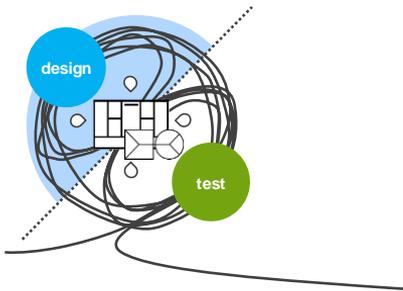
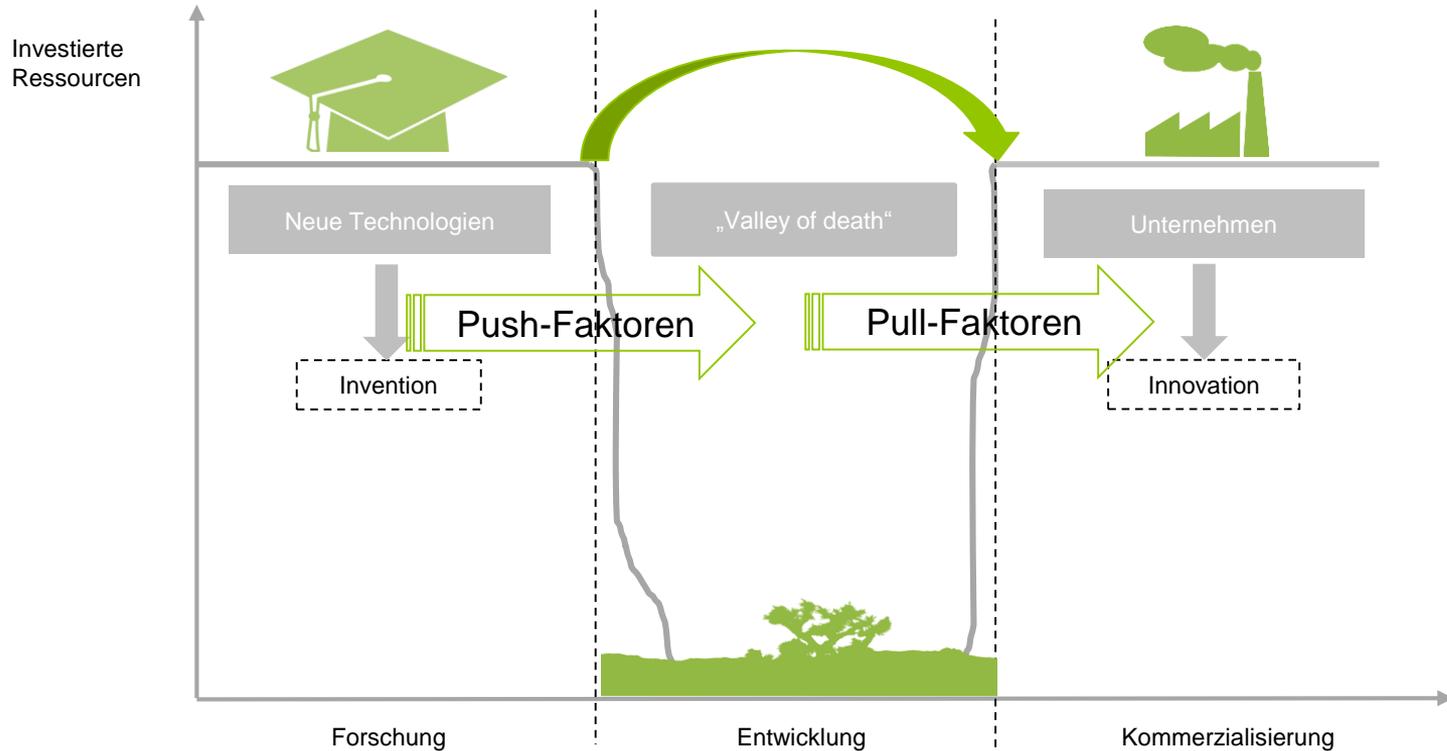


Fit für Smart Maintenance  
*Entrepreneurship für die Smart Maintenance*

Dr. Ronald Kriedel  
22.05.2019

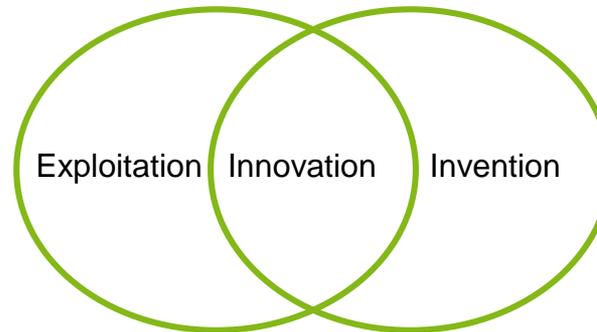


## Das „Valley of Death“



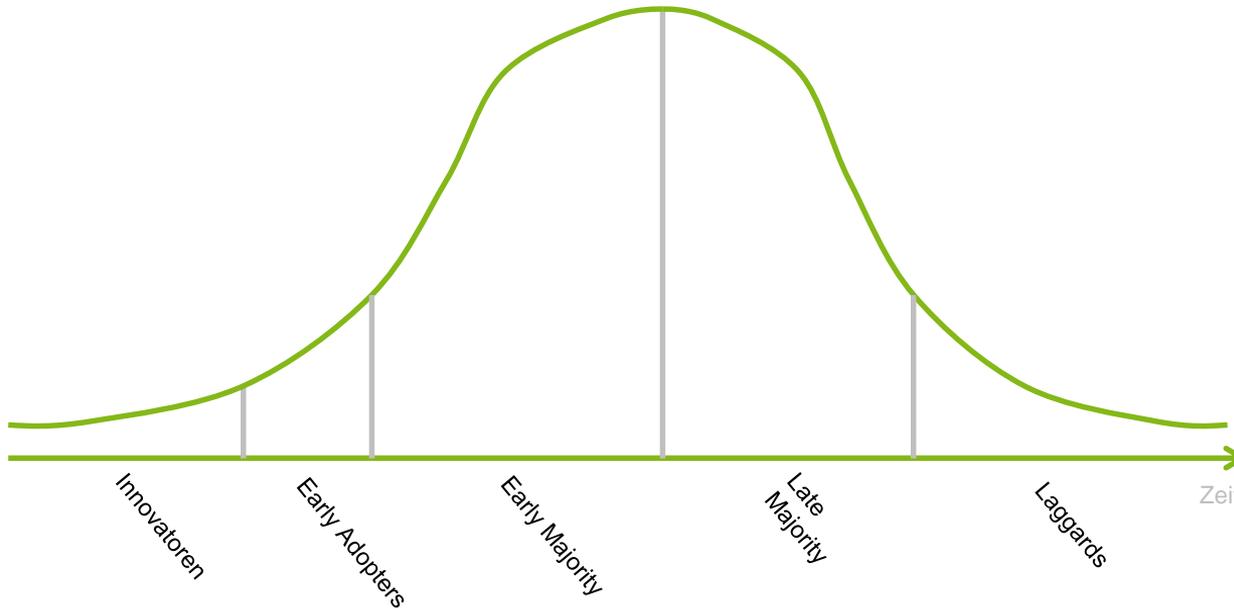
## Ausgangspunkt

- Innovation setzt sich aus zwei Bereichen zusammen:
  - Der Generierung einer Idee, Technologie oder eines Problemfeldes (Invention) und
  - der Wandlung bzw. Ausnutzung dieser Invention durch eine Kommerzialisierung.



- Grundkonzept: Es benötigt ein Geschäftsmodell

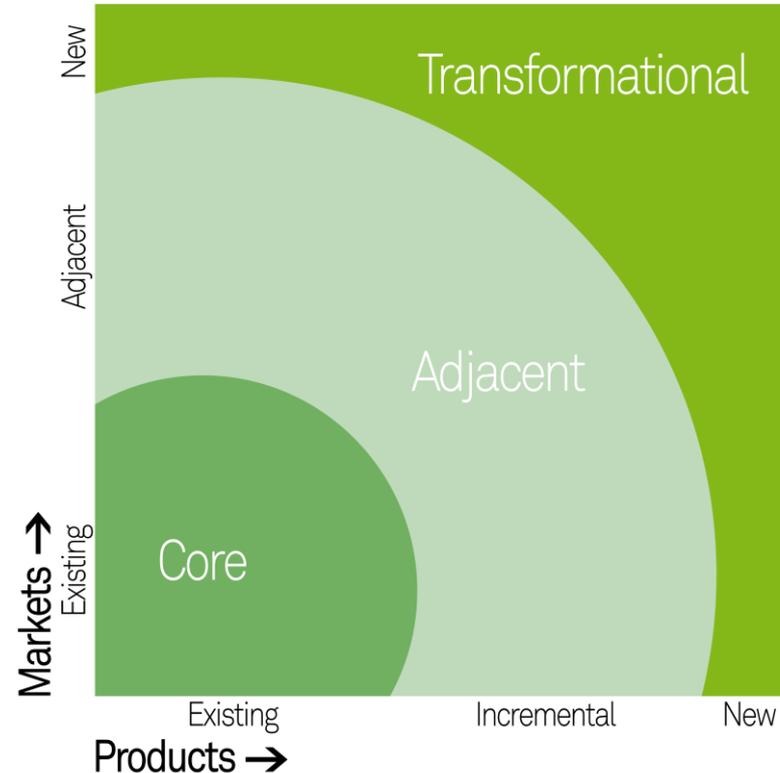
## The *Revised* Technology Adoption Life Cycle



Moore, 2014, S. 21

## Herausforderung: Digitalisierung

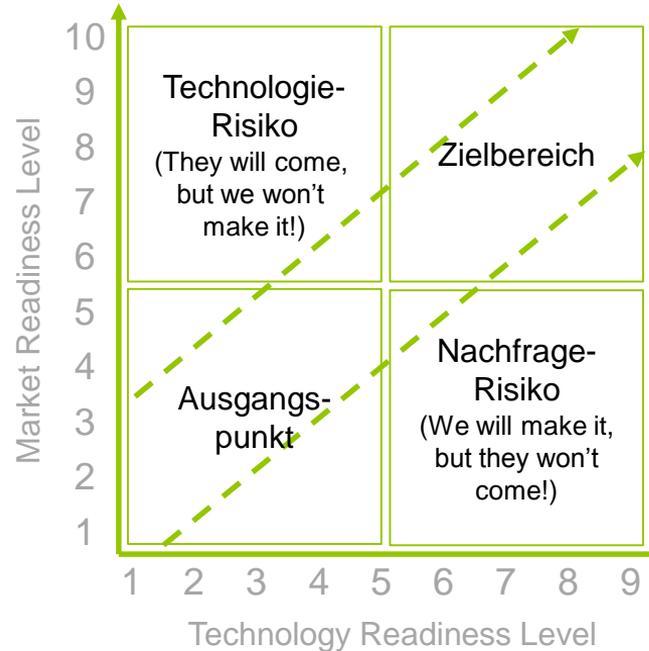
- Neue Technologien → Daraus ergeben sich neue Geschäftsmodelle
  - Digitization: The process of making information available and accessible in a digital format
  - Digitalization: The process of considering how best to apply digitized information to simplify specific operations
  - Digital Transformation: The process of devising new business applications that integrate all digitized data and digitalized applications



## Market- und Technology-Readiness Level

### Market Readiness Level

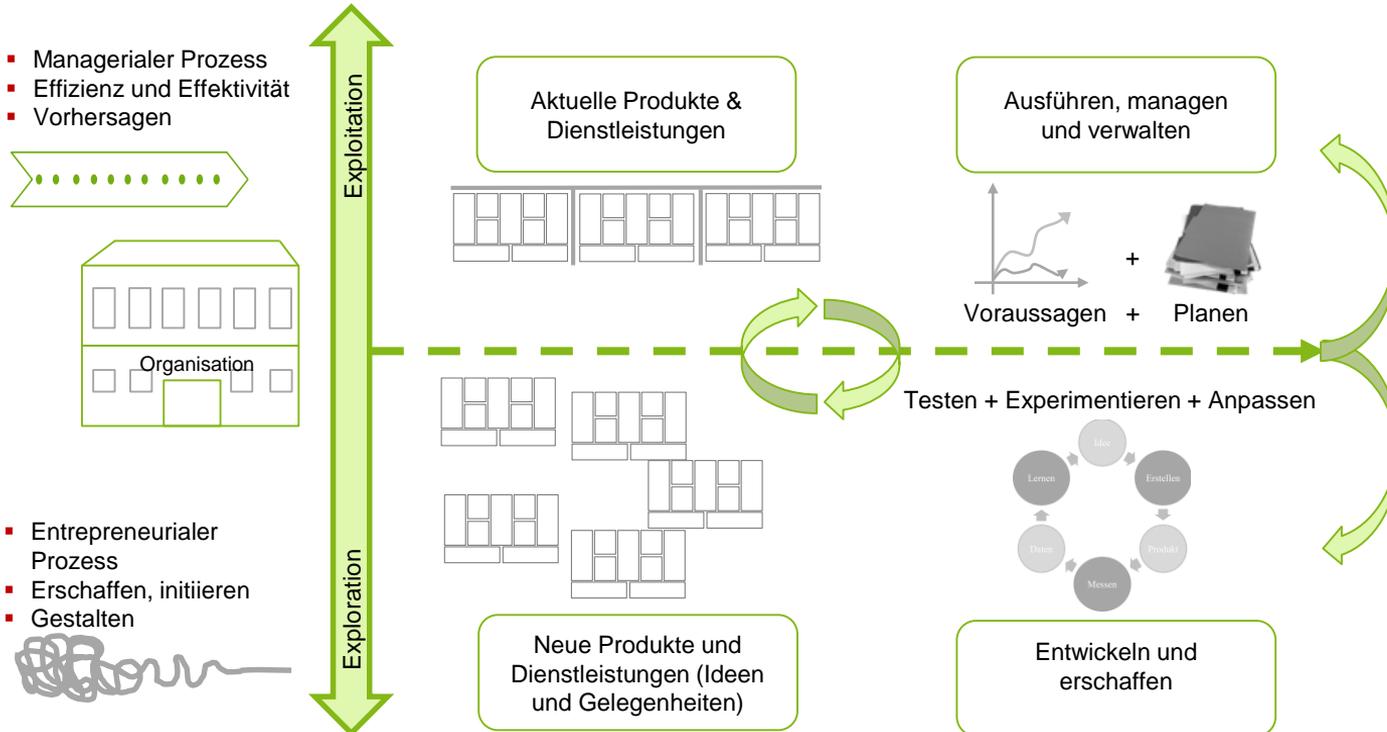
1. Unsatisfied needs have been identified
2. Identification of the potential business opportunities
3. System analysis and general environment analyzed
4. Market research
5. Target defined
6. Industry analysis
7. Competitors analysis and positioning
8. Value proposition defined
9. Product/service defined
10. Business model defined coherently



### Technology Readiness Level

1. Fundamental research
2. Applied research
3. Research to prove feasibility
4. Laboratory demonstration
5. Technology development
6. Whole system field demonstration
7. Industrial prototype
8. Product Industrialization
9. Market / sales certification

## Zwei Herausforderungen

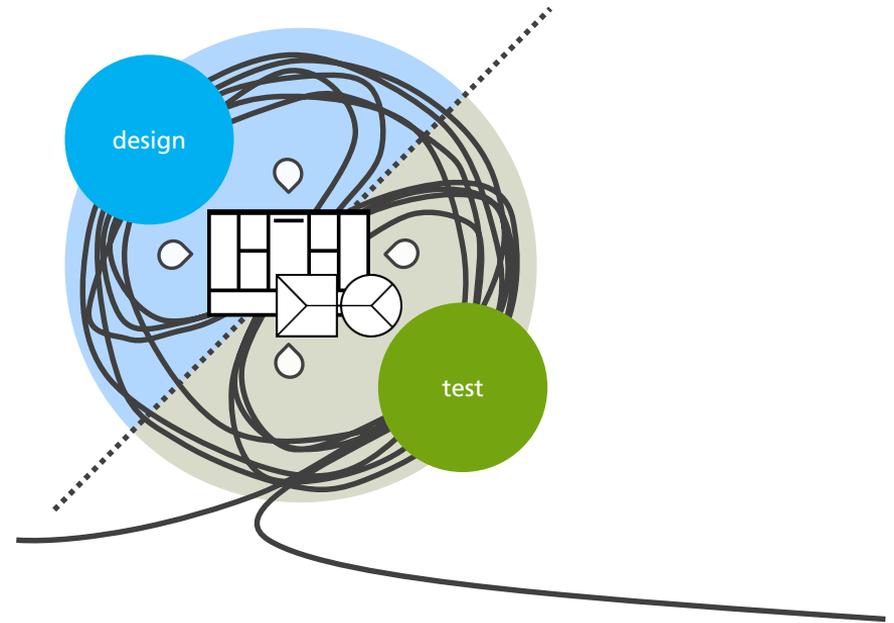
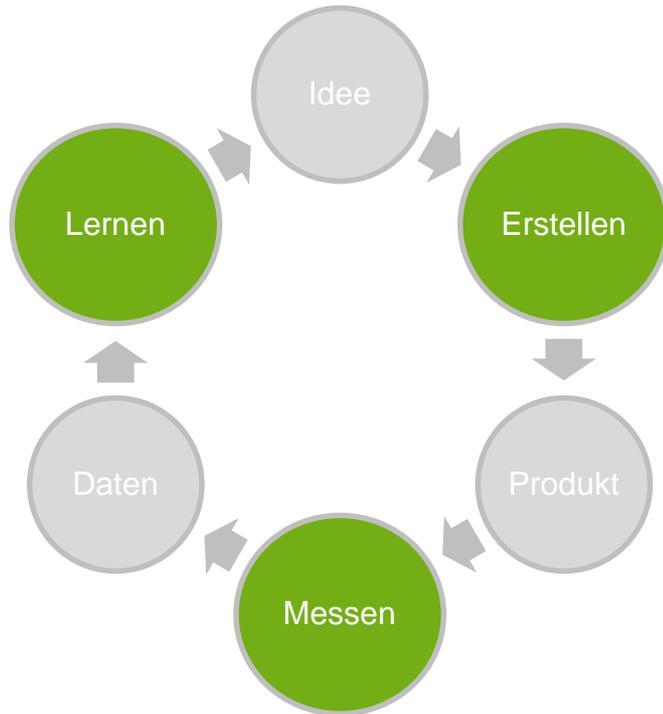




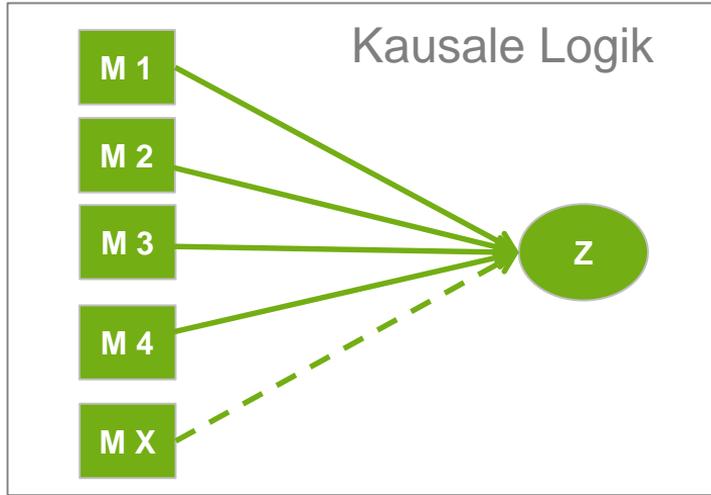
vs.



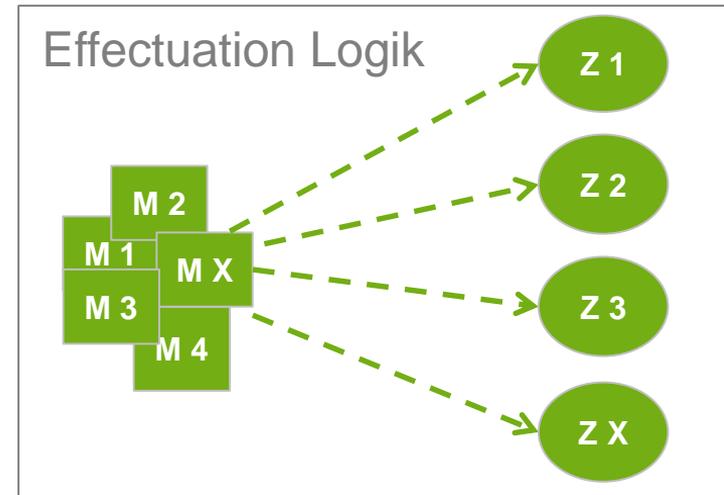
## Der Lean Start-up Gedanke



## Grundlogik

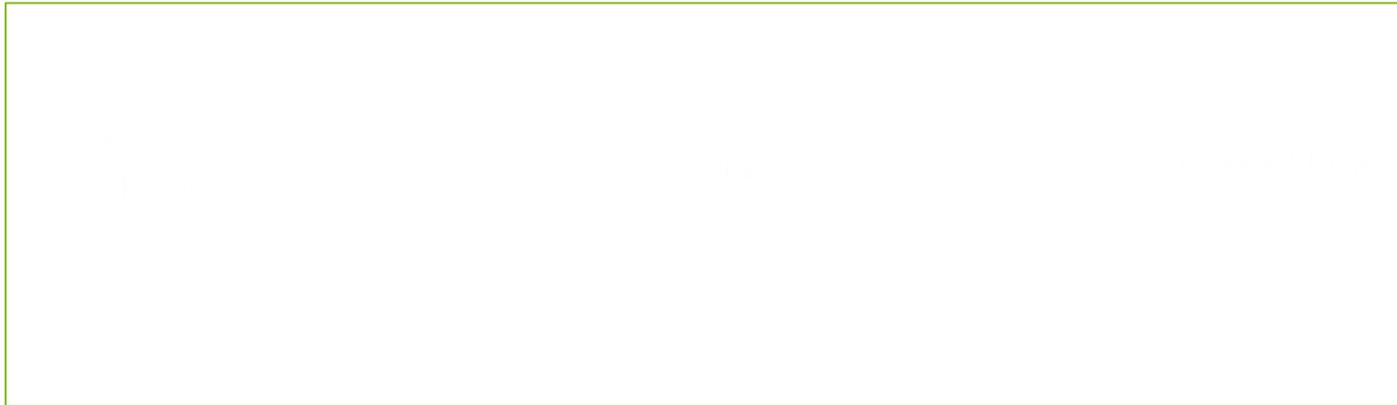


Auswahl bzw. Schaffung von Mitteln und Wegen, um ein zuvor festgelegtes Ziel zu erreichen



Ziele und Ereignisse finden, die sich mit einem gegebenen Set an Mitteln erreichen lassen

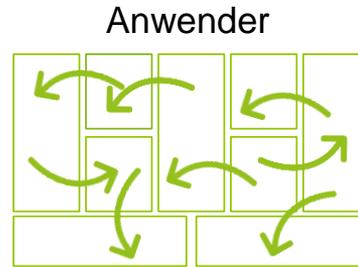
## Der Sprint-Prozess



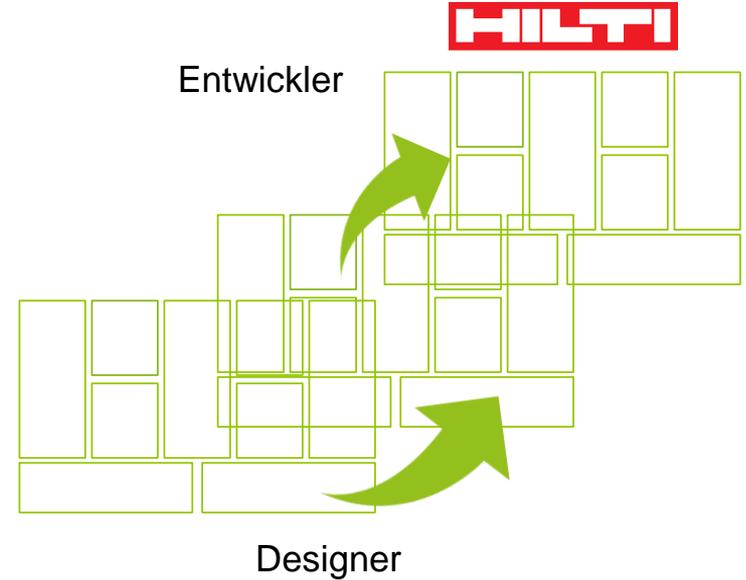
## Geschäftsmodell-Entwicklung



Checkliste  
Die einzelnen Bereiche werden ausgeführt bzw. überprüft.



Anwender  
Die Bausteine des Geschäftsmodells werden optimiert



Ein Geschäftsmodell ist mehr als die Summe seiner Teile





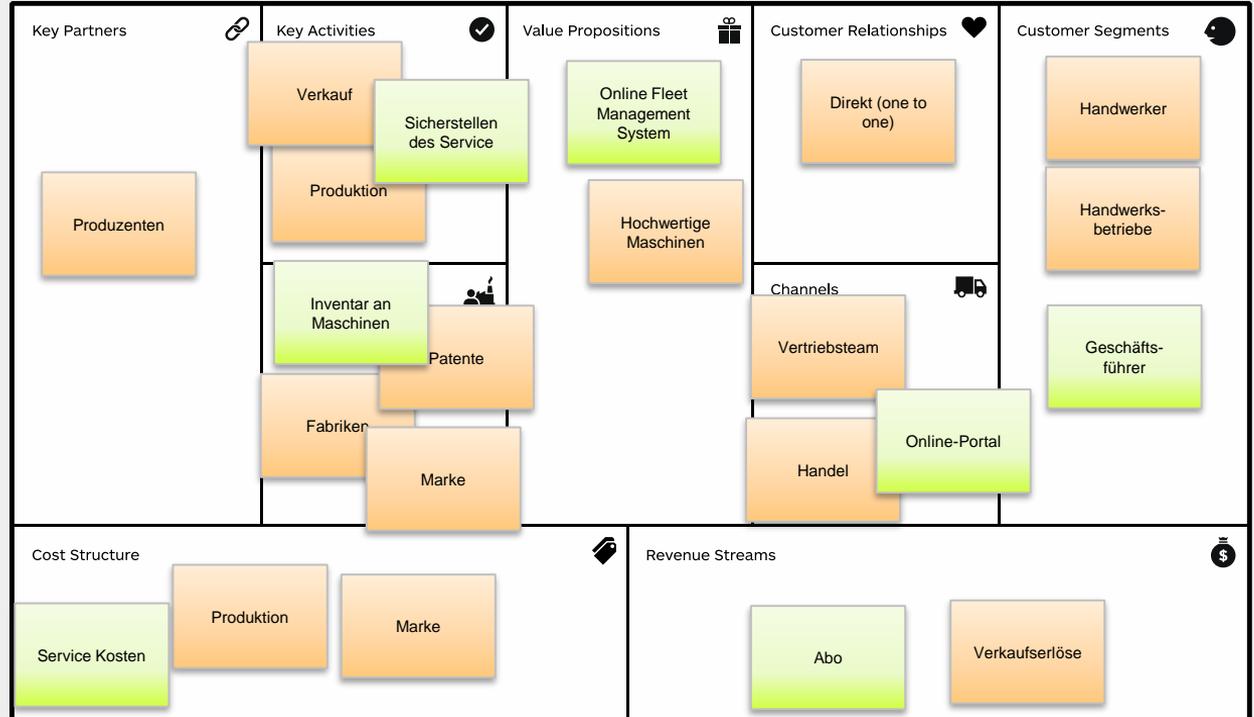
## The Business Model Canvas

Designed for:

Designed by:

Date:

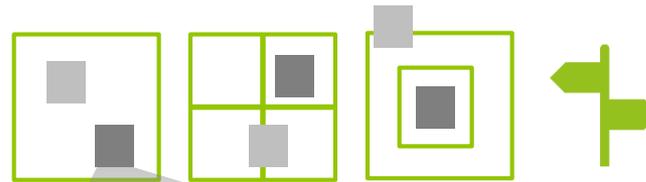
Version:



Wie hat HILTI sein Business Model verändert?

## Werkzeuge für Business Modelling – 3 Betrachtungsebenen

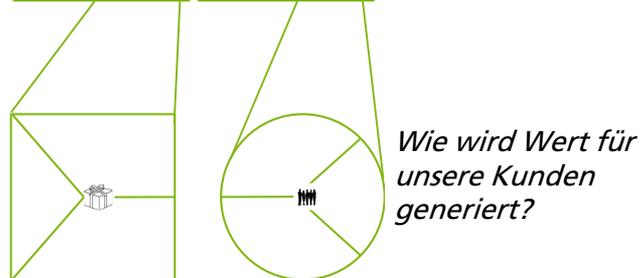
Marktchancen  
- *Where to Play* -  
(Gruber/Tal 2017)



Das Geschäftsmodell  
- *How to Play* -



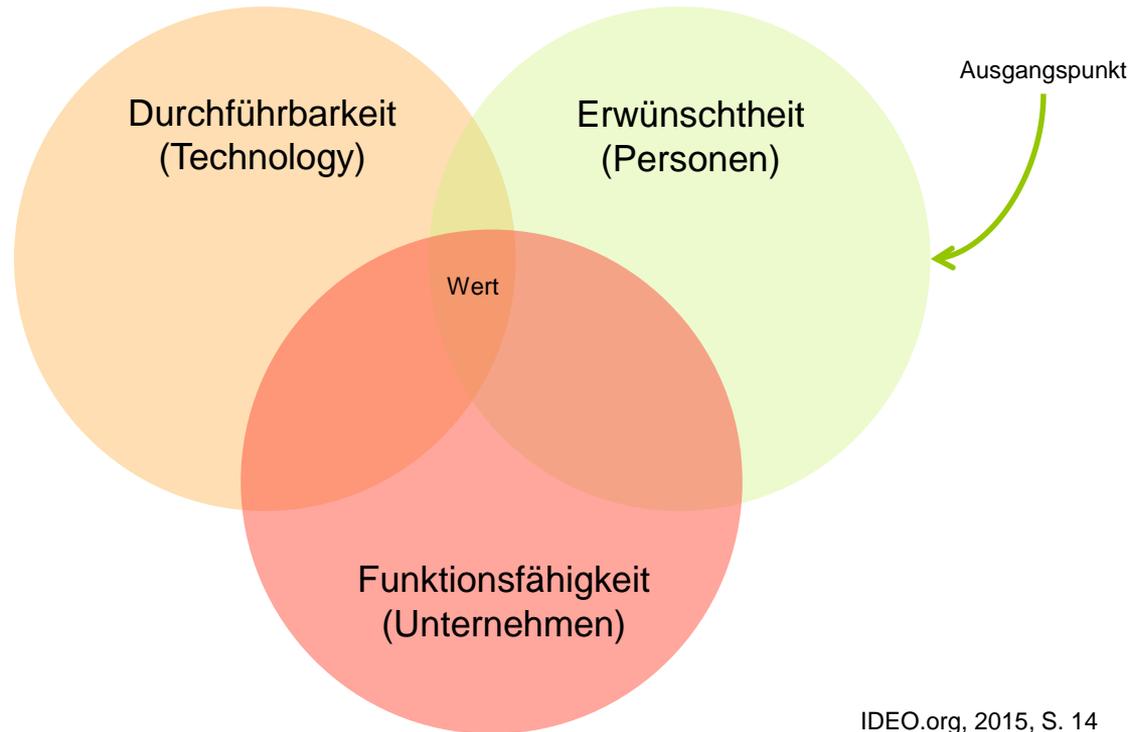
Passung Wertangebot  
und Kundenanforderungen



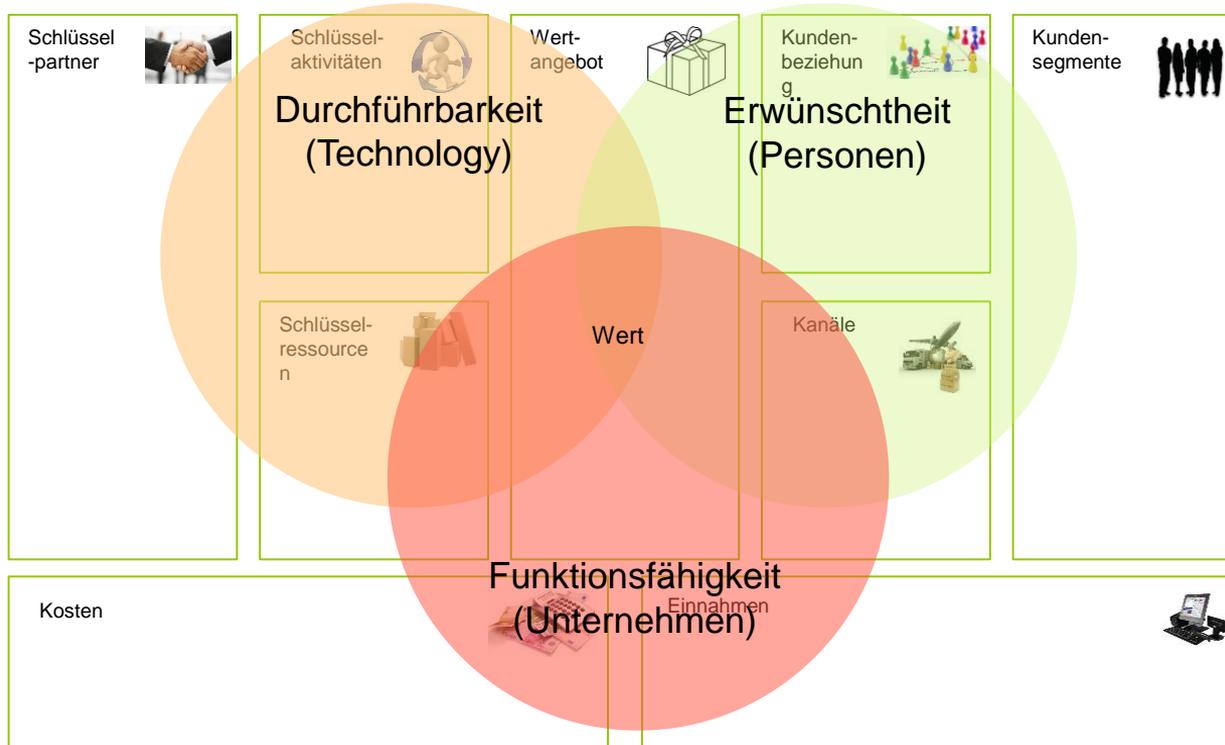
Makroskopische  
Sicht

Mikroskopische  
Sicht

## Human Centred Design – Realen Einfluss Erschaffen



## Verbindung HCD und BMC



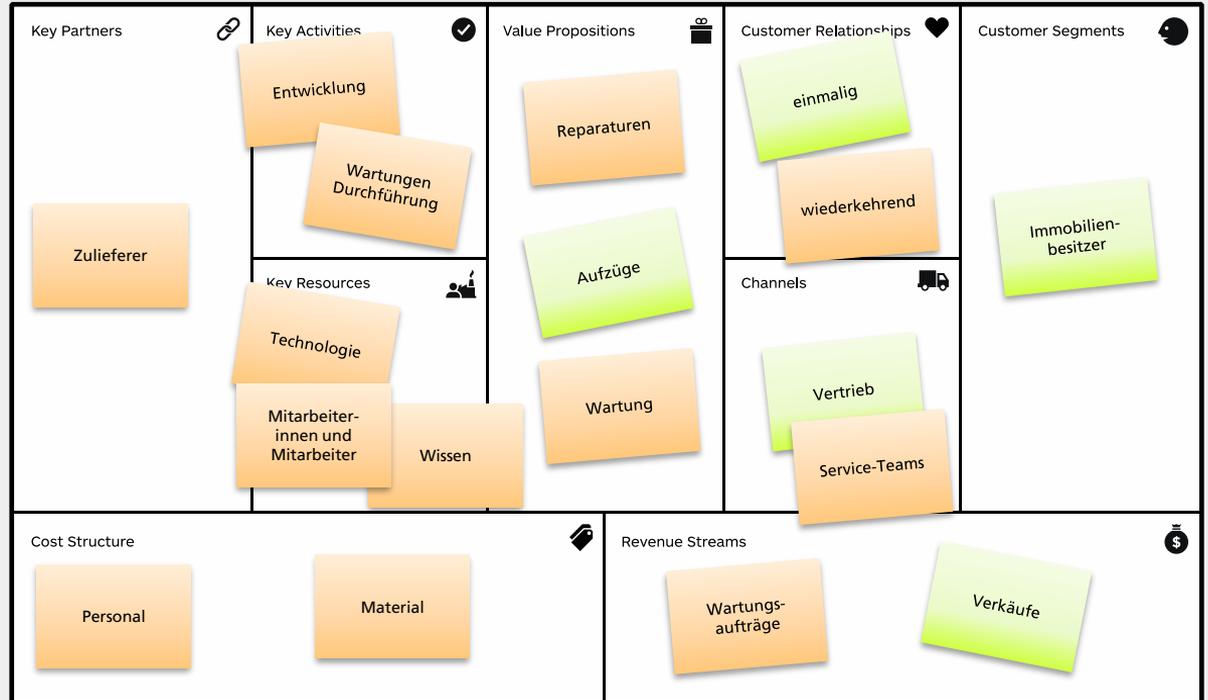
## Human Centered Design verbunden mit dem Business Model Canvas

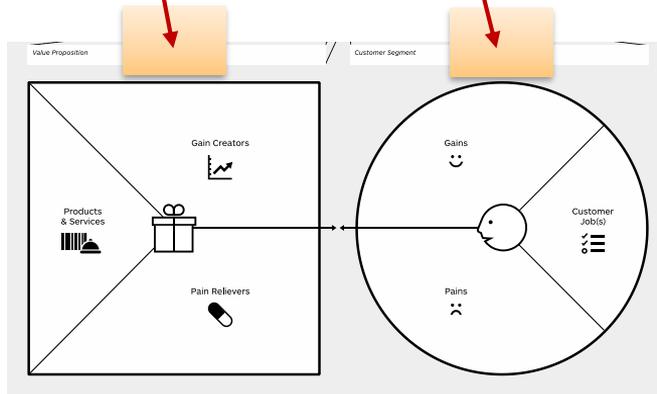
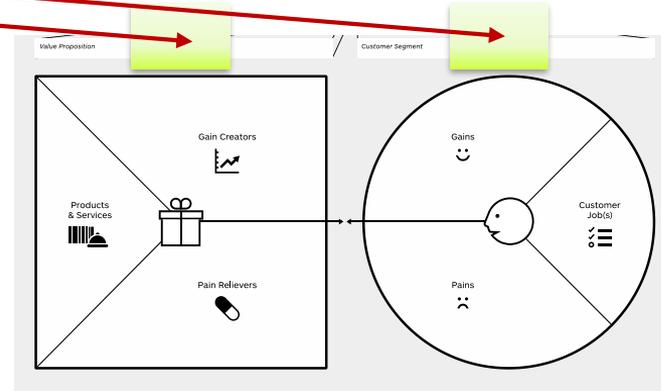
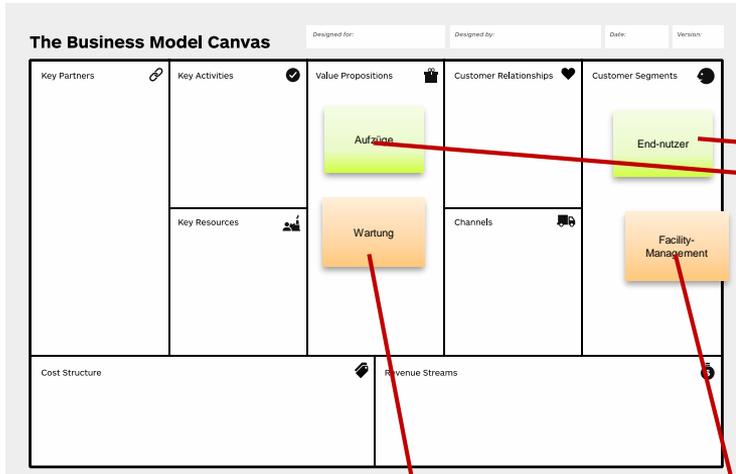




### The Business Model Canvas

Designed for: \_\_\_\_\_ Designed by: \_\_\_\_\_ Date: \_\_\_\_\_ Version: \_\_\_\_\_







**The Culture Map** Beta  
A Change Management Tool

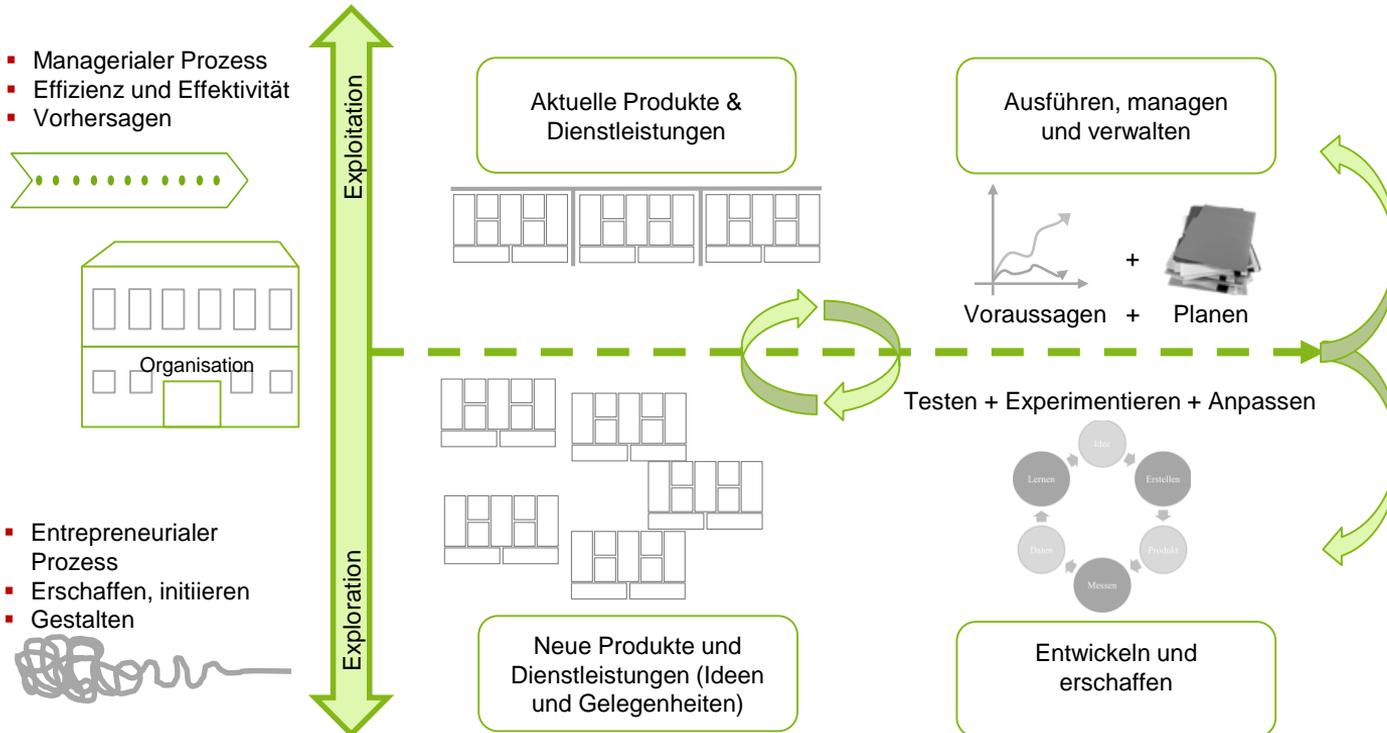
Designed for:  Designed by:  Date:  Version:

<b>Outcomes</b>
<b>Behaviours</b>
<b>Enablers/Blockers</b>

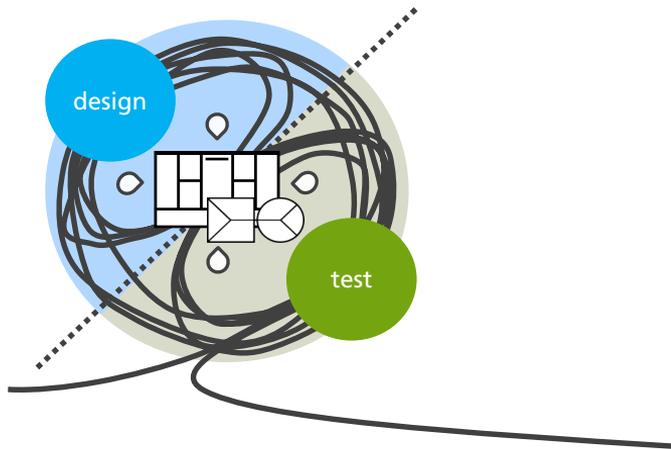
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## Fazit



# VIELEN DANK FÜR IHRE AUFMERKSAMKEIT



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