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Current Trends
in
Web Engineering

Current Trends in Web Engineering

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INVEST in good stories

- Ron Jeffries about stories (in XP): **Three C**
  - **Cards** (their physical medium)
  - **Conversation** (the discussion surrounding them)
  - **Confirmation** (tests that verify them)
- Stories are good enough for both sides
  - For customers/stakeholders and programmers
  - To work together effectively
- Characteristics: INVEST

INVEST in good stories (2)

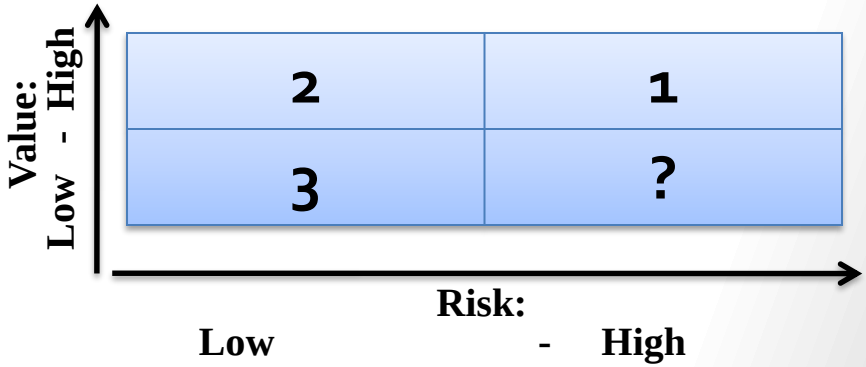
- INVEST in detail
  - I – **Independent** (no dependencies betw. stories)
  - N – **Negotiable** (no contract, captures the essence)
  - V – **Valuable** (value to the *customer only*)
  - E – **Estimable** (written good enough to be ranked)
  - S – **Small** (good stories tend to be small – but think of it in this way: Alistair Cockburn described the cards as tokens promising a future conversation)
  - T – **Testable** (good story is a promise: "I can write a test for it" – if customer does not know what done means who will know at all?)

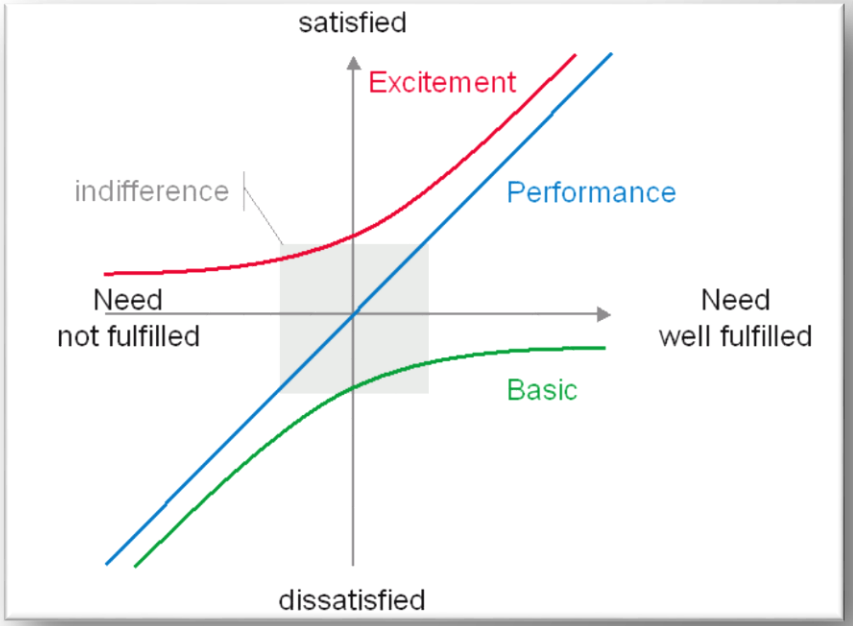
Invest in Stories and Smart Tasks

- For Sprint Planning
  - Mapping from Story to Tasks
- A task should be smart
  - S – **Specific** (do you understand what's involved)
  - M – **Measurable** (can we decide on done)
  - A – **Achievable** (can a member solve the task)
  - R – **Relevant** (can you explain and justify the task)
  - T – **Time-boxed** (is it small enough)

Product Backlog Order

- Different techniques for ordering the backlog, e.g. by priorization based on ROI
- Different approaches might be applied
  - ROI – Risk-Value matrix
    - 1,2,3,4
  - Kano Model
    - Define mixture of basic, performance, and excitement characteristics
- MoSCoW Method
  - Must, Should, Could and Won't have





Beyond traditional user story frameworks

- Scrum:
  - **As a <user/role>**
  - **I want <functionality/goal/desire>**
  - **so that <business value/benefit received>.**
- Behaviour Driven Development
  - **In Order To… <receive benefit>**
  - **As A… <user/role>**
  - **I Want… <goal/desire>**
- Hypothesis Driven Development (HDD)*
  - **We believe <*this capability*>**
  - **Will result in <*this outcome*>**
  - **We will know we have succeeded when <*we see a measurable signal*>**

* http://barryoreilly.com/2013/10/21/how-to-implement-hypothesis-driven-development/

HDD Example

Hypothesis Story Card Example:

- **We Believe That**
  increasing the size of hotel images on the booking page
- **Will Result In**
  improved customer engagement and conversion
- **We Will Know We Have Succeeded When**
  we see a 5% increase in customers who review hotel images who then proceed to book in 48 hours.

- Combining Agile and HDD*:
  - Effective monitoring and evaluation tools are required to measure the impact of testing efforts
  - Agile software development focuses on "working software" as the primary measure of progress.
  - Combining Hypothesis-Driven Development with Continuous Delivery, we define "working software" and "validated learning" as the primary measures of progress.

* http://barryoreilly.com/2013/10/21/how-to-implement-hypothesis-driven-development/

SECTION://6

- Example Backlog (1st approach)

As Student

- (simplified Example…)
- I want to attend the lecture, …
- Need:
  - Acquire new knowledge / Understanding
    - To be better than competitors
  - Freedom
    - To have a freedom of choice for the job I like
  - Protection
    - To get a well-paid job

HDD – any ideas? How to proceed?

- **We believe <*this capability*>**
- **Will result in <*this outcome*>**
- **We will know we have succeeded when <*we see a measurable signal*>**

CHAPTER://4

- Alignment Diagrams

Maps, Mapping and more

- Some Literature
  - Mapping Experiences – Aligning for value, by James Kalbach, O'Reilly
  - Design Sprint, by Richard Banfield C.Todd Lombardo Trace Wax , O'Reilly
  - User Story Mapping – Discover the whole story, build the right product, by Jeff Patton and Peter Economy, O'Reilly
- User Story Mapping, Customer Journey Maps, Experience Maps, Service Blueprints, mental model diagrams, Job Maps, and many, many more??? Confusing isn't it?
  - Many terms, many usages, one goal: **Alignment**!

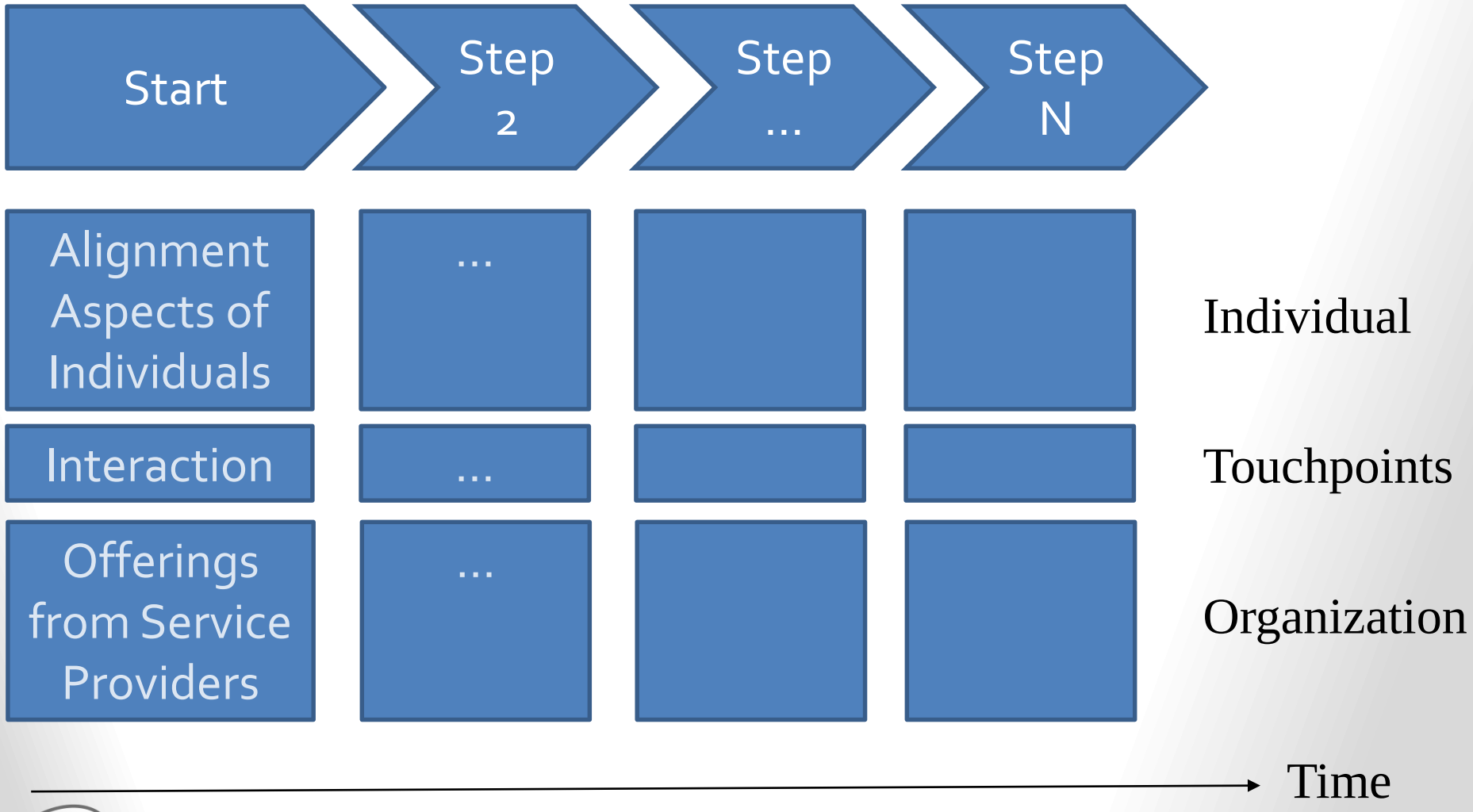
Alignment of what?

- It is all about understanding – and putting all stakeholder on the same page (Developer, Service Provider, User, Customer, etc.)
- It is about **value** and experience (and **impact**)
  - How is value created?
  - How is value perceived?
  - How is value provided?

- **Alignment Maps** – an important approach/tool
  - Visualize the ***steps*** and ***experiences*** when trying to reach a ***goal***
  - Visualize intersections (***Touchpoints***) where ***users*** get in contact with the offerings of ***service provider***
  - ***Mapping*** is the process of creating an alignment map
    - ***Mapping Focus:*** Current vs. Future state, Experience, Features needed, jobs to be done, etc.

- …and are very well known from Design Thinking

A simple Alignment Diagram



Alignment Map as Table

	Stage 1	Stage 2	Stage 3	Stage N
Stage Goals etc.				
Actions				
Thoughts				
Feelings	☺	☹		
Pain Points				
Touchpoints				
Services and Offerings				
Processes				
Goals and Opportunities				
SWOT eg.				

Story Mapping / 1

1. Select the user/customer whose experience you want to understand better
2. Lay out your hypothetical view of what the user/customer's journey looks like from beginning to end

Example: