

System Development International Project

Day 2

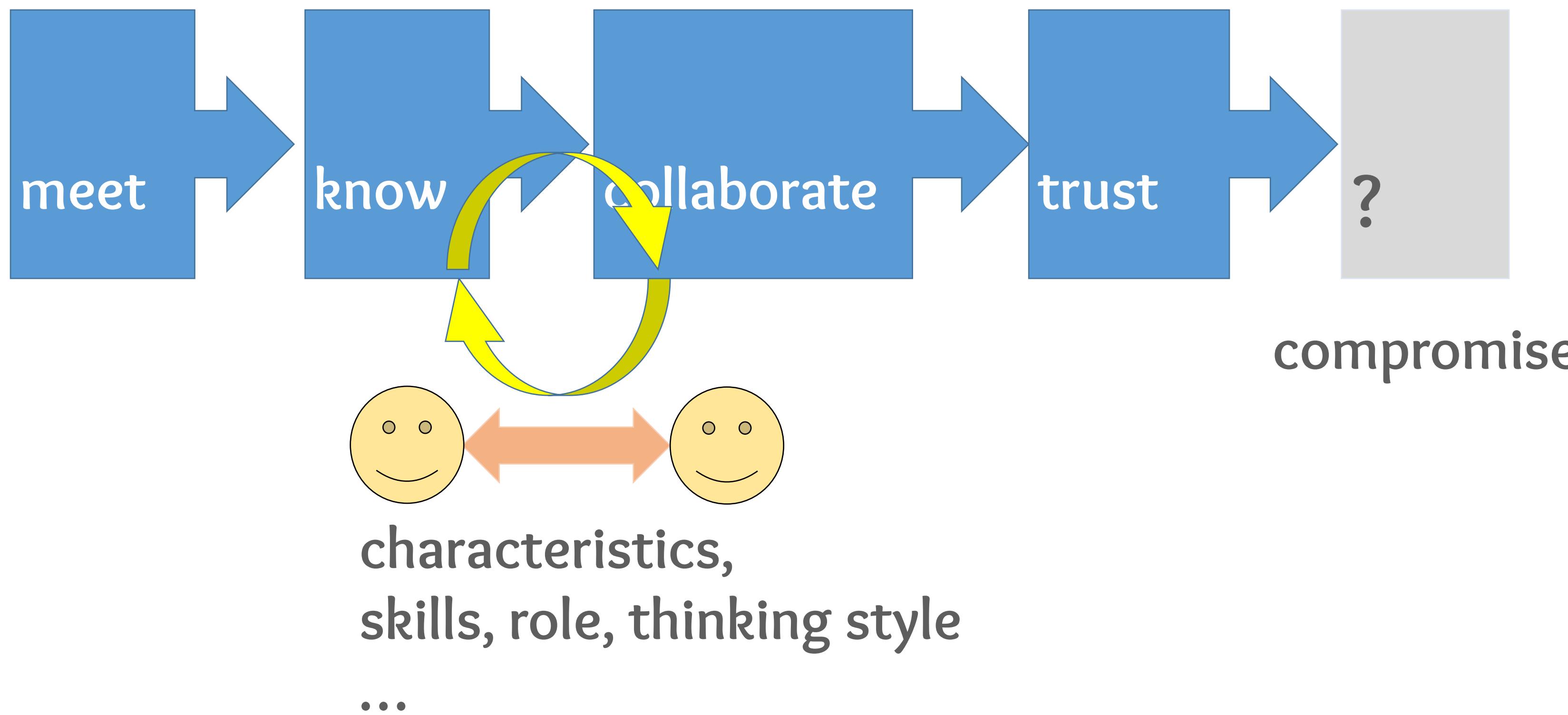
2019/2/26

Xavier Défago
(Chikako Morimoto)

Team building

- Team building!

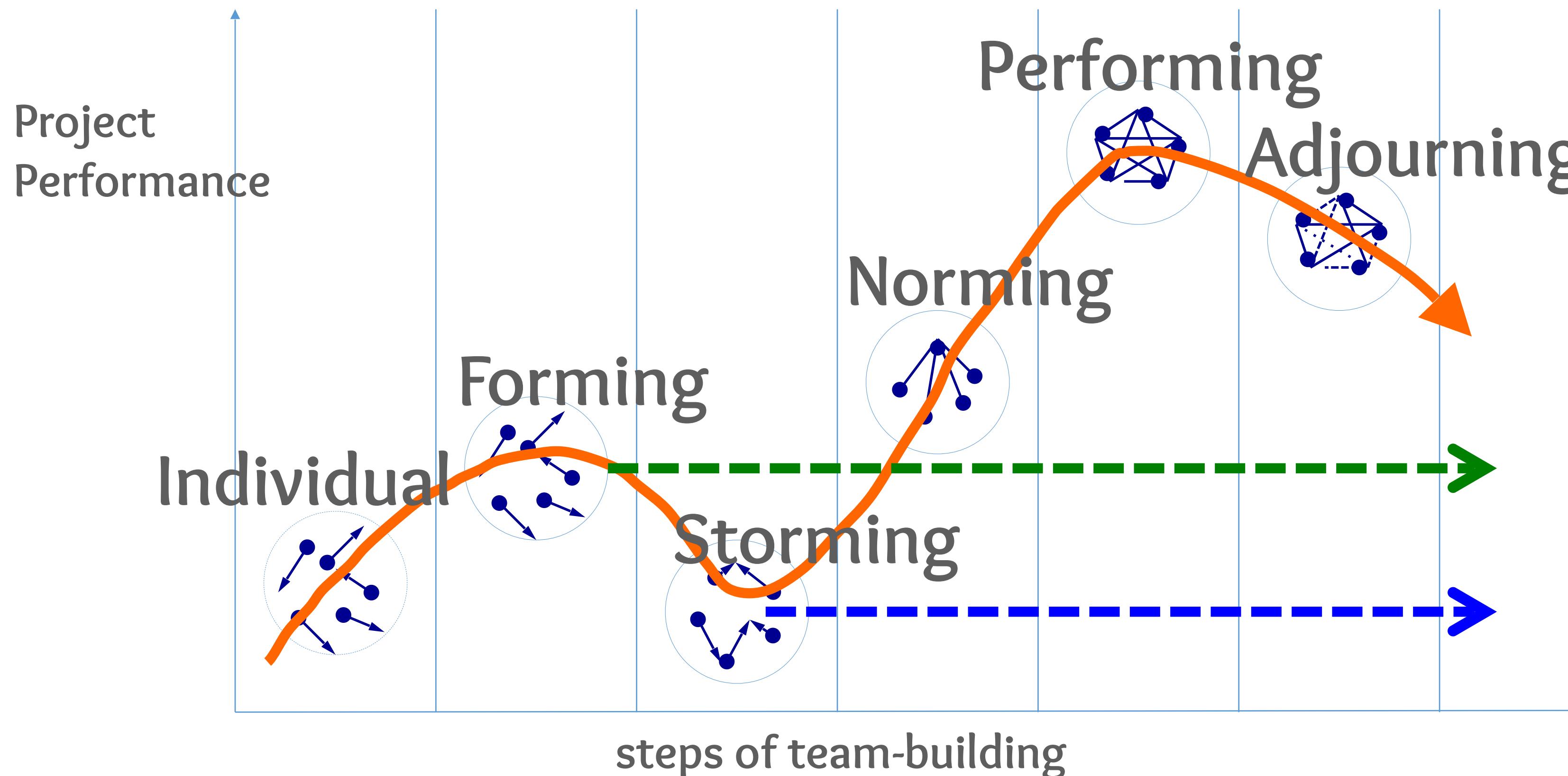
- How to build a trust relationship?



Team building

- **How to build a trust relationship?**

- Team doesn't occur by itself, so we need to make team.
- Tuckman's team-building model



Team building

- How are you today?
- What did you learn from these 1.5days?
- Choose 1 block,
and add it to the team symbol

Social Value

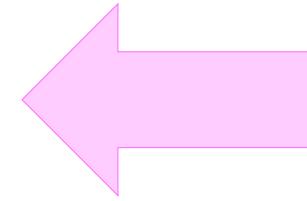
- **Built a thing right.**

- Computer Science
- Software Engineering
- Project Management

Quality Management

- **Built a right thing.**

- Business Model Analysis
- Requirement Engineering



- Lean startup (from business)

- Agile development model (from development)

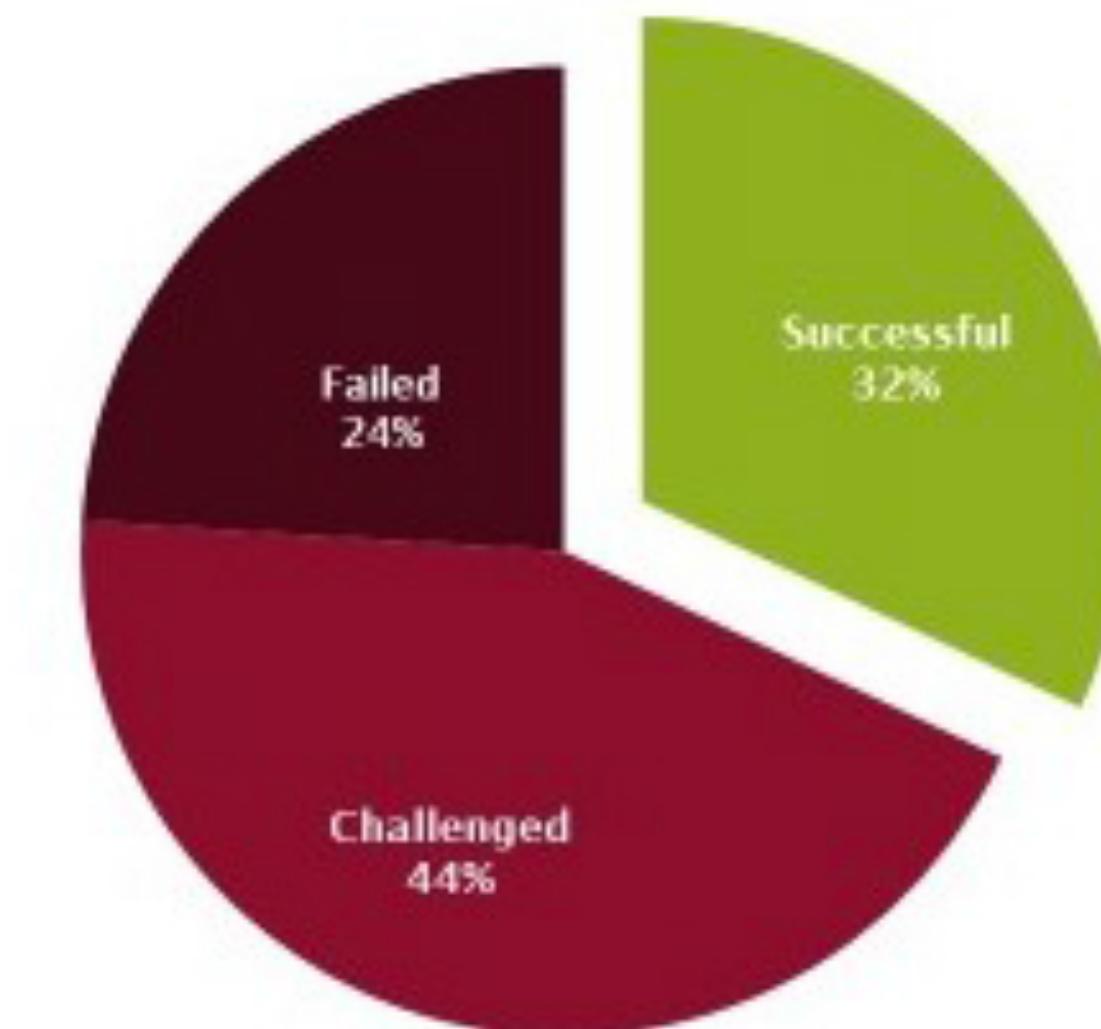
Right Things

Software Development Process

68% Of All Projects Not Successful

Ausgestellt am 8. März 2012 von Ingo Meironke in Business, English, Featured, Resource Management

Standish Group stated in their Chaos Report of 2009 that ~68% of all projects are not successful.

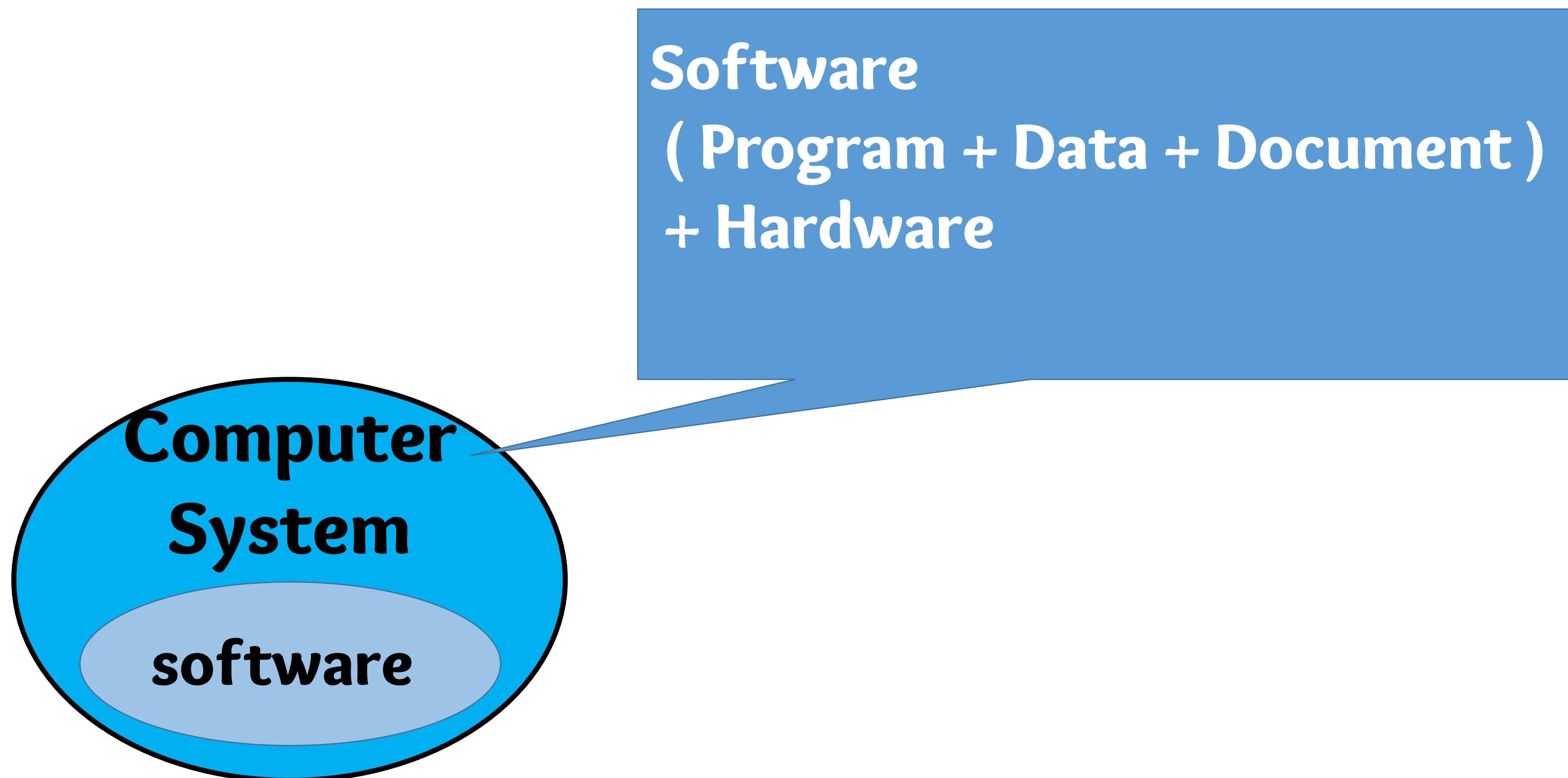


Source: CHAOS Report 2009, Standish Group

CHAOS Summary 2009, Standish

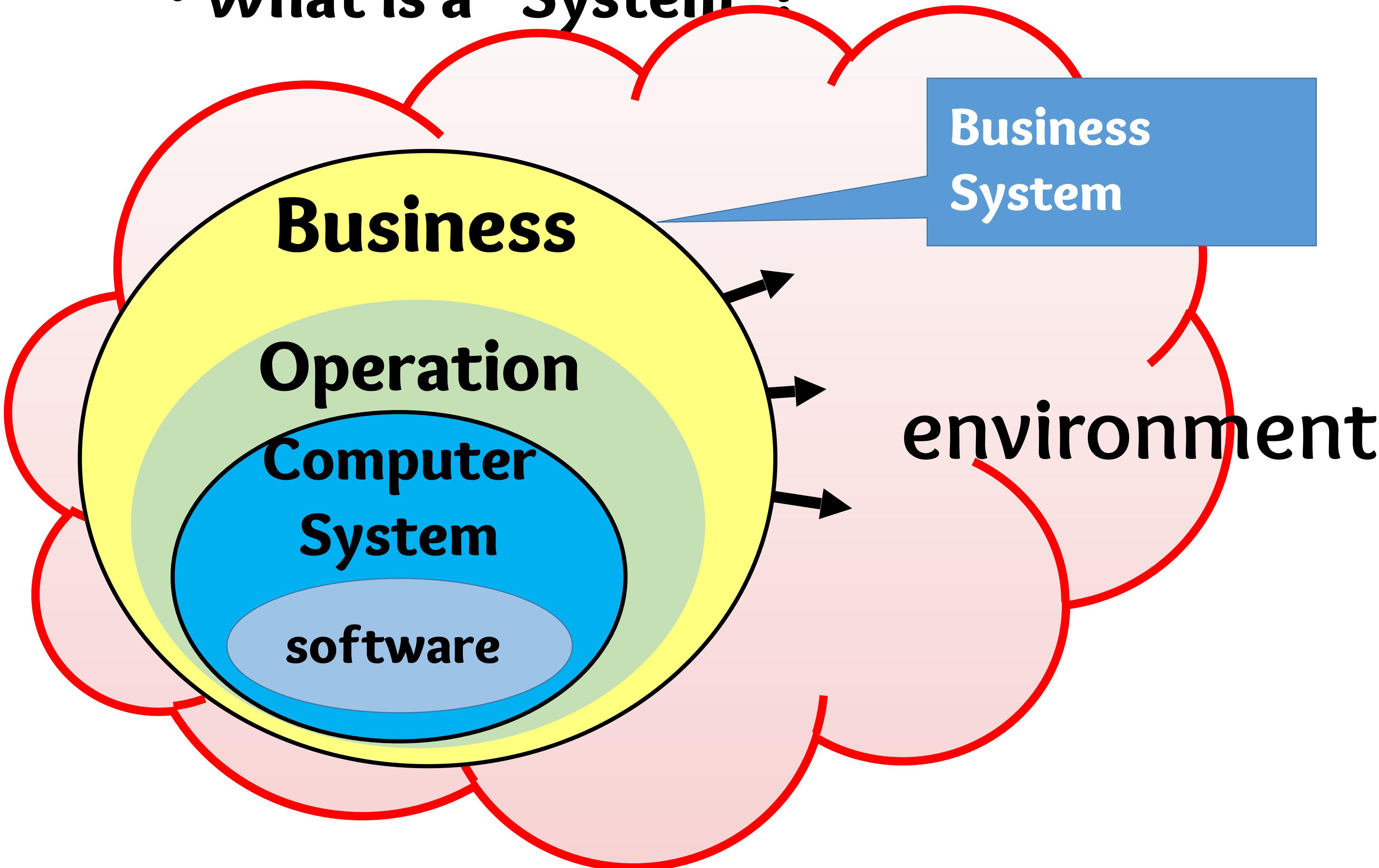
Software Development Layer

- What is a “System”?



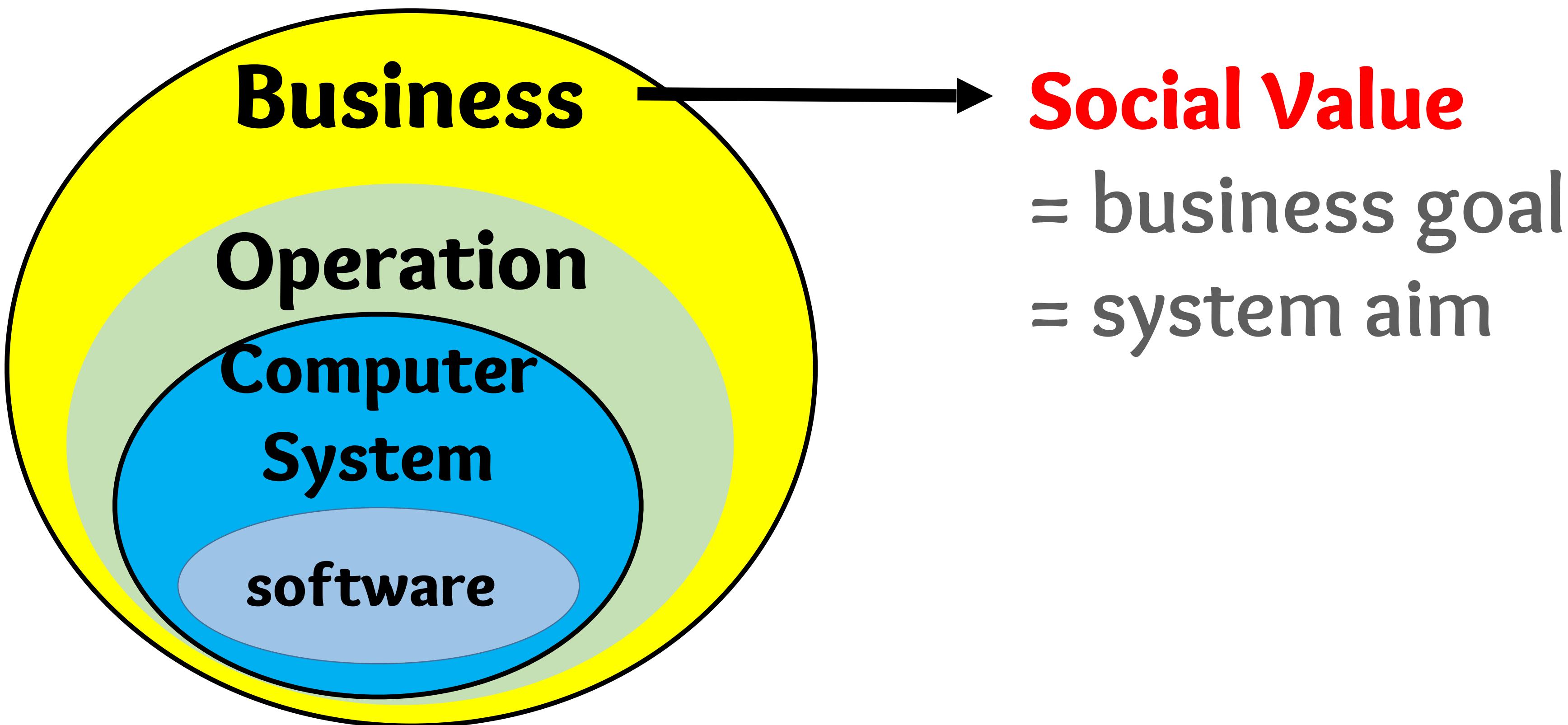
Software Development Layer

- What is a “System”?



Software Development Layer

- What is a “System”?



Software Development Process

- What do we need to know for success?

Software Development Process

- What do we need to know for success?

Built a thing right.

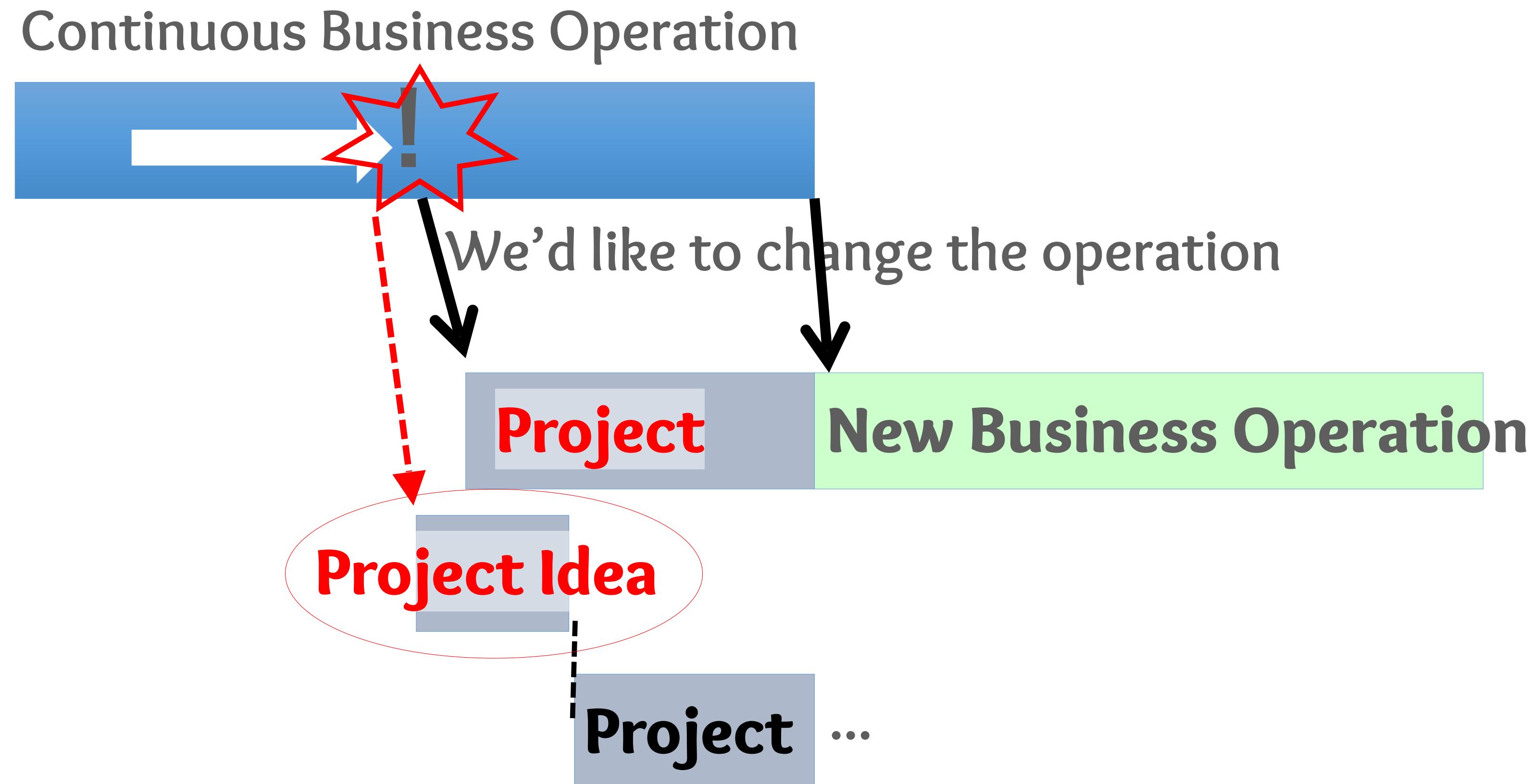
Built the right thing.

Social Value

- Built a **thing right**
 - Computer Science
 - Software Engineering
 - Project Management
- Built the **right thing**
 - Business Model Analysis
 - Requirement Engineering

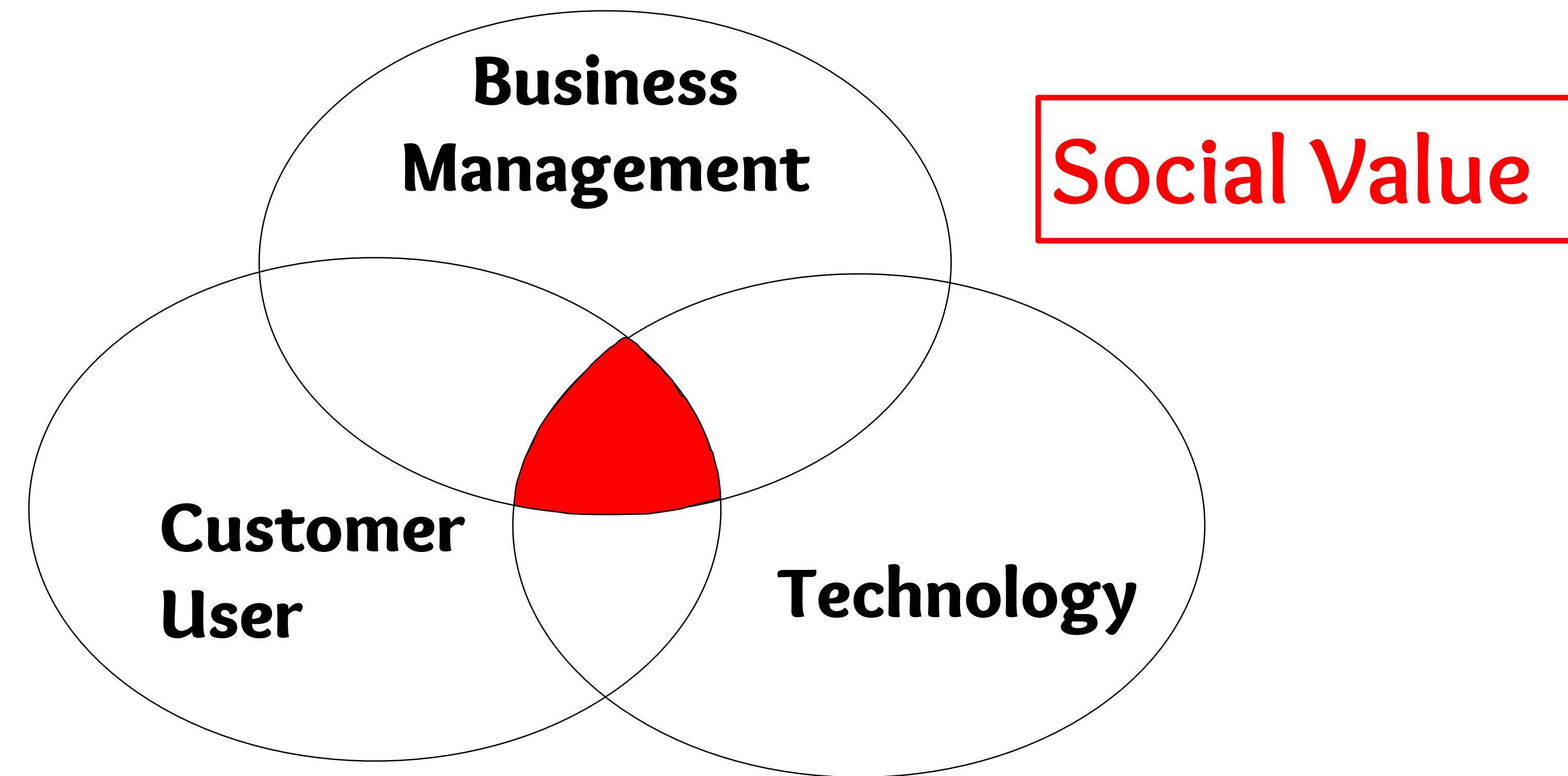
What is a Project?

- View from the company...



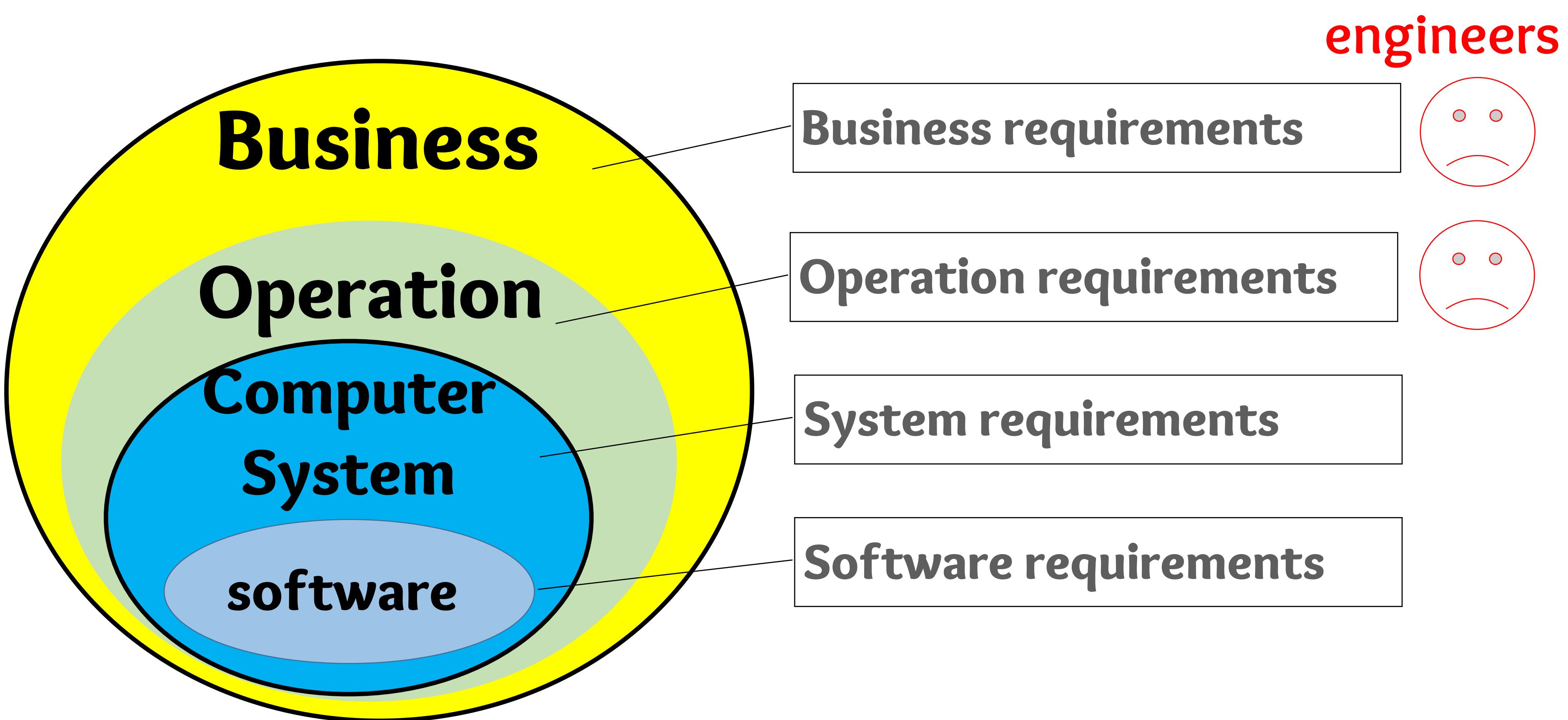
“Right Thing”?

- We need 3 views



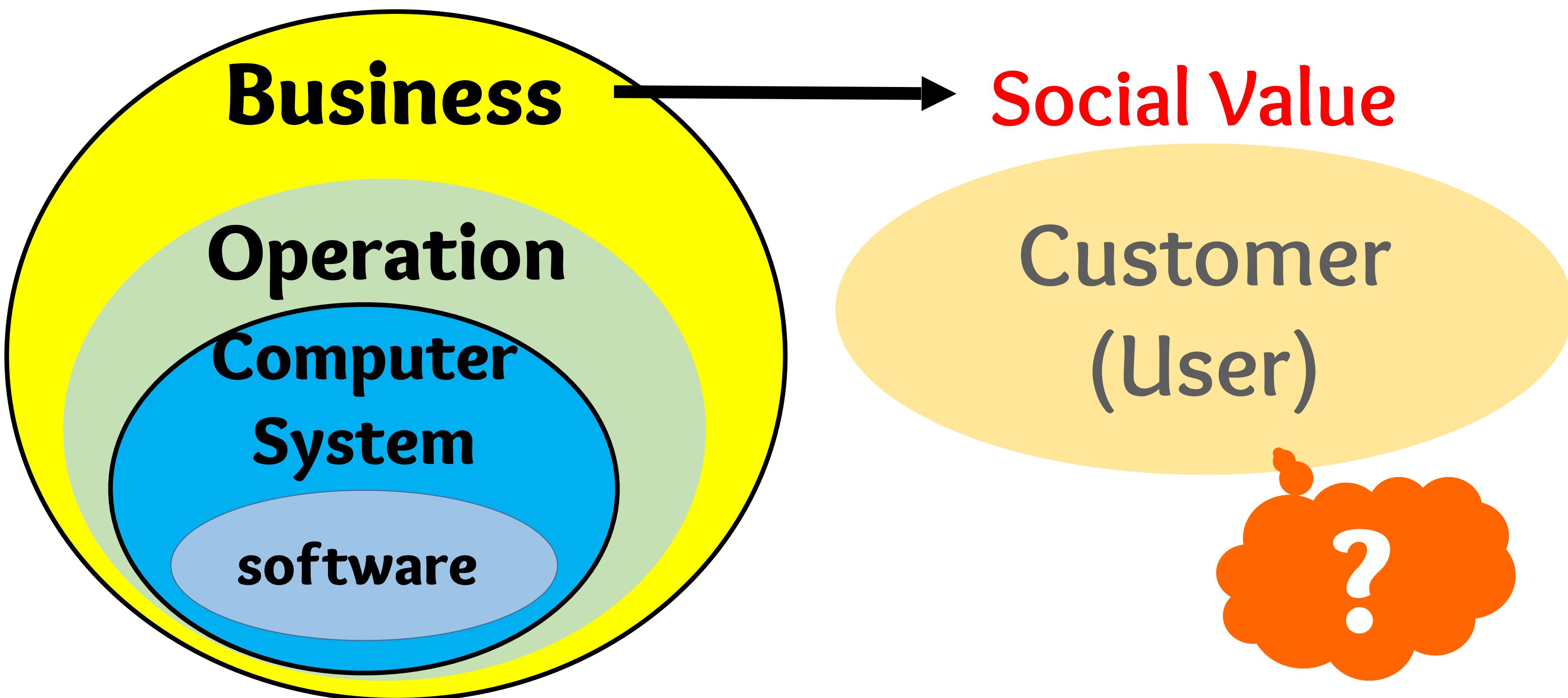
Software Development Process

- What we need to know for success?



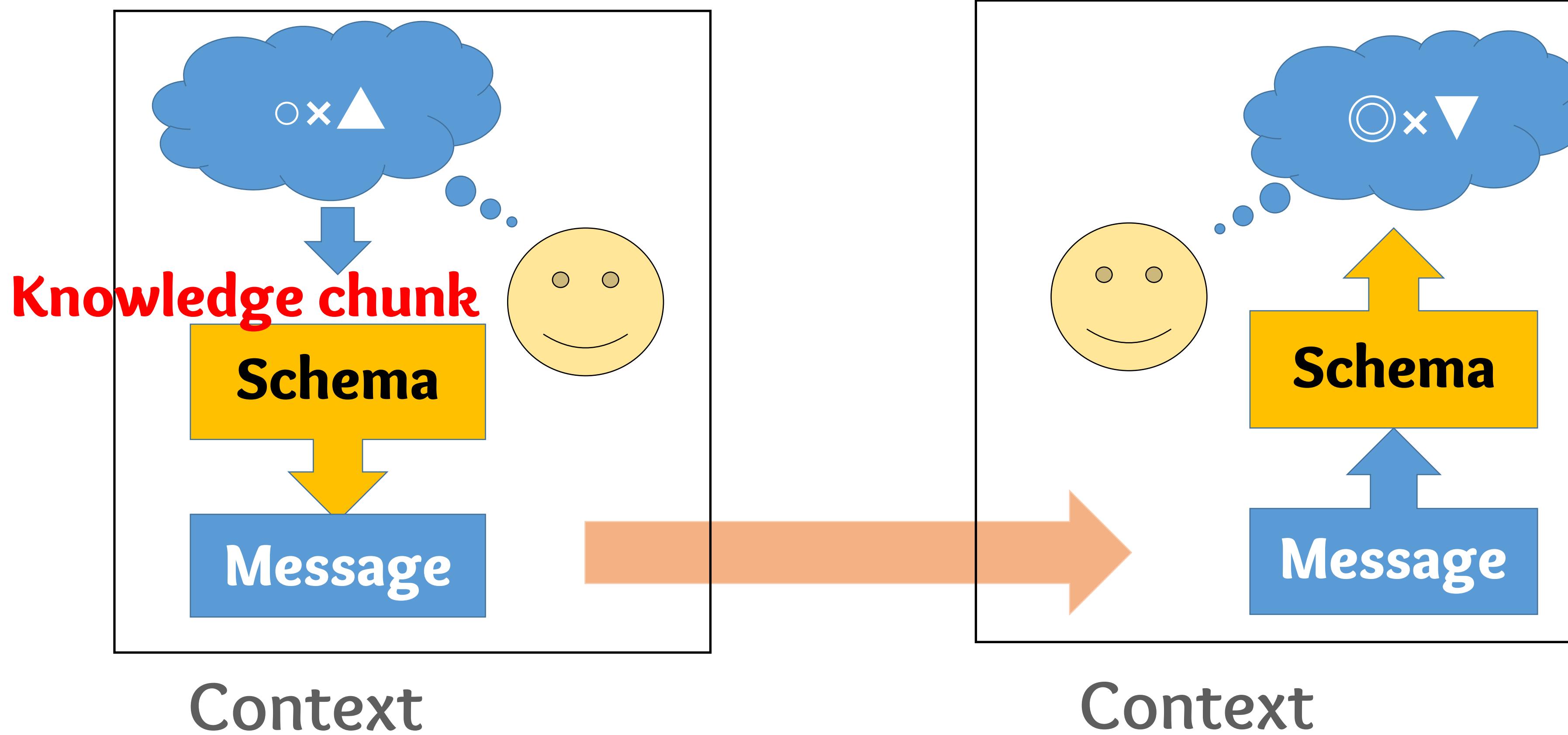
“Right Thing”?

- Who knows the “Right thing”?



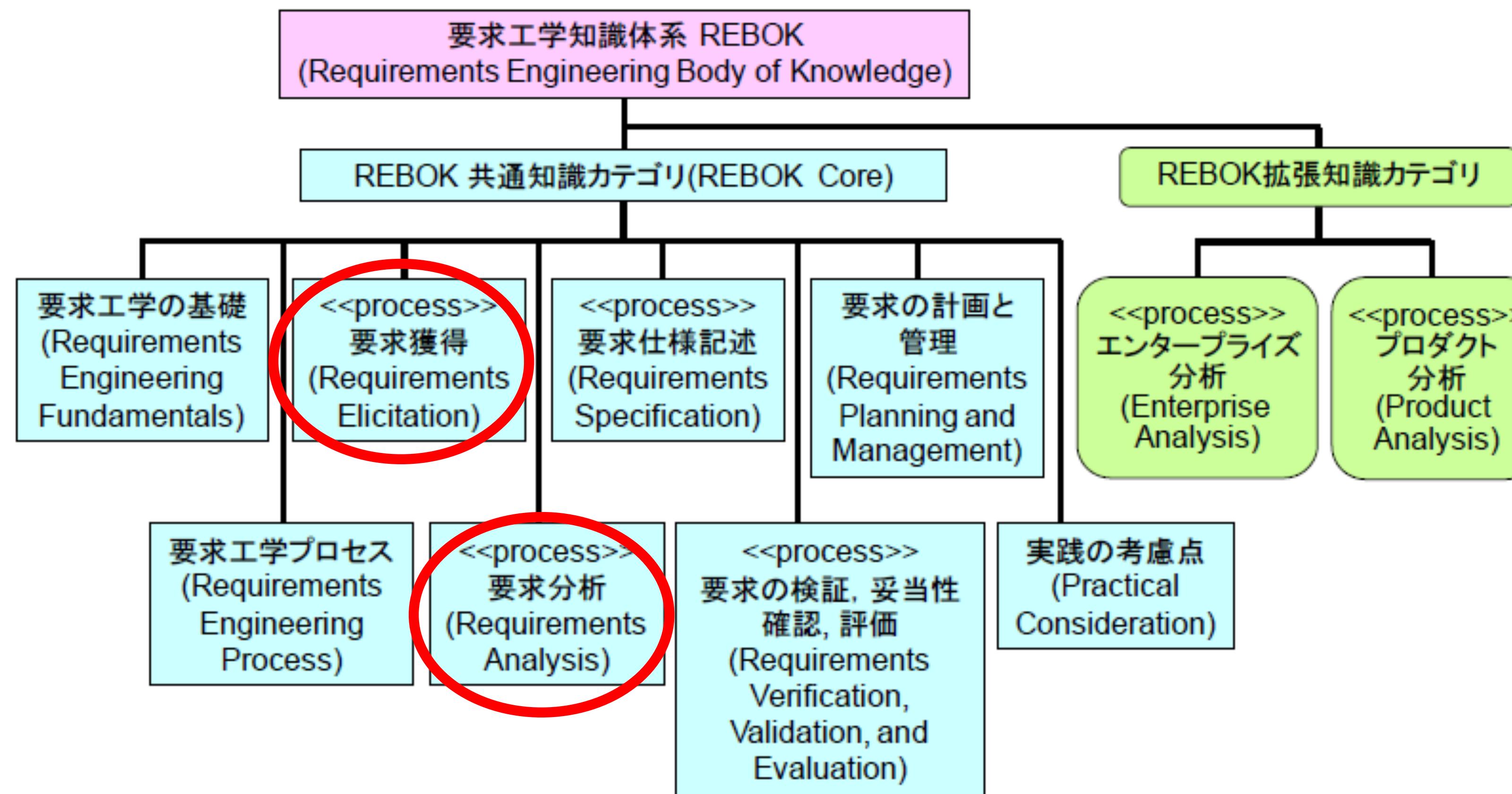
“Right Thing”?

- Why engineers don't like to talk about Business?



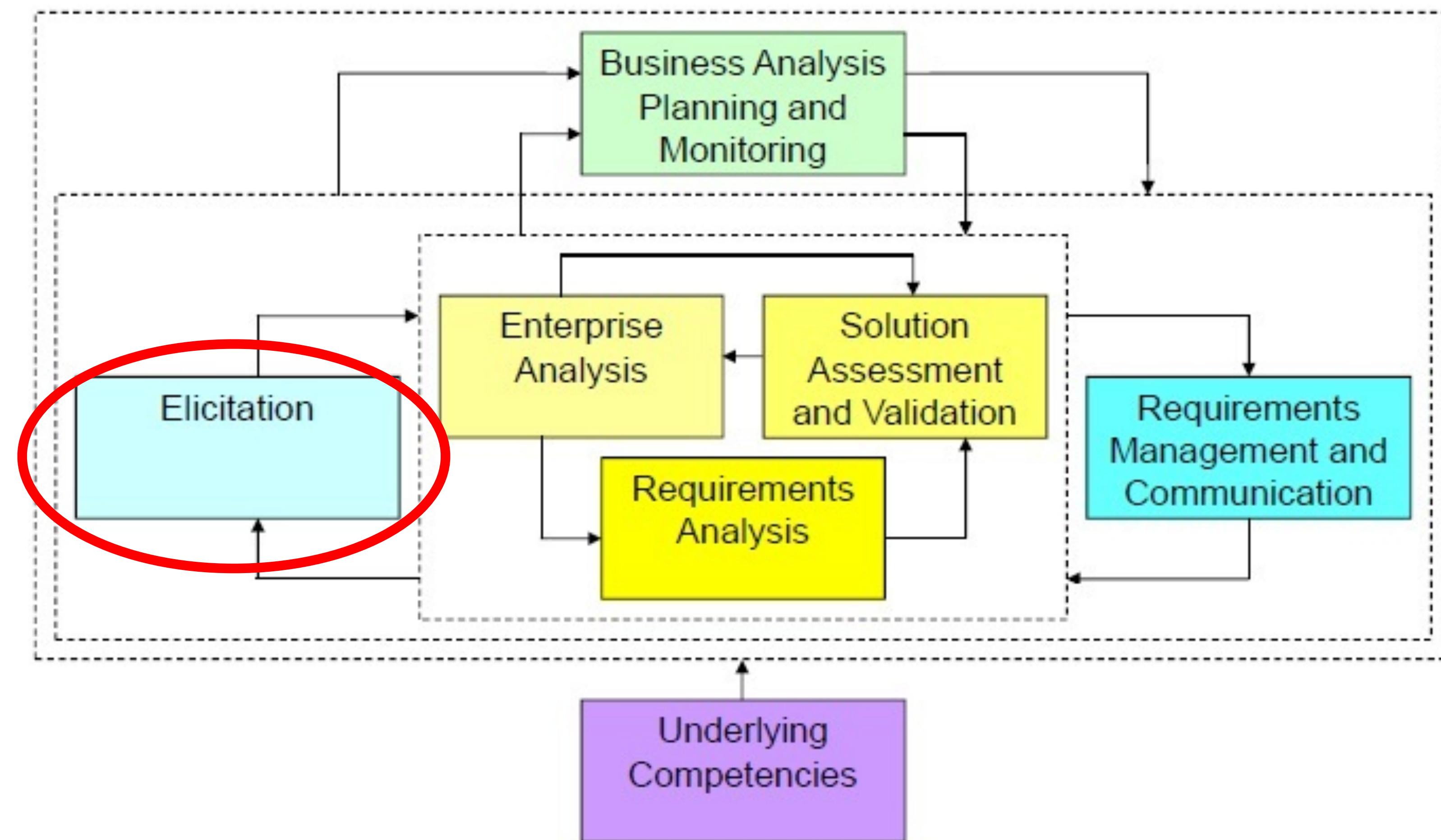
“Right Thing”?

- Requirements Engineering
 - REBOK(Requirement Engineering Body of Knowledge), 2011
<http://www.ipa.go.jp/files/000005375.pdf>



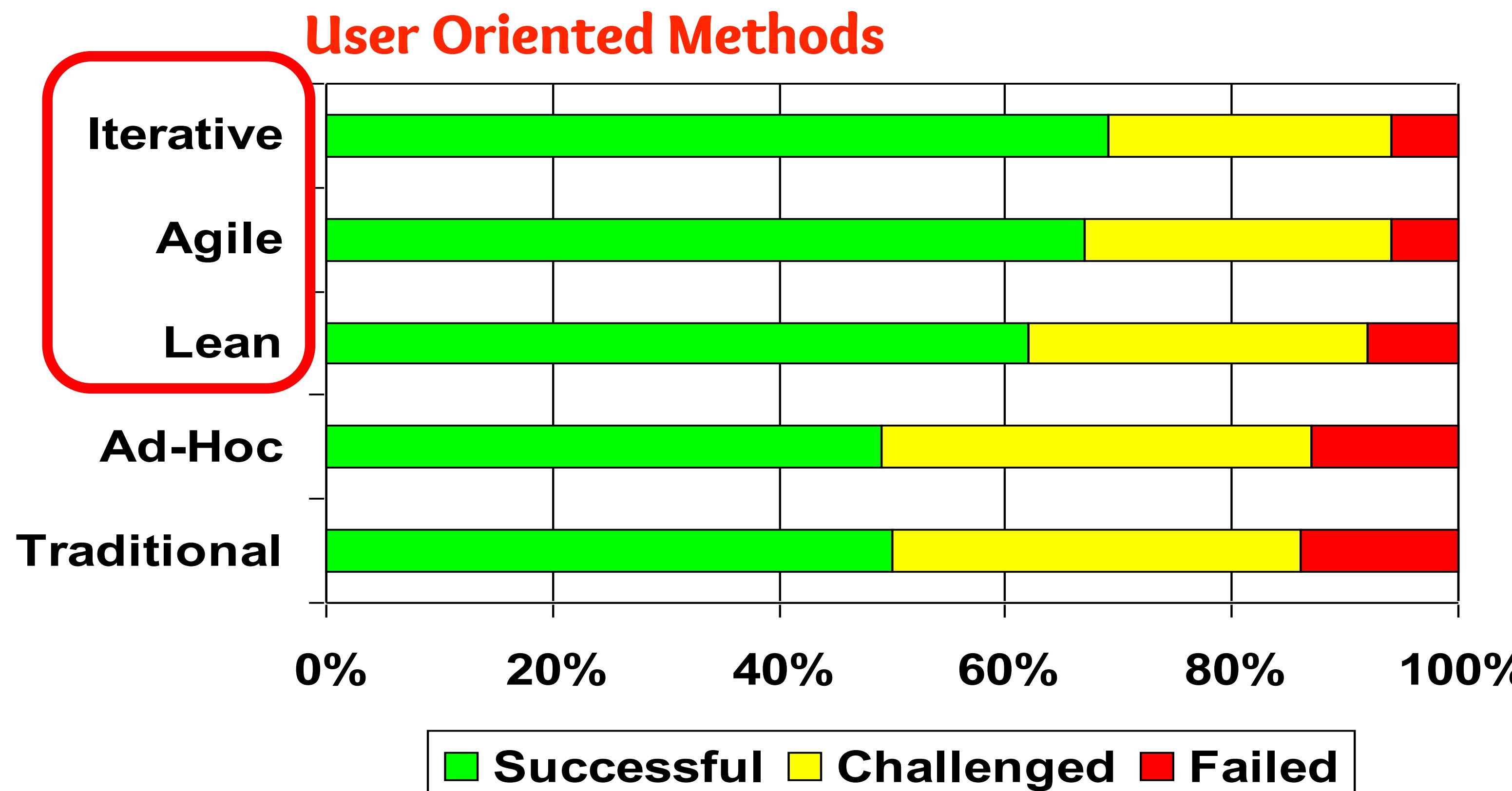
“Right Thing”?

- **Business Analysis**
 - BABOK(Business Analysis Body of Knowledge), 2005



“Right Thing”?

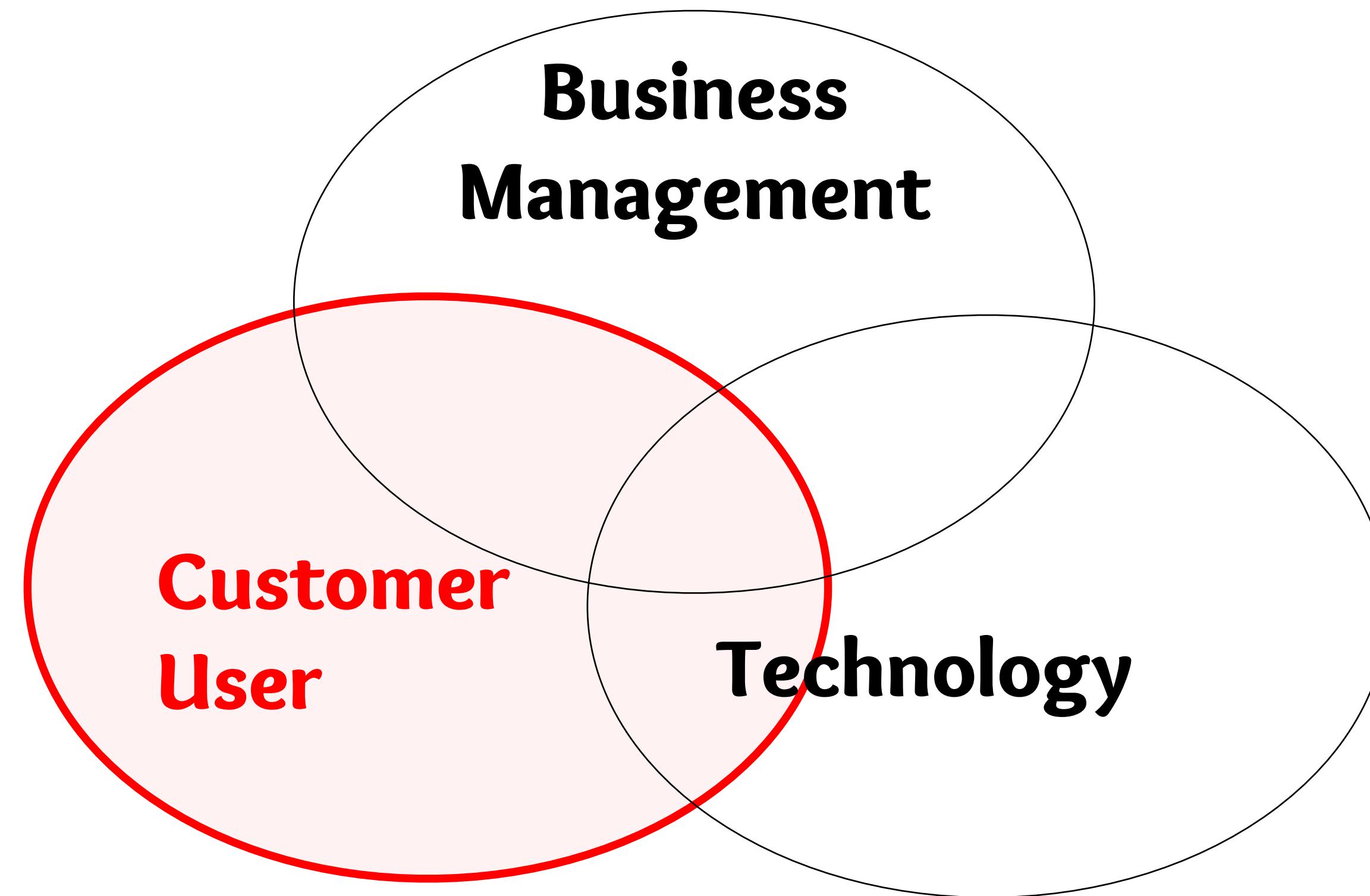
- Who knows the “Right thing”?



*Detailed results online at
www.ambysoft.com/surveys/*

“Right Thing”?

- Do you know “Customer” and “User” ?



Social Value

- What percentage of new products/services fail ?

40 - 90 %

Failure defined as return on investment

“Why Companies Fail--and How Their Founders Can Bounce Back”

(<http://hbswk.hbs.edu/item/6591.html>)

Social Value

- Why startups fail?
- Main reason: NOT “poor product”

No market needs

42

Running out of cash

29

Not the right team

23

:

:

Poor product

17

Top 20 reasons why startups fail

<https://www.cbinsights.com/blog/startup-failure-post-mortem/>

“Right Thing”?

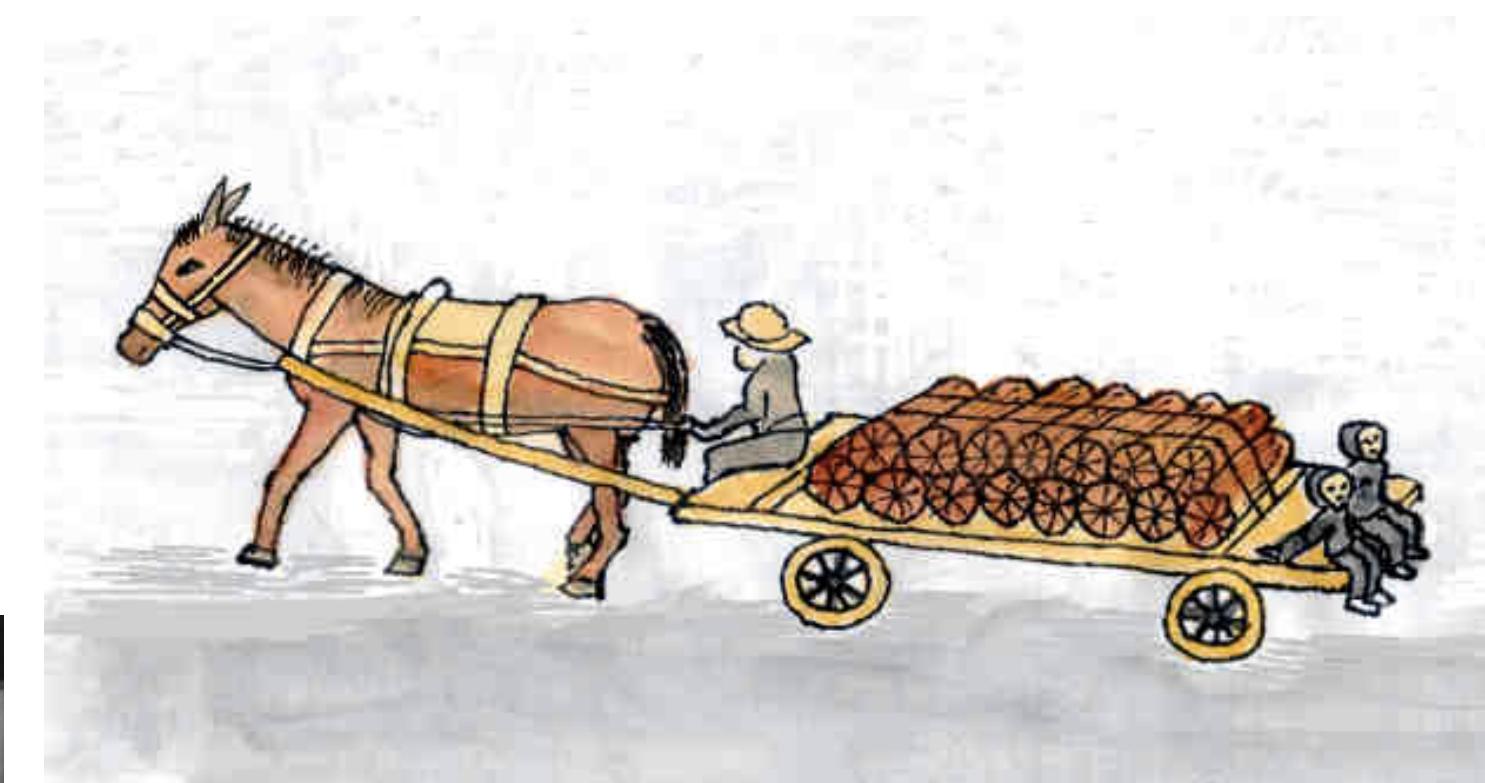
- Who knows the “Right thing”?
 - Our world is changing.
 - Social value is changing, too.
 - Business is changing.
- Customers don't know what they want

“Right Thing”?

- What do users know?



Was “**car**” innovated from
“**horse-drawn carriage**”?



We are different people

- He likes an apple.
- Because ... ?



We are different people

- We can not see underwater

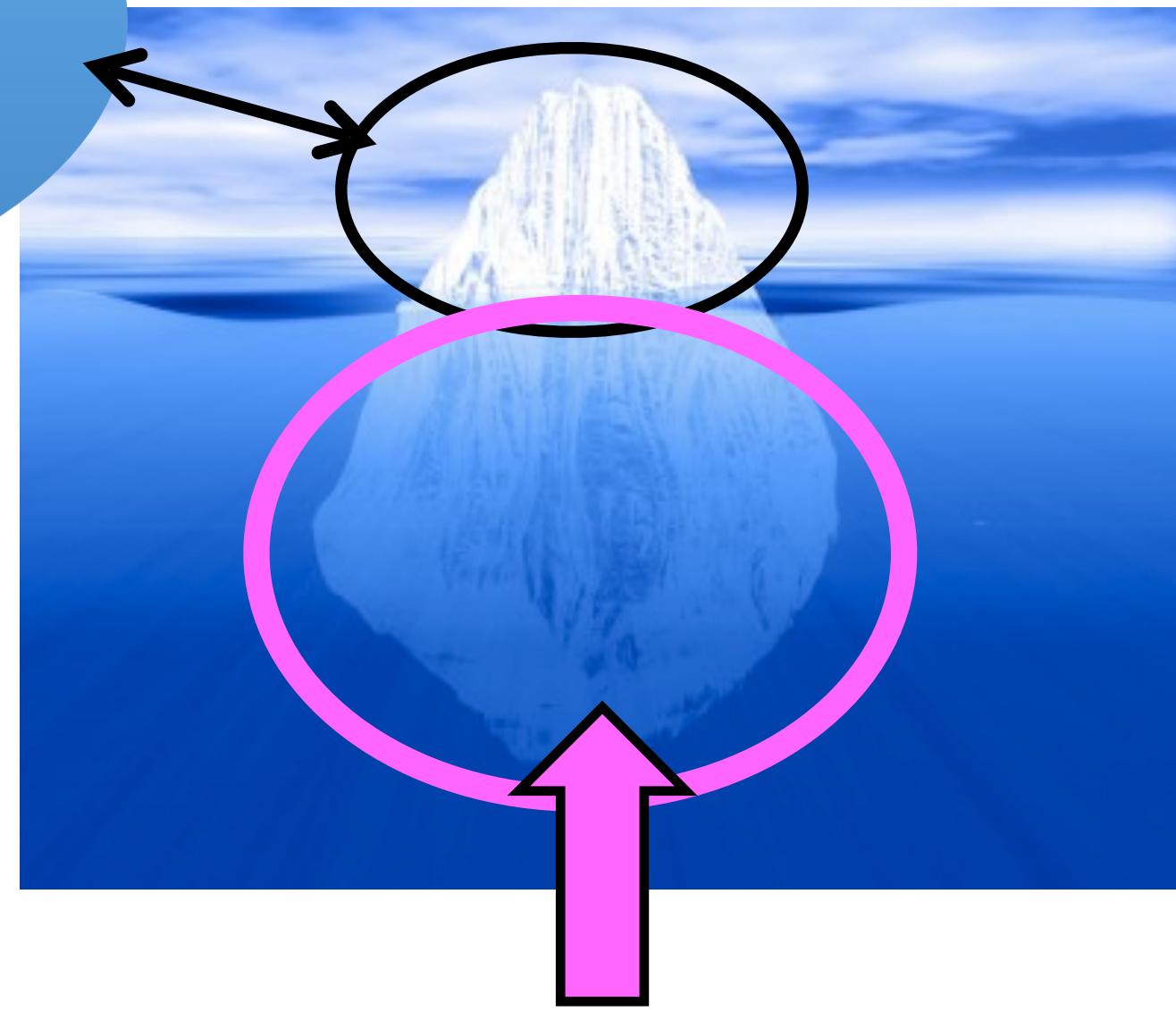


Try to Understand

- **Imagine** underwater



I like apples
because ...



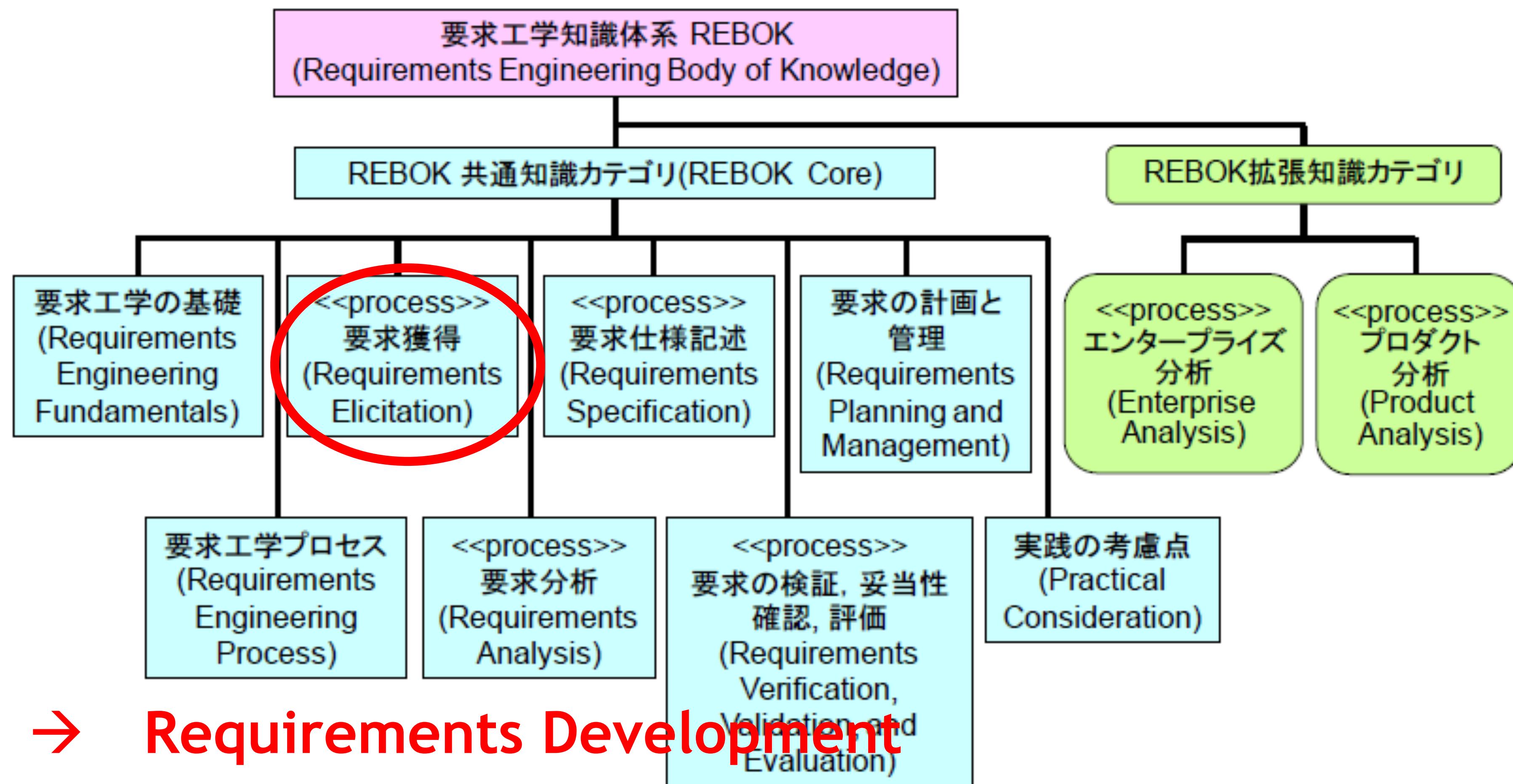
- What **words** did he/she use?
- What was the **expression**?
- What about **body language**?
- **Voice size**?
- **Focussed** (mind) or not?

Observe / Feel / Think

Imagine

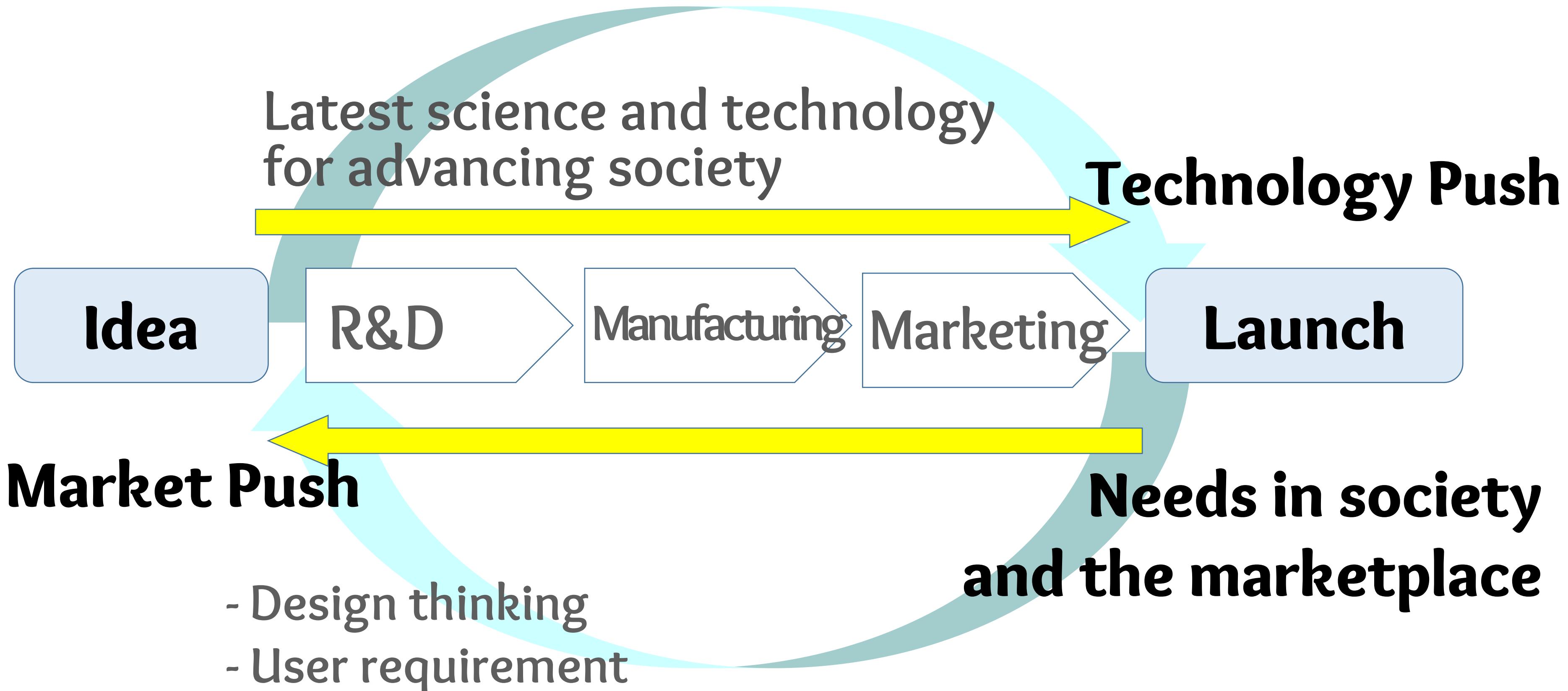
“Right Thing”?

- Requirements Engineering
 - REBOK(Requirement Engineering Body of Knowledge)



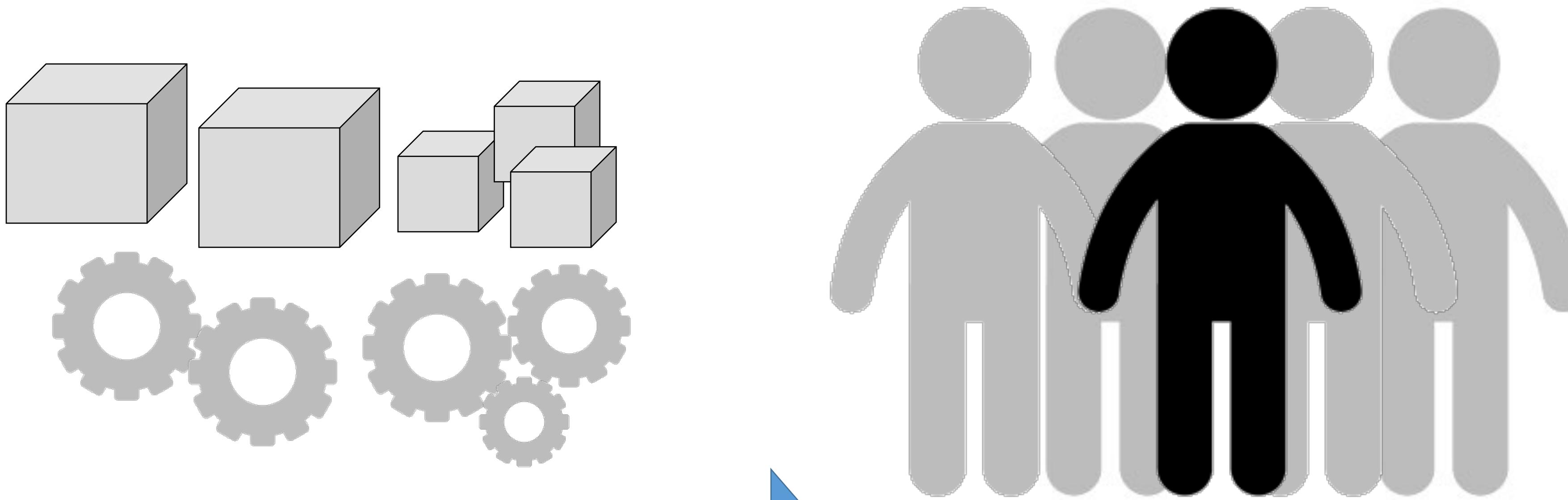
Business Idea Development

- **Business from technology**
- **Business from user needs**

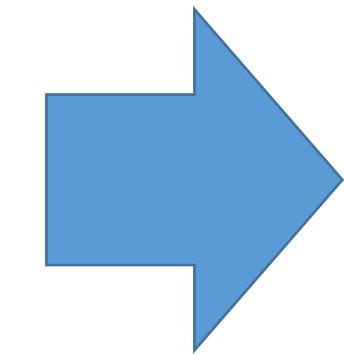


Business Idea Development

- **human-oriented approach**



Technology Centric
Product Oriented
<**Function**>



People Centric
Service Oriented
<**Value**>

The protagonists are people

Design Thinking Process

- Design Thinking is essentially a **human-oriented approach** to innovation.

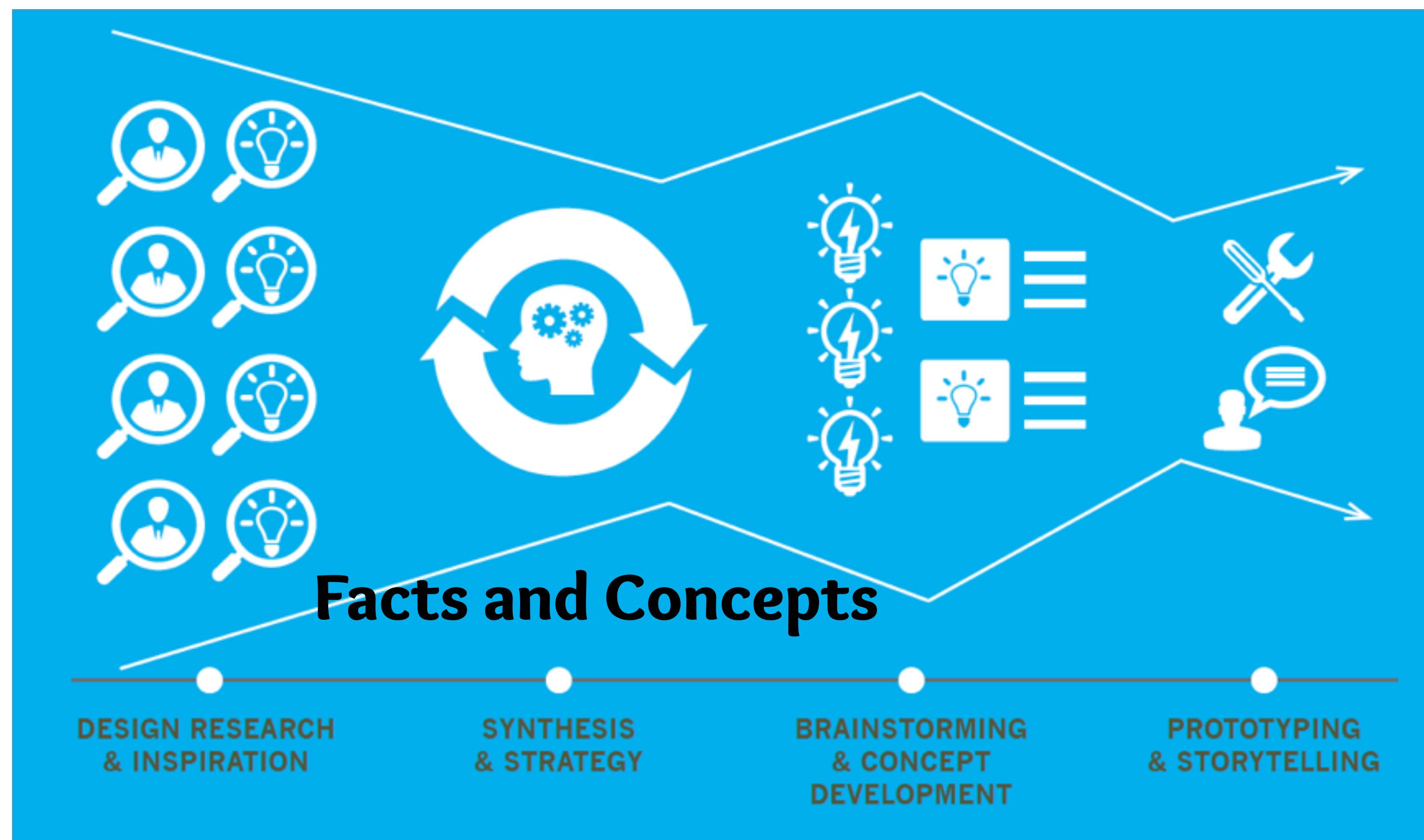
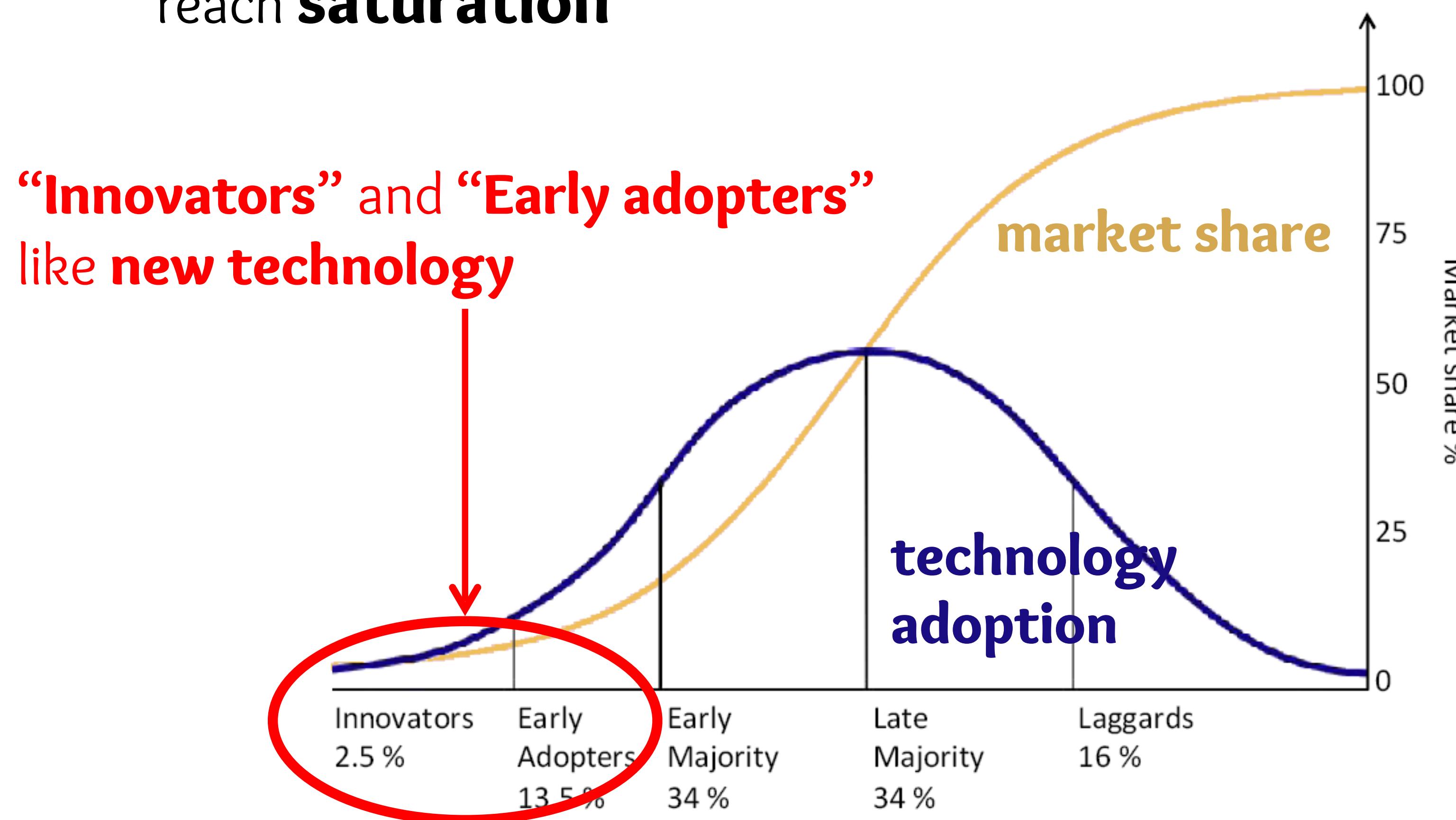


Figure from IDEO

Customer Segment

- With successive **groups of consumers** adopting the **technology (blue)**, its **market share (yellow)** will eventually reach **saturation**



Customer Segment

- **Innovators**

- Innovators are willing to **take risks**, have the highest social status. Their risk tolerance allows them to adopt technologies that may ultimately fail.

- **Early Adopters**

- These individuals have the highest degree of **opinion leadership** among the adopter categories. Early adopters have a higher social status. They use judicious choice of adoption to help them maintain a central communication position.

- **Early Majority**

- They adopt an innovation after a varying degree of time that is significantly longer than the innovators and early adopters. After they accept innovations, it already isn't innovation.

- **Late Majority**

- They adopt technology after the average person. Late Majority are typically **skeptical about innovation**, have below average social status.

- **Laggards**

- They are last to adopt technology. Unlike some of the previous categories, individuals in this category show little to no opinion leadership. Laggards typically tend to be focused on "traditions".

Target is **early adopters** to **prove the value** of your service

Theme of mini-PBL

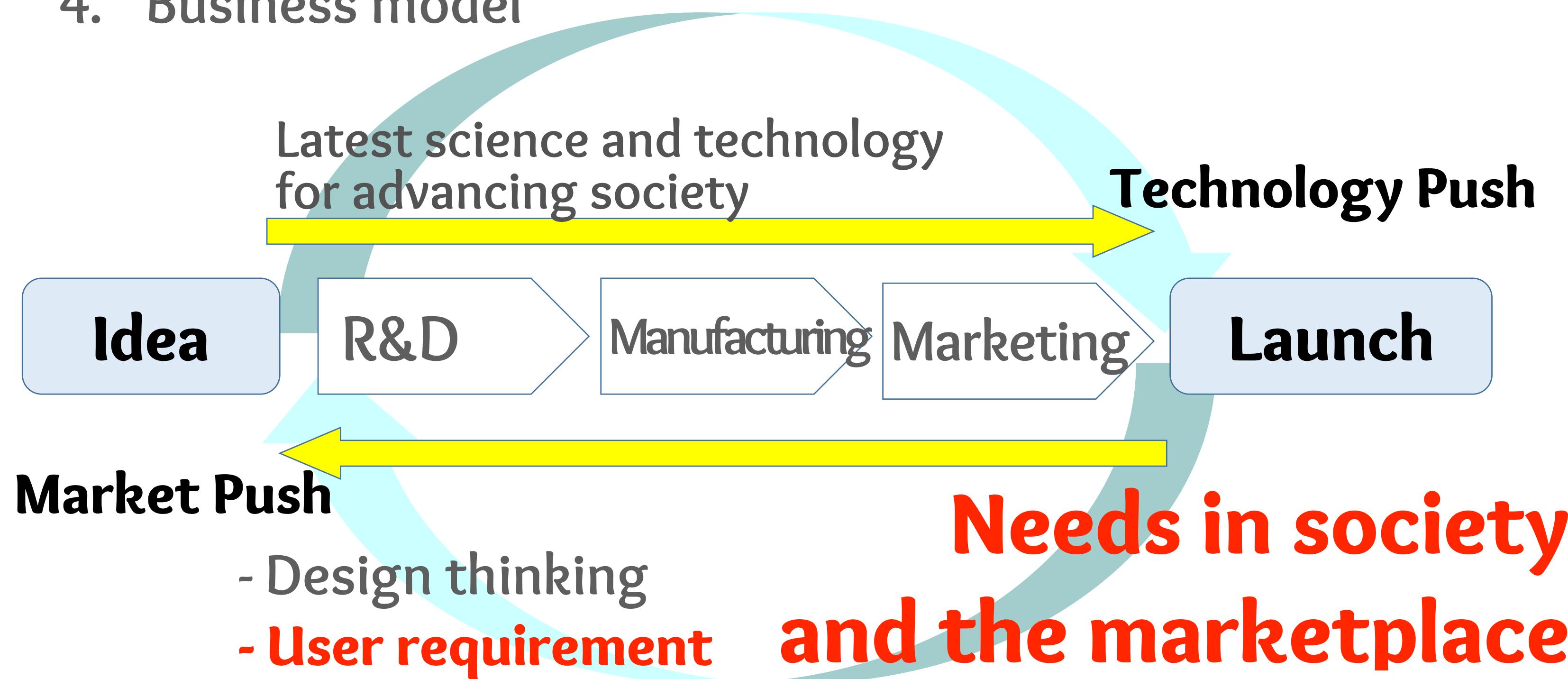
- Practice of finding new services

1. Analyze the product

2. User definition and problem elicitation

3. Redefine user and problem

4. Business model



Lean Canvas

- **Business model canvas**

- Business modeling tool
- “Value Proposition Design: How to Create Products and Services Customers Want”

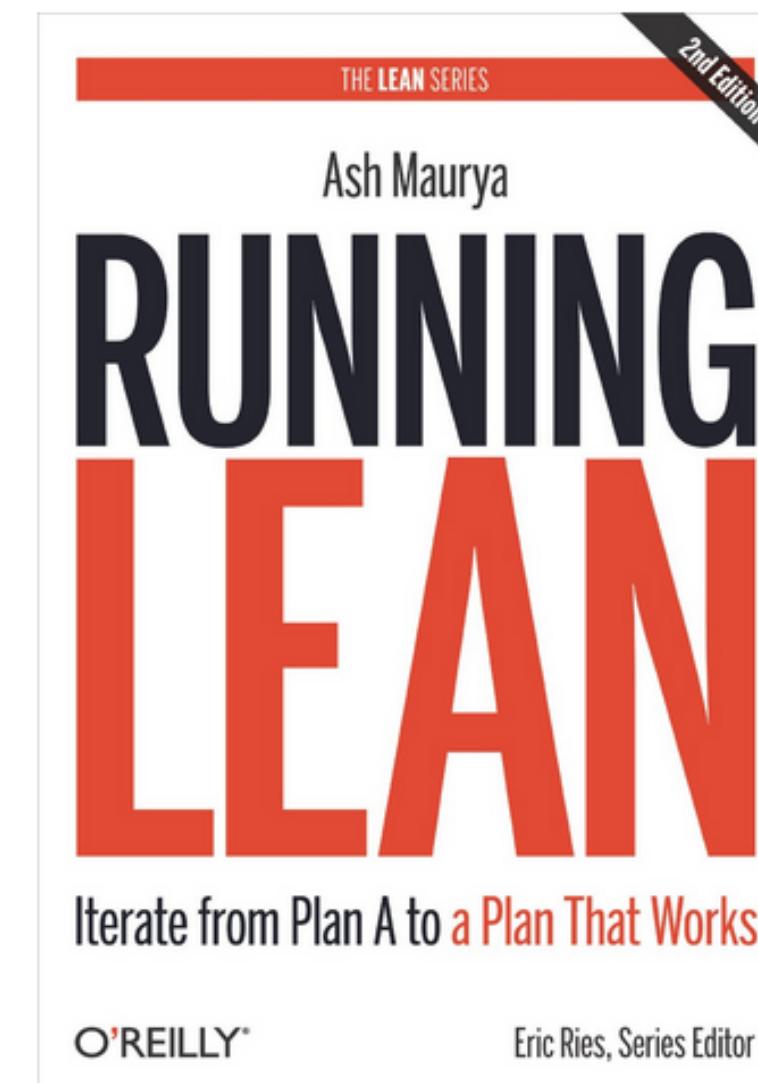
Alexander Osterwalder, Yves Pigneur, 2014



- **Lean canvas**

- For startup business
- Checking uncertainty ideas
- “Running Lean: Iterate from Plan A to a Plan That Works”

Ash Maurya, 2012



Lean Canvas

- 1. Customer Segments**
- 2. Unique Value Proposition**
- 3. Channels**
- 4. Unfair Advantage**
- 5. Revenue Streams**
- 6. Key Metrics**
- 7. Solution**
- 8. Problem**
- 9. Cost Structure**

| | | | | |
|--|---|--|--|---|
| <i>Problem</i> Business Models need to be more portable Measuring Progress is hard work. Communicating learning is critical. Existing Alternatives: Intuition, business plans, spreadsheets, business model canvas. | <i>Solution</i> 1-page Lean Canvas Progress Dashboard Sharing Features 7 | <i>Unique Value Proposition</i> Helps startups raise their odds of success. High-level concept: Startup Report Card. | <i>Unfair Advantage</i> "Expert" Endorsements Personal Authority 4 | <i>Customer Segments</i> Startup Founders (Creators) Advisors/Investors (Collaborators) Early Adopter: Book reader or workshop participant 1 |
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| <i>Cost Structure</i> Hosting Costs: heroku (currently \$0) People Costs: \$5K/mo 9 | | <i>Revenue Streams</i> Bundled with book and workshops 30-day free trial @ \$14/mo 5 | | |

User definition and Elicitation

- **Let's discuss customer requirements**

What value do they want?

- 1. Customer Segments**

2. Unique Value Proposition
3. Channels
4. Unfair Advantage
5. Revenue Streams
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User definition and Elicitation

- Let's get a view of the **Customer**

- **Target application “...”**

Value : ...

- Through **better** ...
- **Reduce** ...
- **Increase** ...

for ...

Users : (e.g., students, young, not rich, ...)

How is the **user's life?**

What is their **main problem about ...?**

User Definition and Elicitation

- **Let's define the customer!**

1. What personality do you set as a target user?

Imagine details and describe the customer personality

- Nationality?
- Age? Male? Female?
- Fat?
- Rich?
- Club activities?
- What words do they use?
- ...and so on



2. What problems does a user feel?

“PERSONA” method : consider as a user

User Definition and Elicitation

- **Let's discuss customer requirements**

What value they want?

1. Customer Segments
2. Unique Value Proposition
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User Definition and Elicitation

- Listing user's problems
- Focus on **Main** problems (1 ~ 3)
 - Why do they need it?
 - What makes them happy?
 - Please think “is it true?”
- Define user problem in one sentence
 - “ xxxx-ly A-san’s problem is yyyy.”
- Don’t forget “Facts and Concepts”.

See you tomorrow

Tomorrow we start at 10:45.

