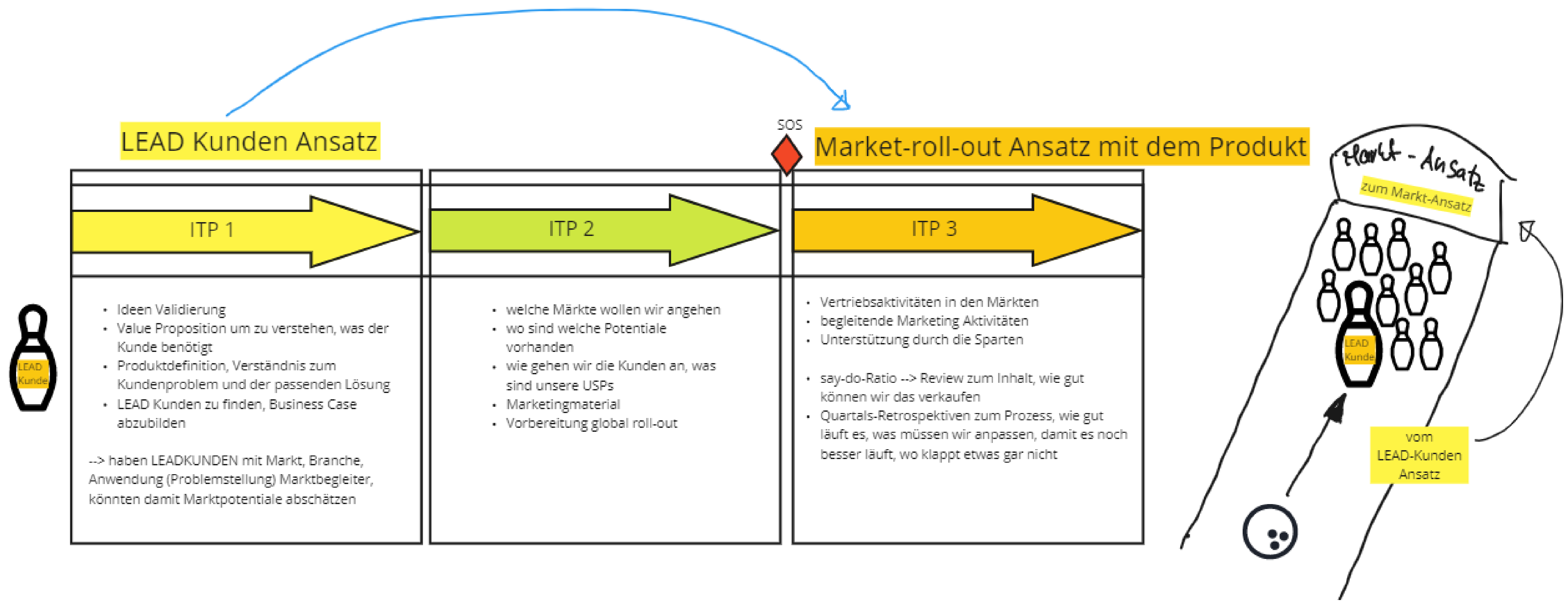
- **Many customers in the same industry segment who follow the example**
- From this, the possible market potential in this segment for ITP1 / ITP3 can also be derived

3. Technology Push, we will further support our LEAD Customer

with high-quality technology and continue to set standards in the industry

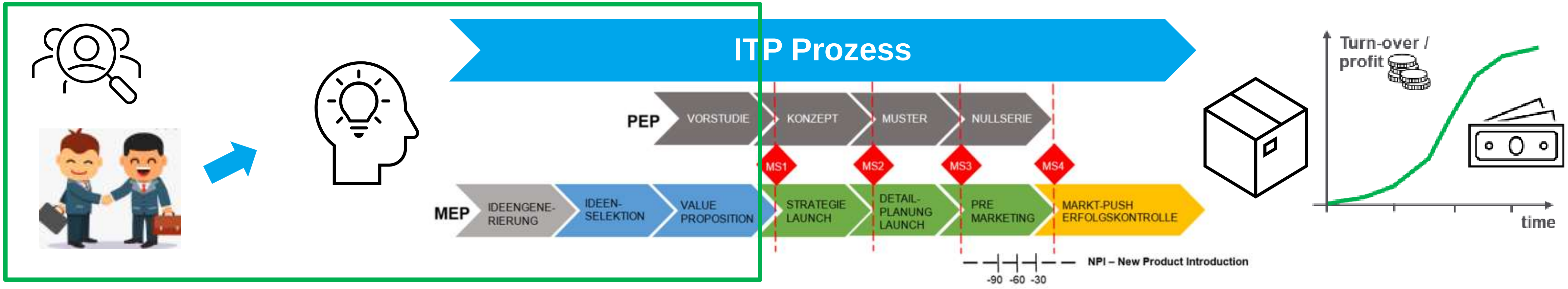
LEAD CUSTOMER APPROACH

Bowling Alley – why do we favour the LEAD Customer approach?



ITP PROCESS

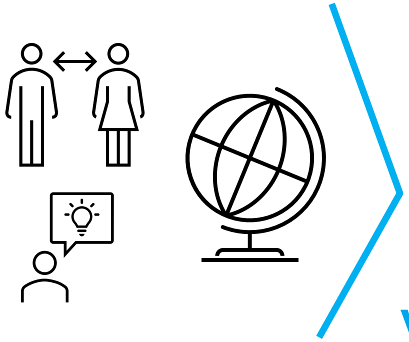
Market pull and idea validation 2 / 3

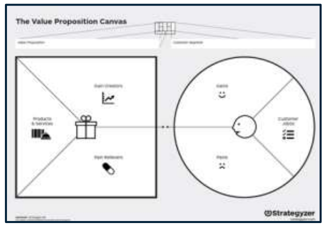


Market Pull:

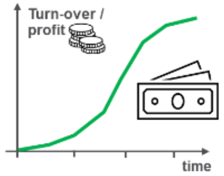
- Understand the customers, **need to interview**
- Consolidate information, **create Hypothesis**
- **Validate Hypothesis**, Product idea in the market

→ **Create valid Product idea**, **solid business case**





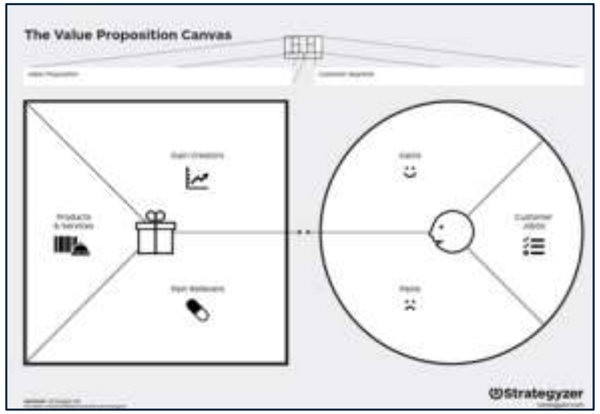
Value Proposition

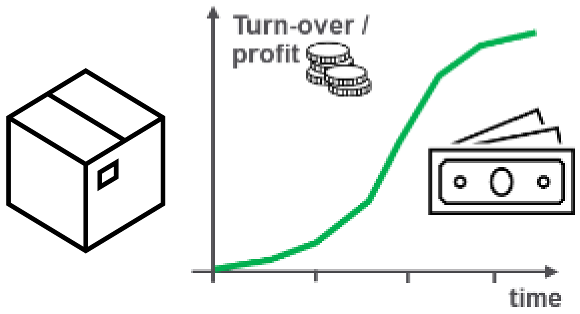


ITP PROCESS

Market pull and idea validation 3 / 3

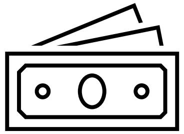
Value Proposition





Value Proposition:

- Understand the customers, **need to interview the customer to understand the <u>VALUE</u> / <u>BENEFIT</u> we create for him / them!**
- work based on **Hypothesis,** create an idea
- **Validate Hypothesis**, Product idea in the market
- **Reduce risk**, try to get as certain / solid as possible



→ **Create** valid Product idea, **solid business case**

→ **We want to spend money, need to justify our approach!**

ITP PROCESS

Introduktion summary

- **ITP Process** describes our way from an idea to a profitable product
- We prefer the **LEAD Customer approach for a market pull or single large customer** approach, understand customer pains and **provide solution for a broad market**
- We will invest money in any new product development, we want to **verify the ideas thoroughly to make sure, the business case is valid**
- **An excellent global product launch** should support us in **a quick ramp-up** in our sales figures to have a **good return on sales!**

02

VALUE PROPOSITION DESIGN

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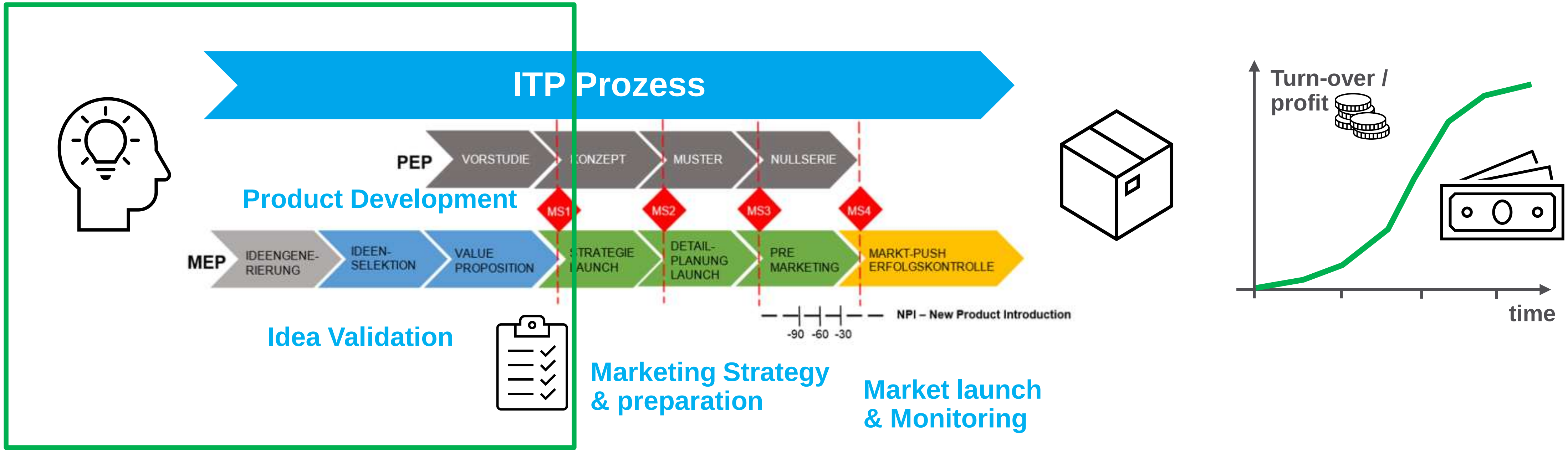
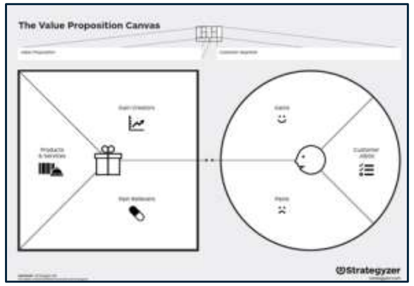
VALUE PROPOSITION DESIGN

Important part in the MEP 1



To understand Value Proposition Design better, we look at the MEP,

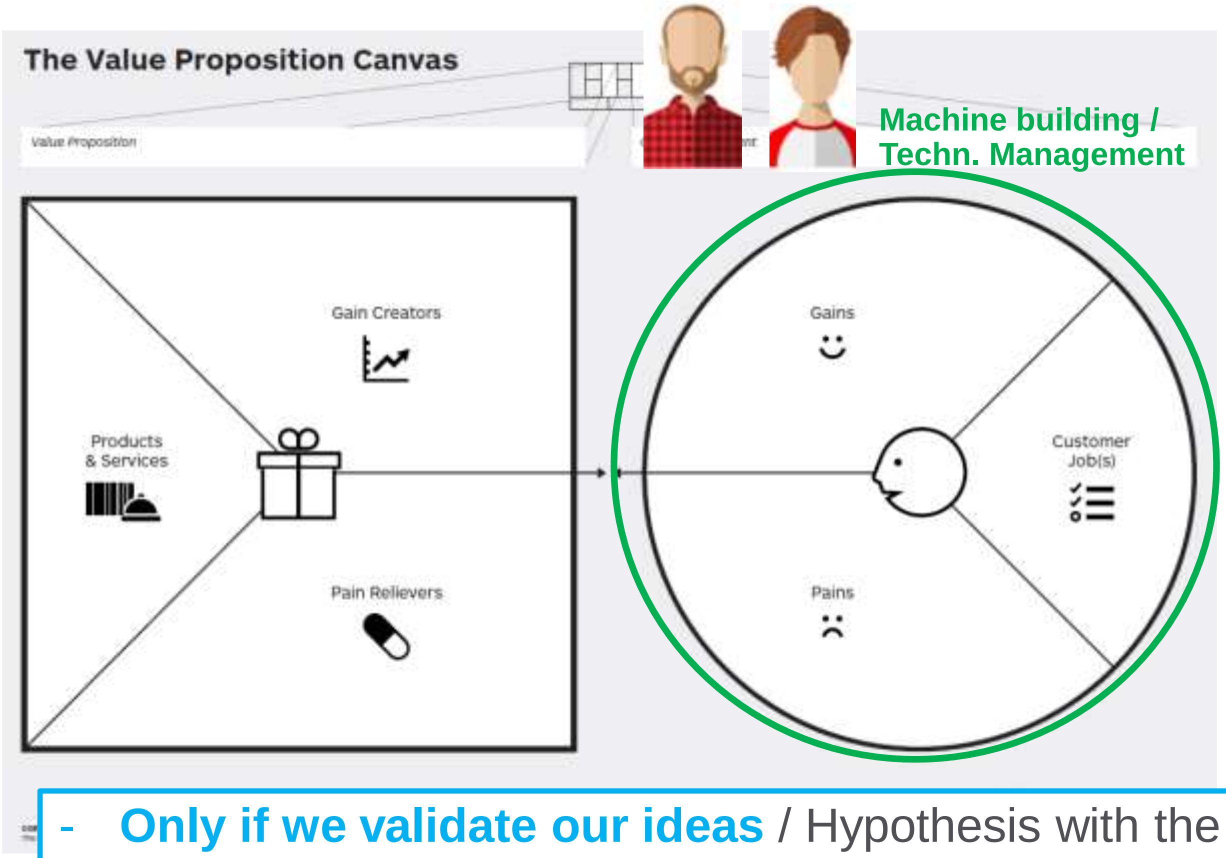
→ MEP 1: Idea Validation



Value Proposition Design, our favoured method to validate ideas in the market

VALUE PROPOSITION DESIGN

Validation of ideas, customer in the centre of our approach



It is all about understanding the customer:

- If we have a product idea, we **create a Hypothesis** about a **certain customer segment**, maybe even **special stakeholders** within a segment

- We **try to understand them from their perspective**, understand their pains, gains and jobs they want to achieve

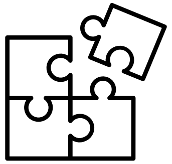
- To be sure we are right, we **need to interview them** and we need to get true customer feedback based on our Hypothesis

- **Only if we validate our ideas** / Hypothesis with the customer, we can be certain if we are correct or if we are wrong!

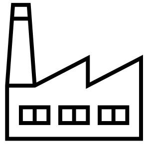
VALUE PROPOSITION DESIGN

Customer specific segment important, stakeholder to be defined

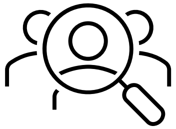
- We **focus on a certain customer segment**, a specific area in a certain industry



- Choose **companies within that segment**, create profile where we believe they could have the same request, same issue, same need



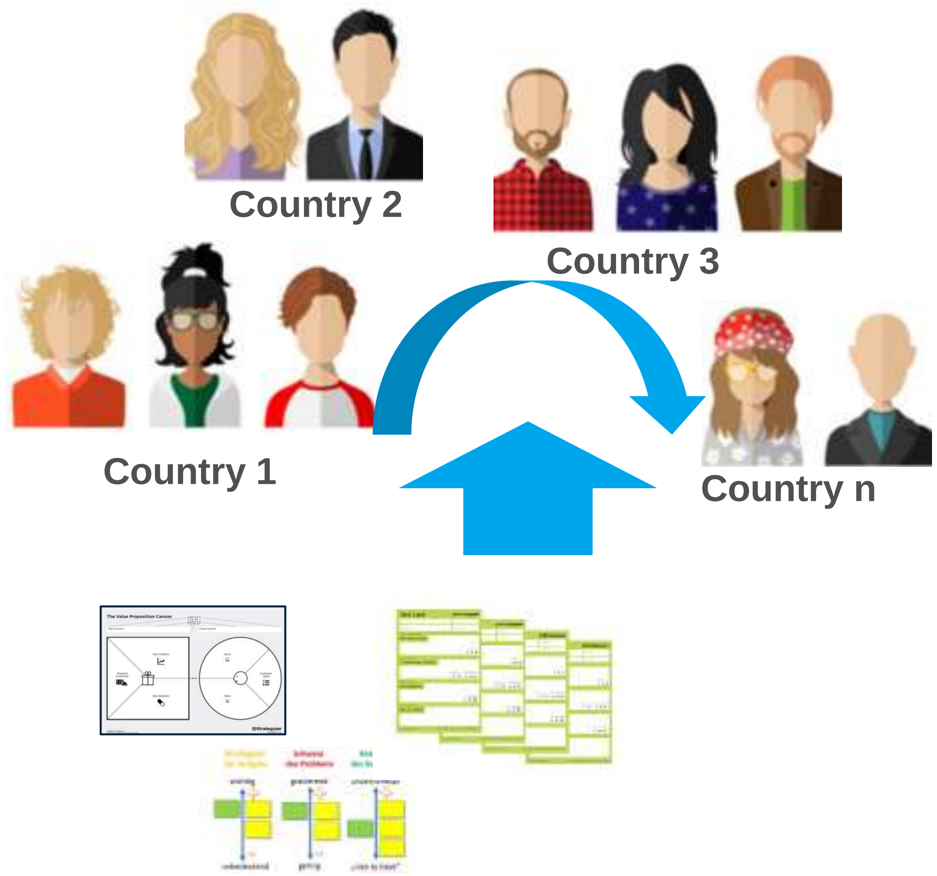
- Within that company we **specify the stakeholder**, we want to talk with. It should be within all companies the same stakeholder group, which we want to approach.



- **Based on the customer segment, companies, specific stakeholders, we than built our hypothesis about pains, gains and jobs they relate to**.

VALUE PROPOSITION DESIGN

Broad approach for good feedback



- After we **defined our customer profiles** very precisely, determined the stakeholders we want to interview

- We **created our hypothesis how to provide value** for those customers

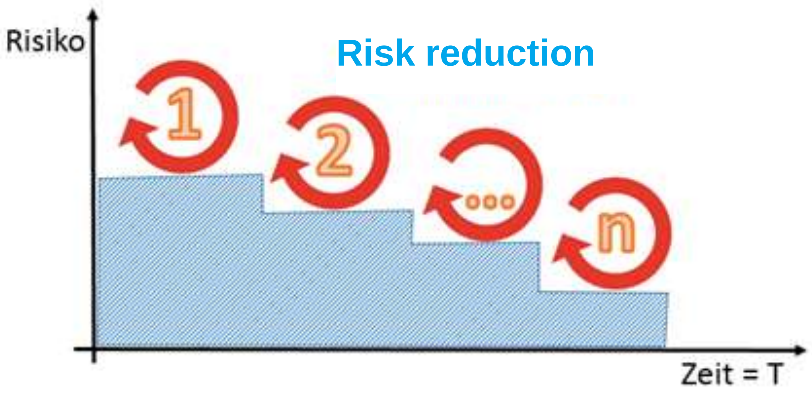
- We now need to **test the product-market** fit by **interviewing** those **stakeholders** in the related companies **to achieve good**, valid, **feedback across** the industry for us.

VALUE PROPOSITION DESIGN

Validation of our ideas and hypthesis is important to understand if we are right!

- **We want to have good market feedback** based on our hypothesis we created and the customer interviews we conducted

- Since it is an idea we have, **we want to be sure the customers see a value** in it for them and are willing to purchase the product once available

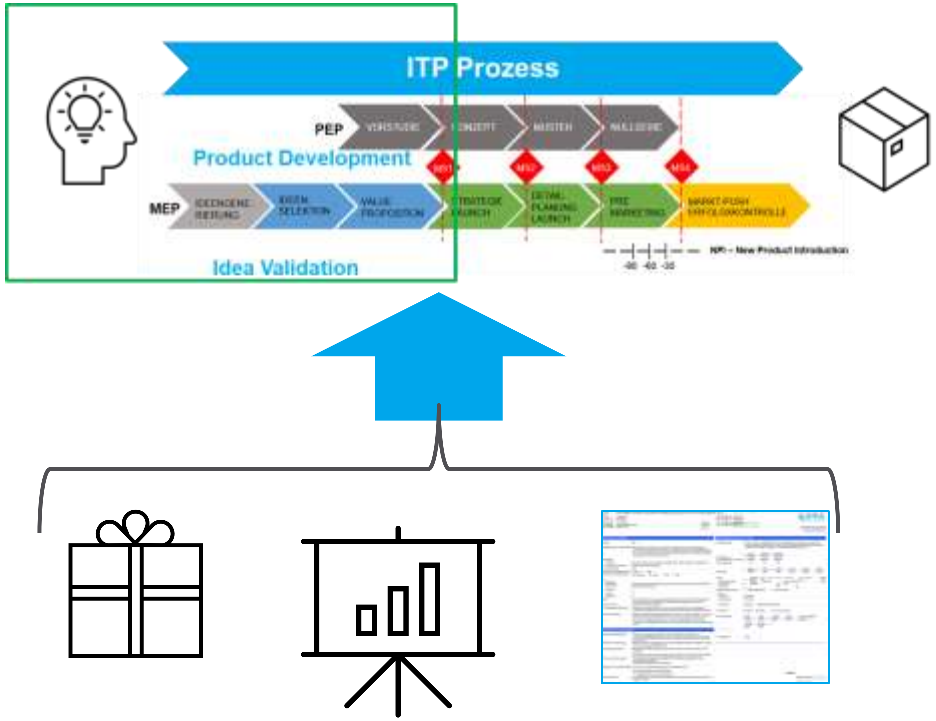


- To make sure we are right, **we might need several iterations of the market validation**, just to make sure we have enough valid information

- **We want confirmation for yes or no!**

VALUE PROPOSITION DESIGN

After the market validation we want to have a good businesscase

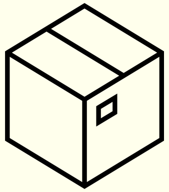


- As a **result of our Value proposition** in the market we should than have a
  - Good understanding about **our value to the customer**
  - **Valid Business case** for the new product idea
  - Have a **list of potential customers** to support product ramp-up
  - An **idea about the market price** and our **differentiation to competition**

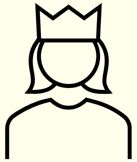
VALUE PROPOSITION DESIGN

Summary

- **Value Proposition** is important for us to validate our ideas in the market, with the customers we defined

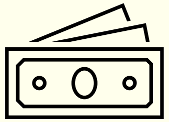


- **Customer segmentation** and definition of the stake holder is important, to develop an exact customer profile for us



- We want to **understand the pains, gains and jobs of those customers**, therefore, we need to interview them for direct customer feedback

- At the end we want to have a good, **solid business case** for us based on our market research and feedback



03

EARLY BUY IN, CO CREATION

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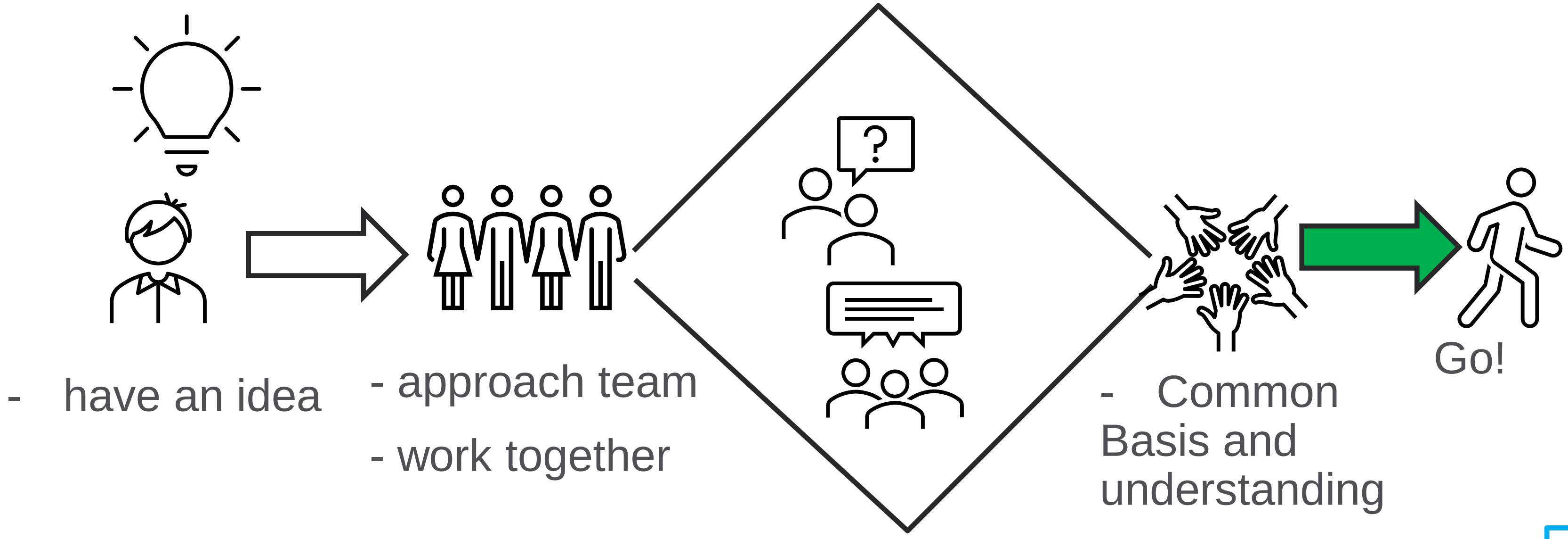
EARLY BUY-IN, CO-CREATION

Alternative approach

Alternative approach can be:



- clarify the idea
- together define the task
- what needs to be done
- whom to talk to,

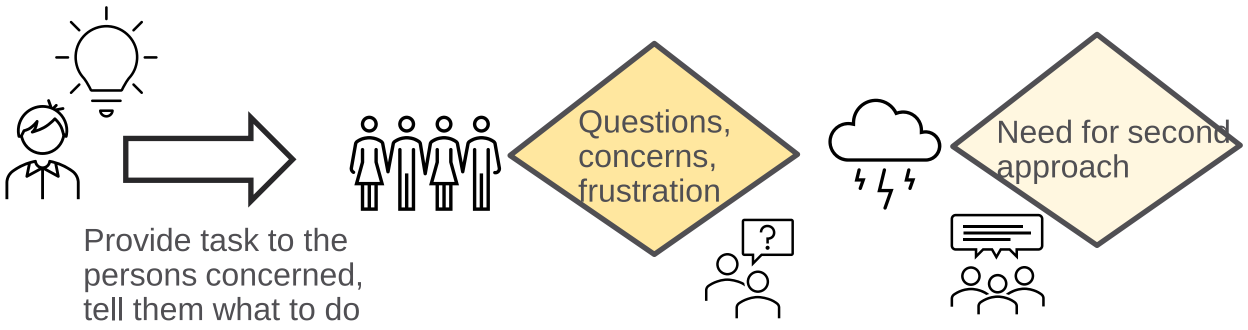
Result could be:

- a **lot of questions** and discussion during the clarification about the task
- **takes time and patience**
- Nevertheless, **a common basis is established**, good understanding about the task on hand and next steps are developed

→ **Agreement about the task**, all understand now what to do and go in the same direction,

EARLY BUY-IN, CO-CREATION

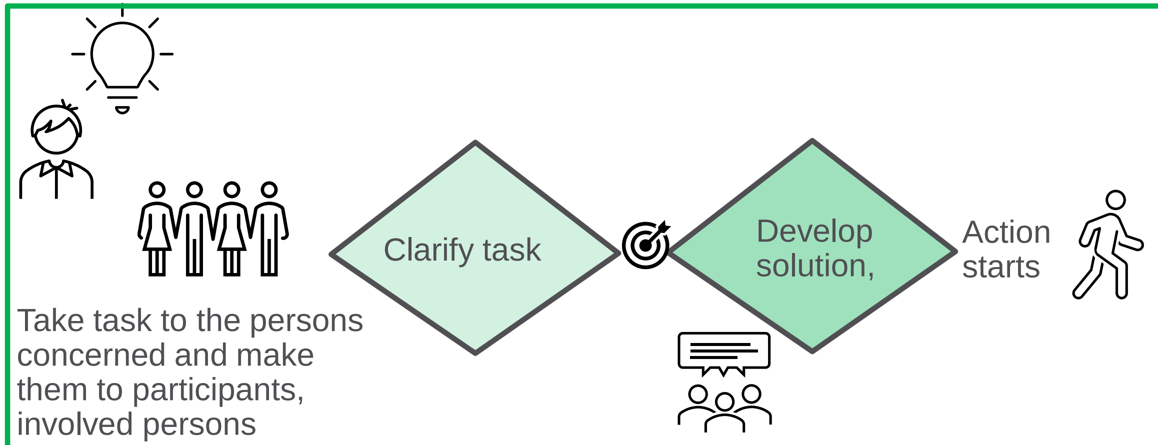
Its all about the start, together!



Approach someone with a task and list of action items to get done leaves persons concerned without deeper involvement.

Concernes will come up later, still need to be addressed in second step.

→ **Telling**



Early involvement of the concerned persons makes them to participants.

Leads to early buy-in, high commit-ment to start with.

Common team task with high amount of involvement.

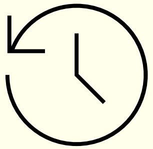
→ **co-creation**

- Betroffene – person concerned
- Beteiligte – involved person, participant

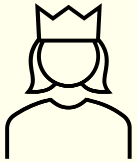
EARLY BUY-IN, CO-CREATION

Summary

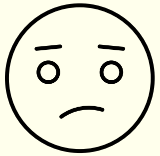
- **Early buy-in** of the team is very important, from the very start on



- We need to **make the person concerned to the person involved**, we can do this by including them right from the start



- **Concerns will come up**, address them right to begin with in the team who will work on the task. Or you have to deal with them afterwards!



- **Co-Creation and early involvement are the key** to commitment and early buy-in and therefore the key to success!

04

FAST RAMP-UP AFTER MARKET INTRODUCTION

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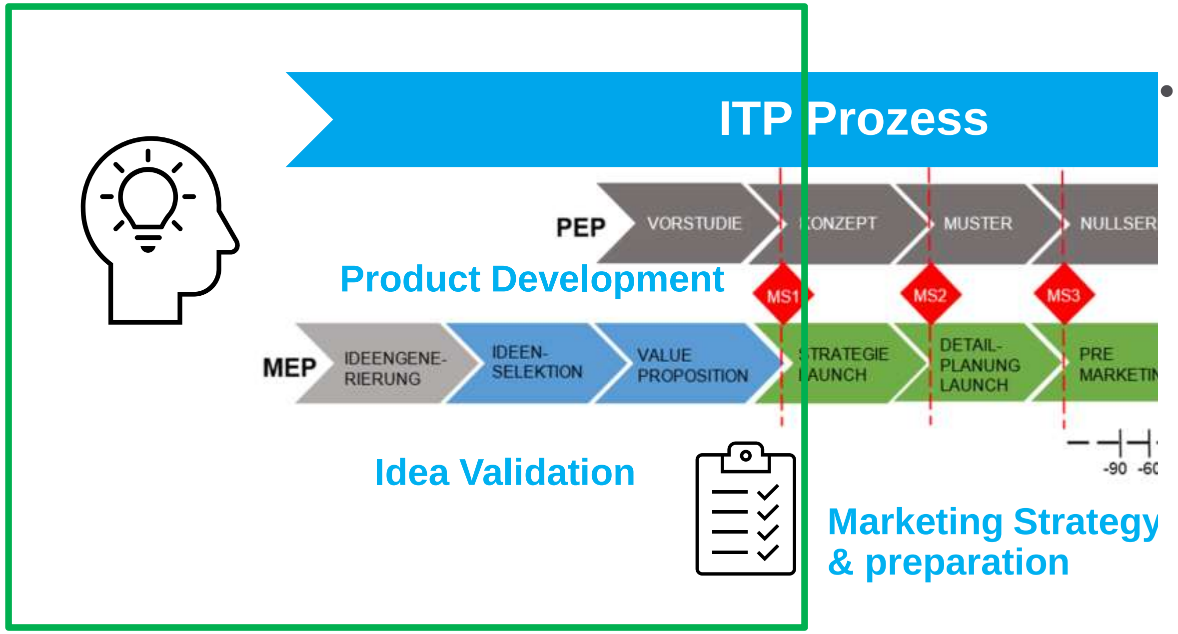
FAST RAMP-UP

Depends on the frontloading and the validated potential customer base



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FAST RAMP-UP

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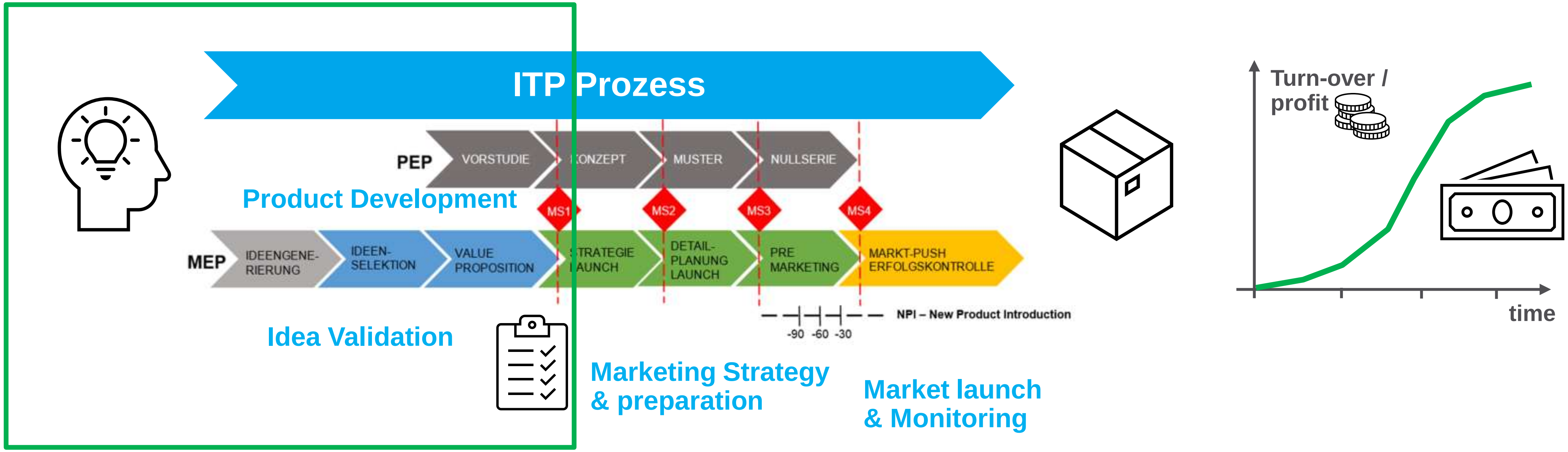


The better we prepare the frontloading with our validation,

The better our market ramp-up after launch and start of production!

FAST RAMP-UP

Keys to success

- **Good and solid value proposition** to gain important market data, customer knowledge, understand their pains and gains and our value to the customer

- **The early buy-in of the complete team**, which will work with the customer, is paramount. The better we prepare upfront the task and the customer hypothesis with the persons concerned, the better will be the results. Make persons concerned to involved persons.

- **It is all about the front-loading**,
  - early buy-in from the persons concerned → involve all relevant persons at the start
  - Good preparation of the value proposition → specify customer segment and profile
  - If the first attempt does not bring the intended results, try again!

- **A strong business case has a solid foundation and is backed up with by a high level of confidence by all the people involved**

05

EXAMPLES

ENGINEERING TECHNOLOGY

E-BOX FOR THE CARAVANING INDUSTRY

Complete new approach with an all-in-one design

Start to finish took 4 years

LEAD Customer approach with Technology Leader in the industry

With customer we have been required to **finetune features vs. benefits** to find out when they will be buying – **Value Proposition Design** approach

Frontloading helped us to get a fast ramp-up after they started buying

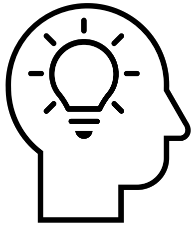
Now we see the **Bowling-Alley effect** in the industry with market followers.

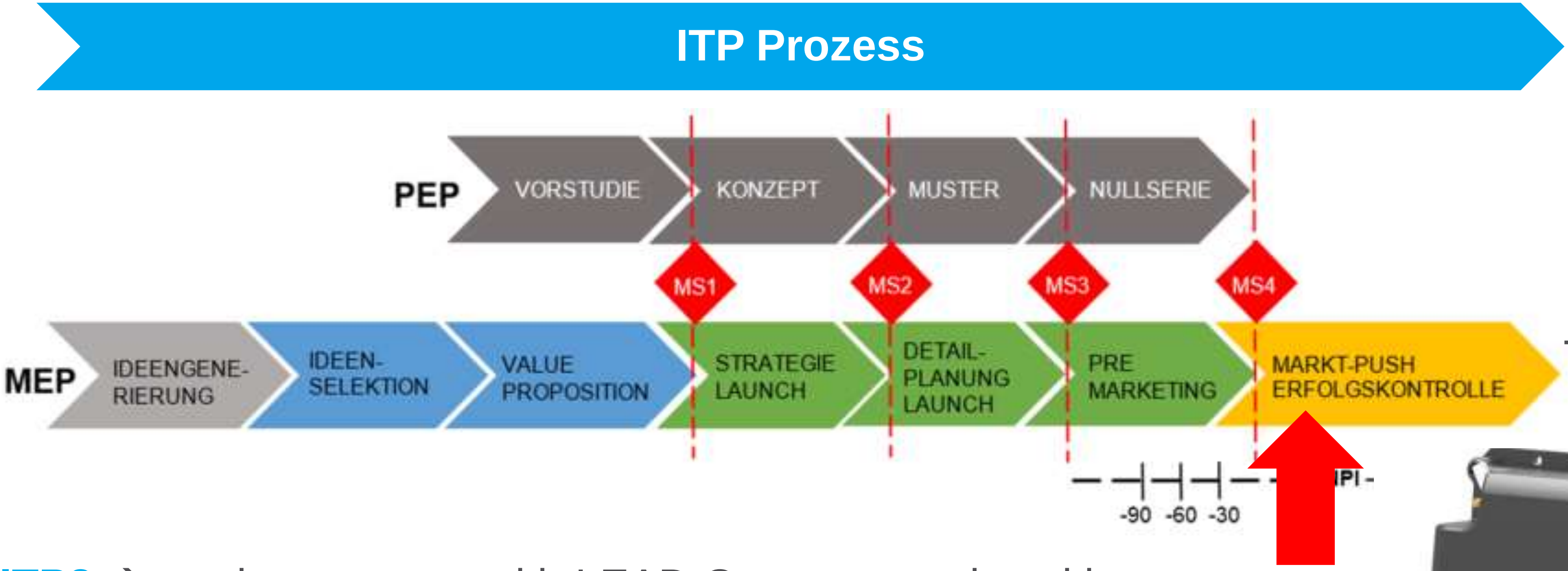
Innovation is:

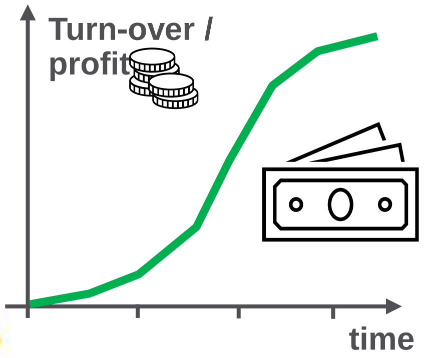
- **All-in-one saves time, cost**
- **Customer can produce mor vehicles with same set-up**

E-BOX FOR THE CARAVANING INDUSTRY

Process overview





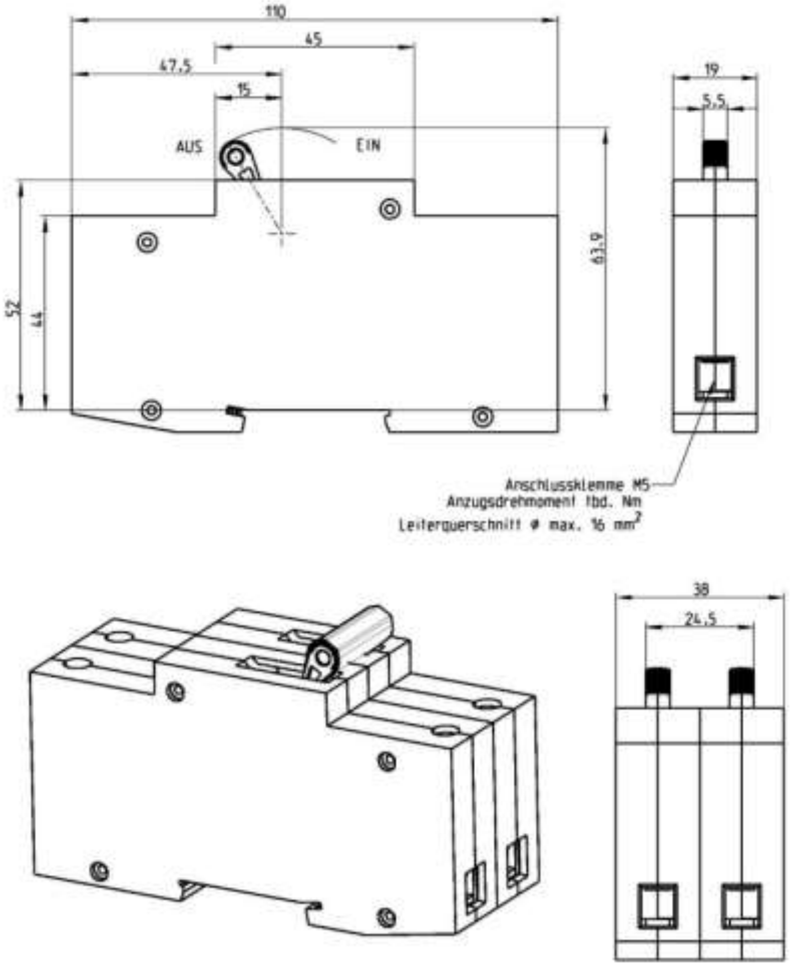


ITP3 → market ramp-up with LEAD Customer and working
On a market pull with other pot. Customers

Idea to innovation – innovation to product!

DC CIRCUIT BREAKER FOR DC INDUSTRY

Expand the usage for renewable energy into industrial environment



Still ongoing process in 3rd year

LEAD Customer approach with Technology Leaders in the industry – **Automation, Infrastructure**

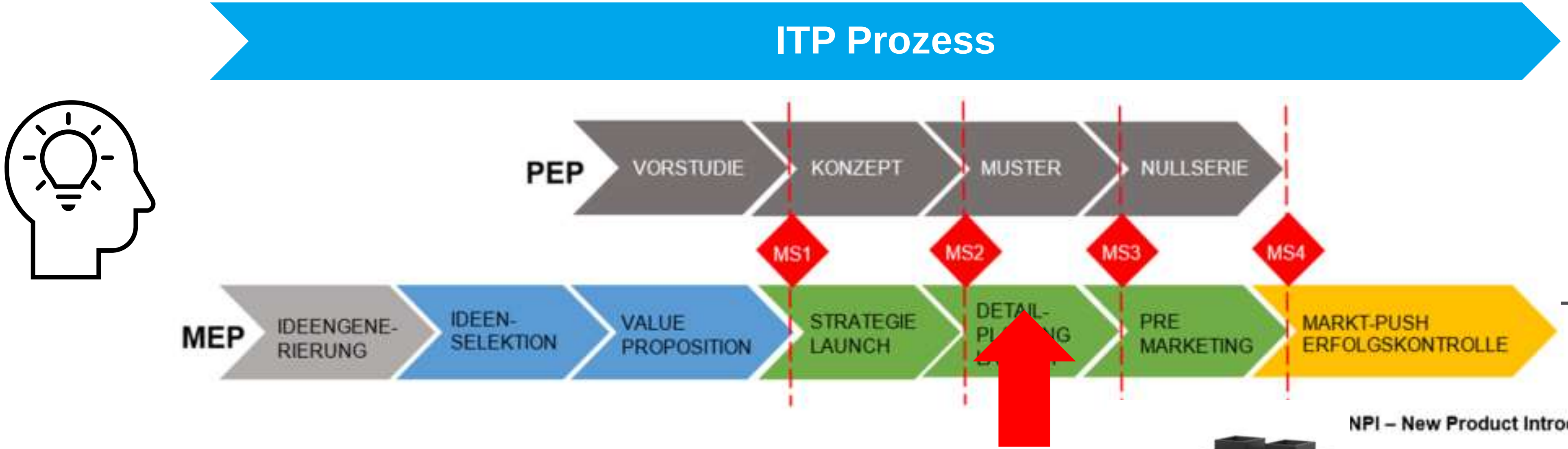
With customer we have been required to finetune features vs. benefits to find out when they will be buying – Value Proposition Design approach

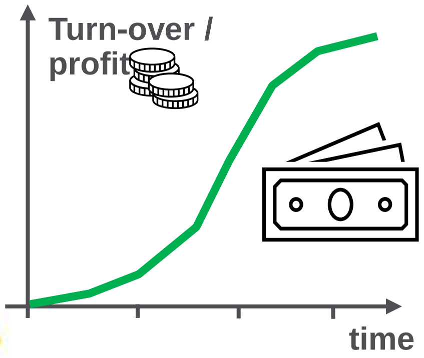
Innovation is:

- **Very small design with DC400V within 38mm,**
- **Space saving for customer to save money**

DC CIRCUIT BREAKER FOR DC INDUSTRY

Process overview





ITP2 → B-Samples at customer for testing in production facilities and infrastructure settings.
Verifying functionality in real-life applications.

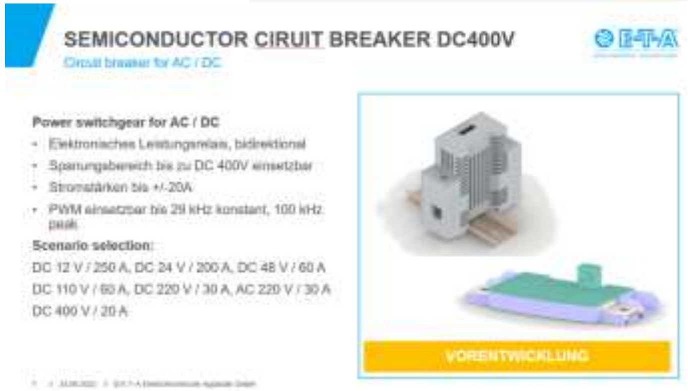
Idea to innovation – innovation to …!

INTELLIGENT SOLID STATE PDU

Power Distribution Unit for Transportation Industry

DC12…24V

General market



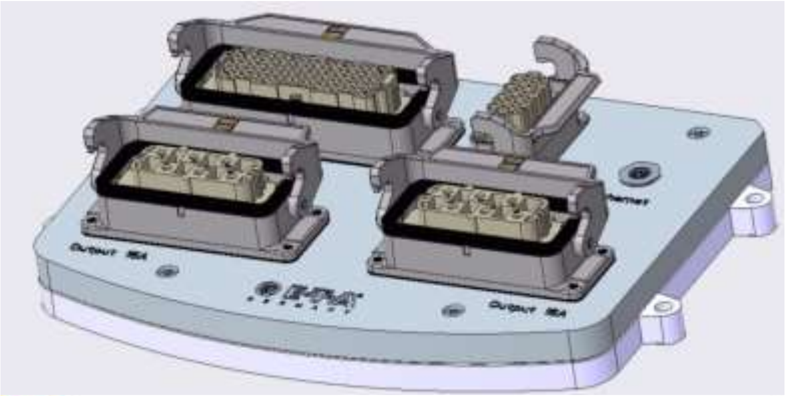
CAN based intelligent solid state power distribution unit for the transportation industry. To provide flexibility, time- and cost-savings.

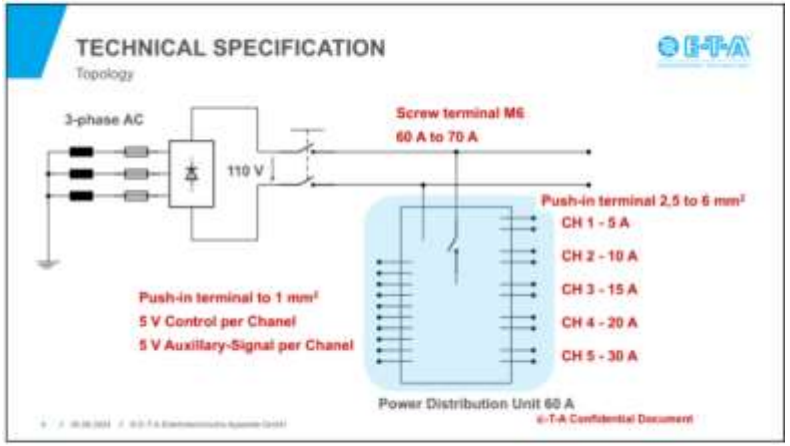
Voltage range DC 6…32V for bus, truck, specialty vehicles.

Next step transfer to new Industry - segment

DC110 …. 150V with

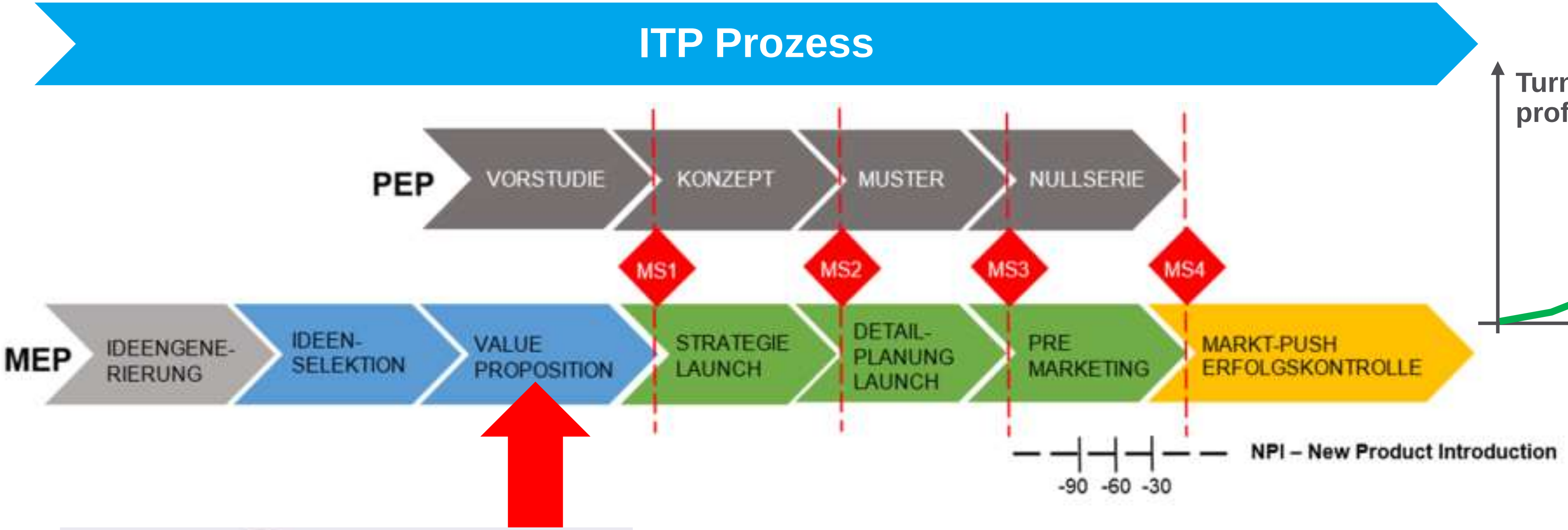
LEAD Customer approach

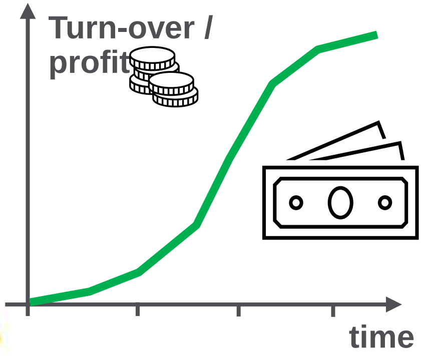


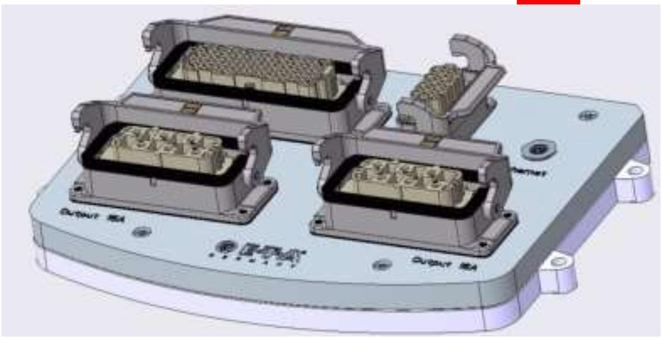


INTELLIGENT SOLID STATE PDU

Process overview







ITP1 → Value Proposition with LEAD Customer with MVP.
Providing functionality at DC110V,

Idea to innovation …

06

SUMMARY

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Keys to success

- **Good and solid value proposition** to gain important market data, customer knowledge, understand their pains and gains and our value to the customer

- **The early buy-in of the complete team**, which will work with the customer, is paramount. The better we prepare upfront the task and the customer hypothesis with the persons concerned, the better will be the results. Make persons concerned to involved persons.

- **It is all about the front-loading**,
  - early buy-in from the persons concerned → involve all relevant persons at the start
  - Good preparation of the value proposition → specify customer segment and profile
  - If the first attempt does not bring the intended results, try again!

- **A strong business case has a solid foundation and is backed up with by a high level of confidence by all the people involved**

END OF THE PRESENTATION