CopenhagenContext

Dealing with Context Change

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IMPROVE
Quality Services

Acknowledgements

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Some slides taken from Rapid Software Testing and are used with permission. Rapid Software Testing was developed by James Bach and Michael Bolton. Also see: http://www.satisfice.com/info_rst.shtml

What is testing?
And why do we test?

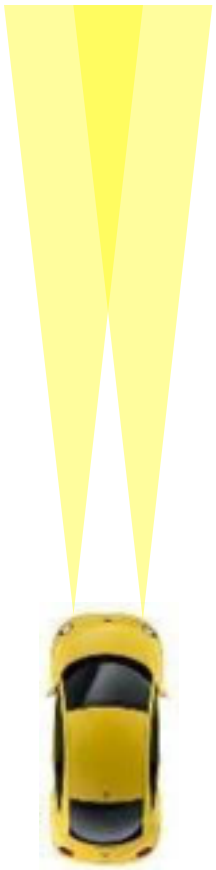
Evaluate a product by learning about it through exploration and experimentation (RST)

Testing gathers information about a product with the intention to inform a decision (Jerry Weinberg)

Testers see things for what they are. They make informed decisions about quality possible, because they think critically about software (RST)

Testers light the way (RST)

Testers Light the Way:
The Risk Gap



What we need to know

What we know

The purpose of testing is to close the risk gap. The bigger this is, the harder it is to test.

Our knowledge of the status of the product

Source: Rapid Software Testing © Satisfice Inc. http://www.satisfice.com/info_rst.shtml

Exercise:
What is Context?

1. Define context.
2. Discuss with your neighbour…

Any questions?

2 Minutes

What is Context?

context

/ˈkɒntɛkst/

noun

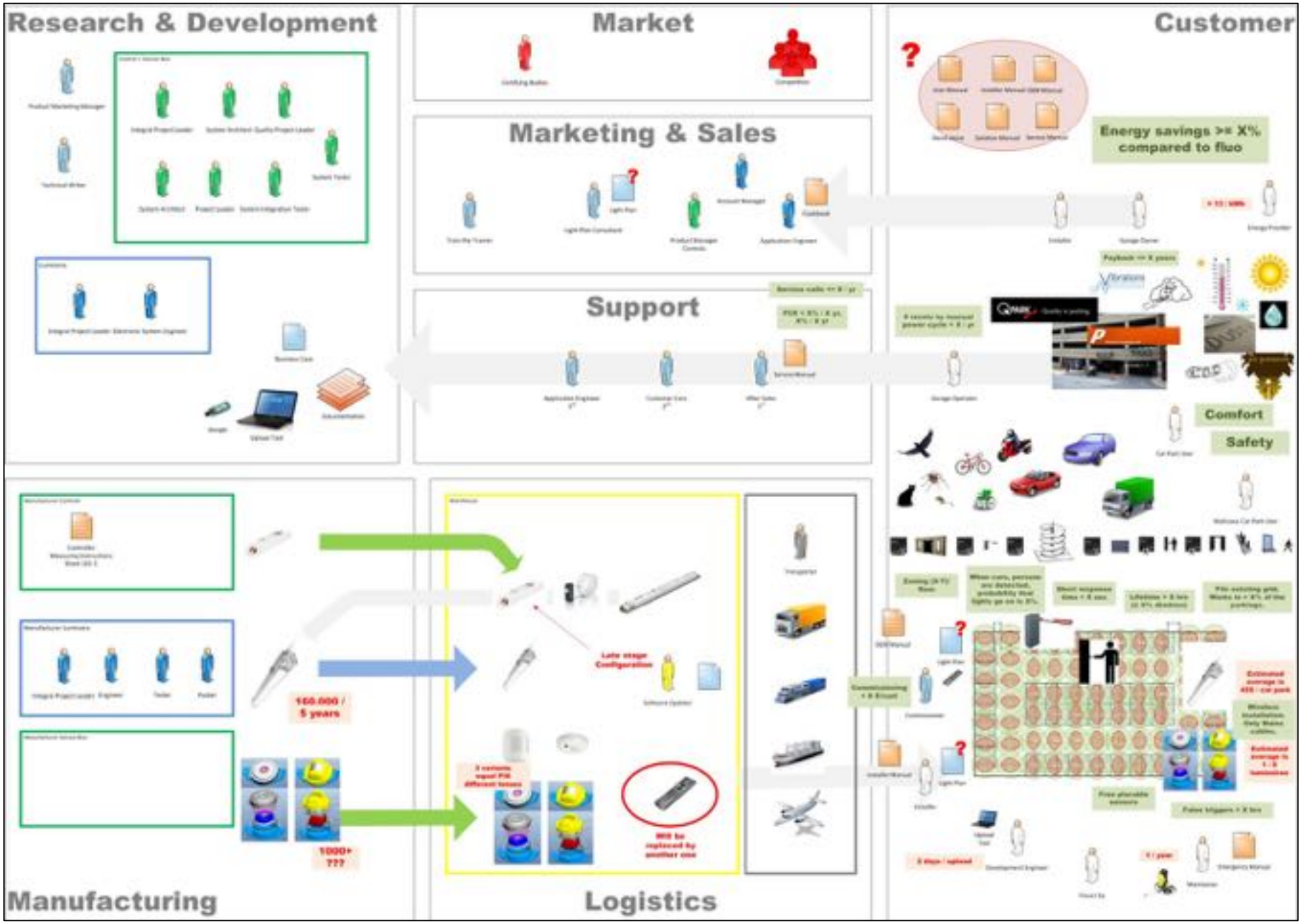
the circumstances that form the setting for an event, statement, or idea, and in terms of which it can be fully understood.
"the proposals need to be considered in the context of new European directives"
synonyms: circumstances, conditions, surroundings, factors, state of affairs; situation, environment, milieu, setting, background, backdrop, scene; climate, atmosphere, ambience, mood, feel

Context?

What is Context-Driven Testing?

"People evaluating a product by learning about it through experimentation in a manner organized and motivated by a systematic consideration of all the factors that significantly influence the problems and solutions that lie within the scope of their mission."

-- James Bach, Let's Test in 2013: "How do I Know I am Context-Driven?"



Source: http://ruudcox.wordpress.com/2013/10/25/an-example-of-a-product-ecology-for-testers/

What are we looking for?

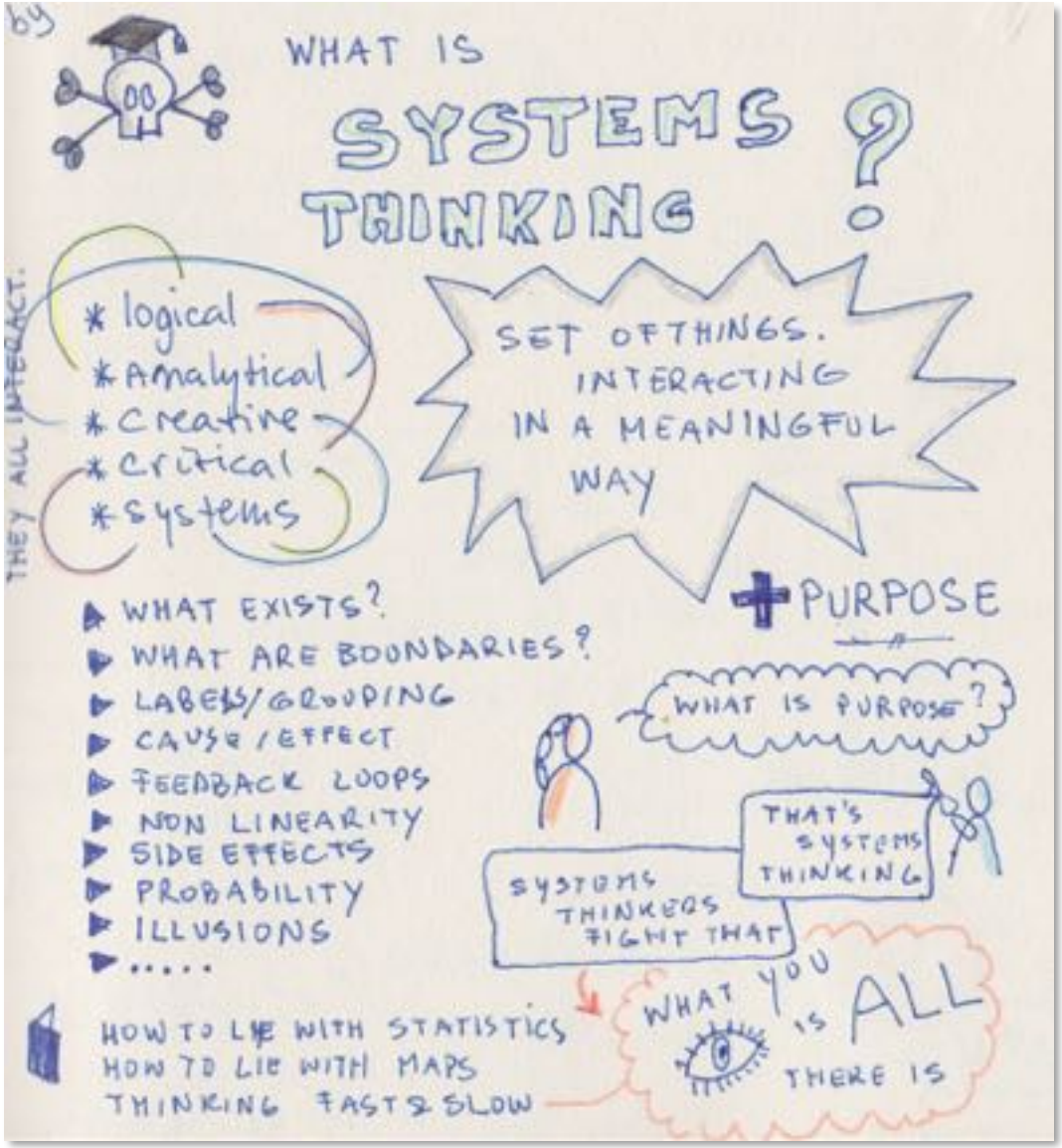
- Relationship with “the product”
  - Whole Product Life Cycle
  - All of them → EVERYTHING!?
- What matters? What is your mission?
- Potential risk & value
- Exploration and experimentation
  - What questions do you need to ask?
- What about the unknown unknowns?

Why do we need this?

- To determine what you could test ....
  - Factors
  - Relations
  - Risks & Value

- The better you understand **the product's eco system**, the better you can test it ...

Systems thinking



Source: http://ruudcox.wordpress.com/2013/04/24/dewt3-sketchnotes/

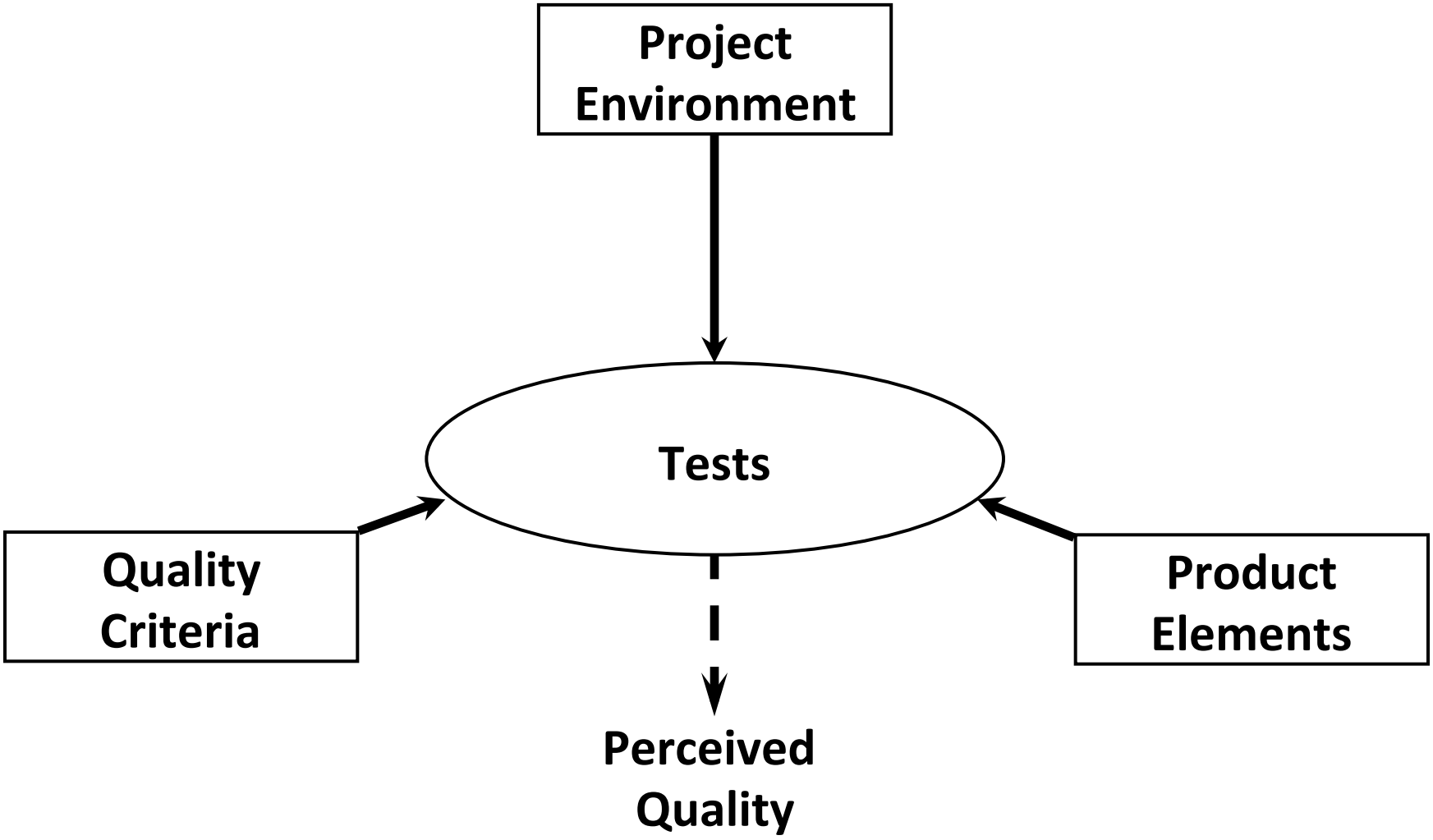
WYSIATI

Source: http://www.inc.com/daniel-kahneman/idea-lab-what-you-see-not-all-there-is.html

What questions do you need to ask?

A way you could start is using guide word heuristics!

Heuristic Test Strategy Model



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Project Environment

Ways to understand our context

MIDTESTD

- Mission
  - *The set of things we must do in order to satisfy our clients.*
- Information
  - *Information about the product or project that is needed for testing.*
- Developer relations
  - *How you get along with the programmers.*
- Test team
  - *Anyone who will perform or support testing.*
- Equipment & tools
  - *Hardware, software, or documents required to administer testing.*
- Schedule
  - *The sequence, duration, and synchronization of project events.*
- Test Items
  - *The product to be tested.*
- Deliverables
  - *The observable products of the test project.*

Source: Rapid Software Testing © Satisfice Inc. http://www.satisfice.com/info_rst.shtml

One Way to Model the product: Product Elements

SFDIPOT – "San Francisco Depot"

- Structure
- Function
- Data
- Interfaces
- Platform
- Operations
- Time

Source: Rapid Software Testing © Satisfice Inc. http://www.satisfice.com/info_rst.shtml

Quality Criteria

Identifying value and threats to it…

CRUCSS CPID

- Capabililty
- Reliability
- Usability
- Charisma
- Security
- Scalability
- Compatibility
- Performance
- Installability
- Development

Many test approaches focus on Capability (functionality) and underemphasize the other criteria

Source: Rapid Software Testing © Satisfice Inc. http://www.satisfice.com/info_rst.shtml

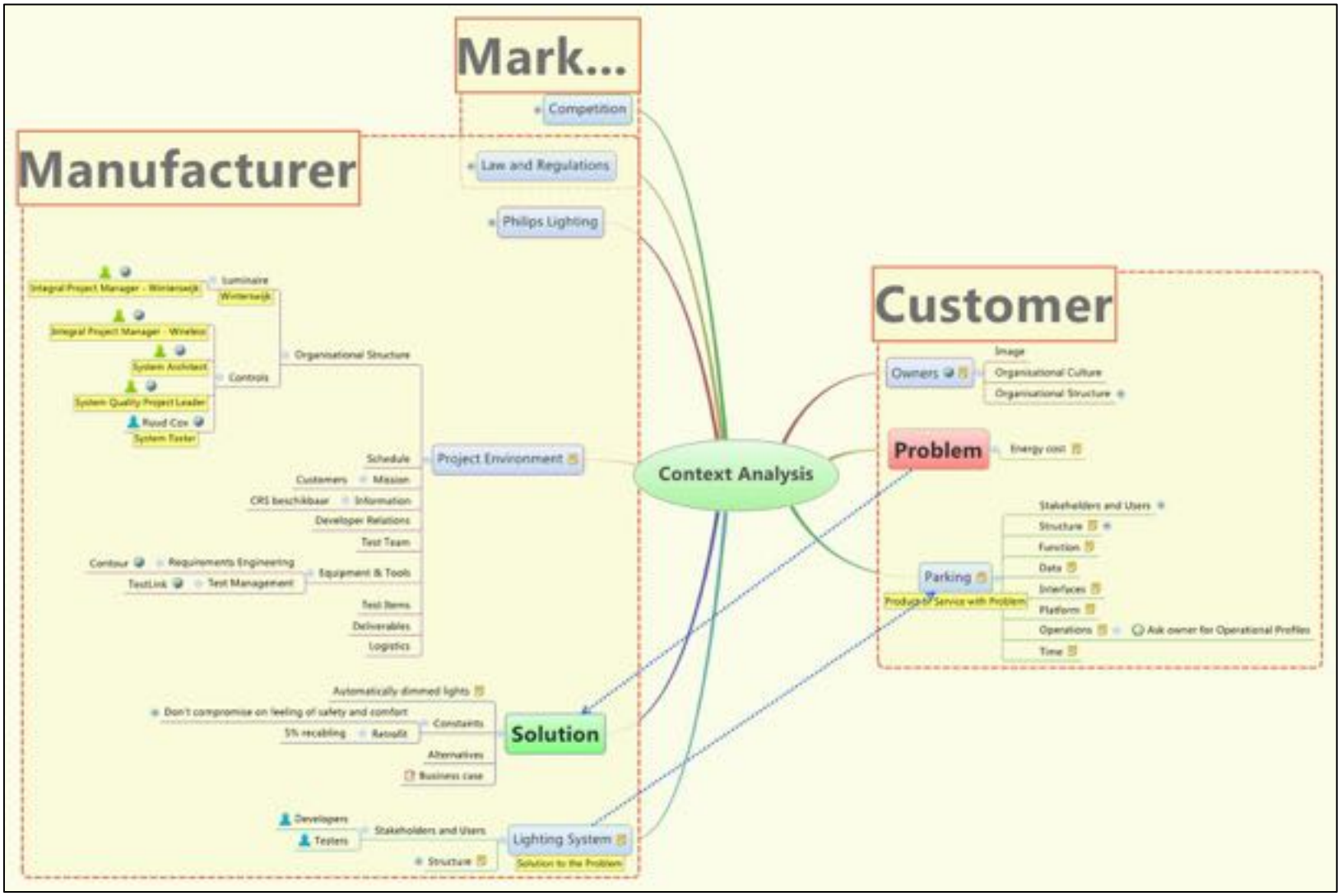
Oracles

An oracle is a means by which you recognize a problem when it happens in testing.

FEW HICCUPPS

- Familiarity
- Explainability
- World
- History
- Image
- Comparable Products
- Claims
- Users' Desires
- Product
- Purpose
- Statutes

Source: Rapid Software Testing © Satisfice Inc. http://www.satisfice.com/info_rst.shtml



Context analysis: 1st iteration

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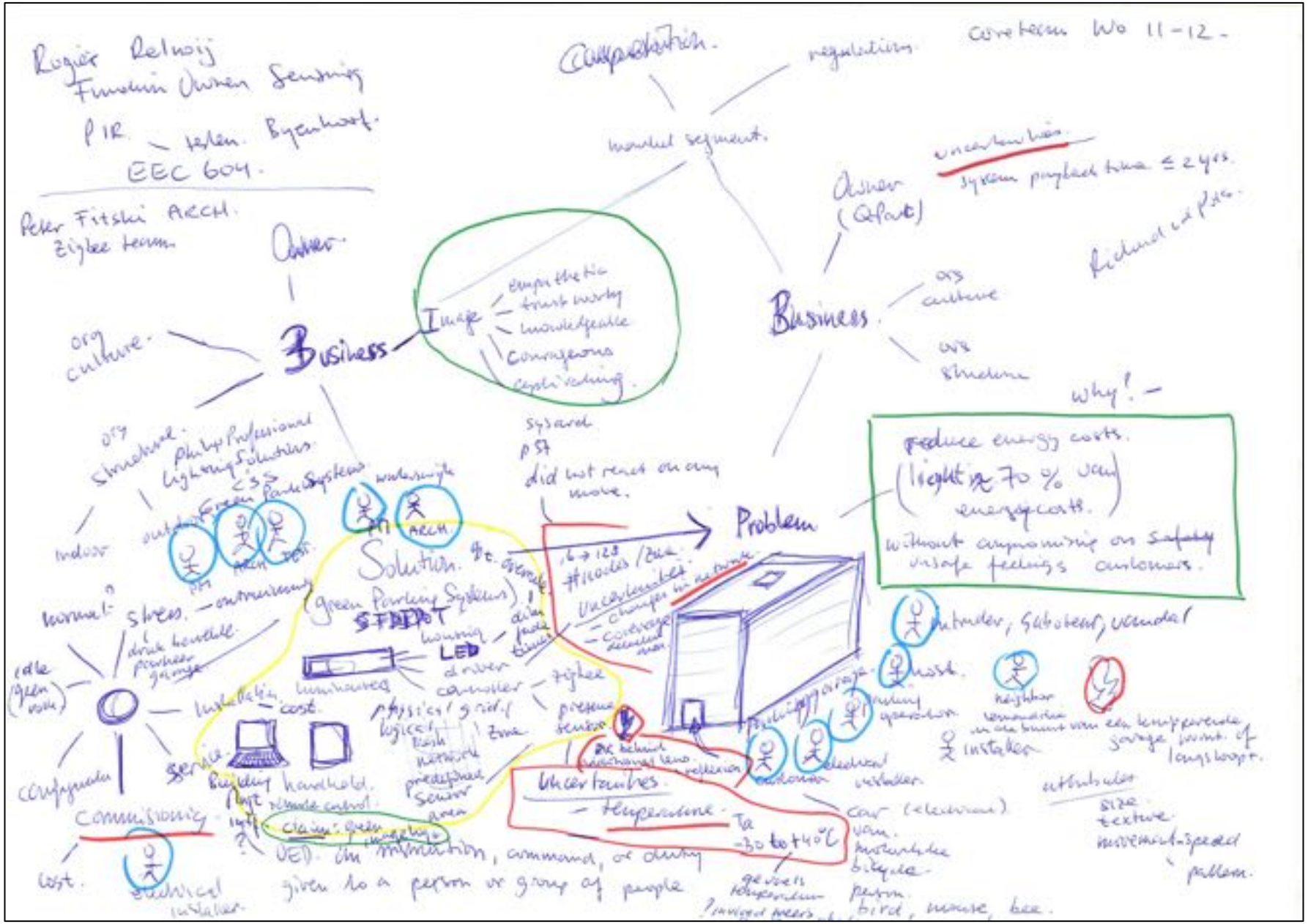

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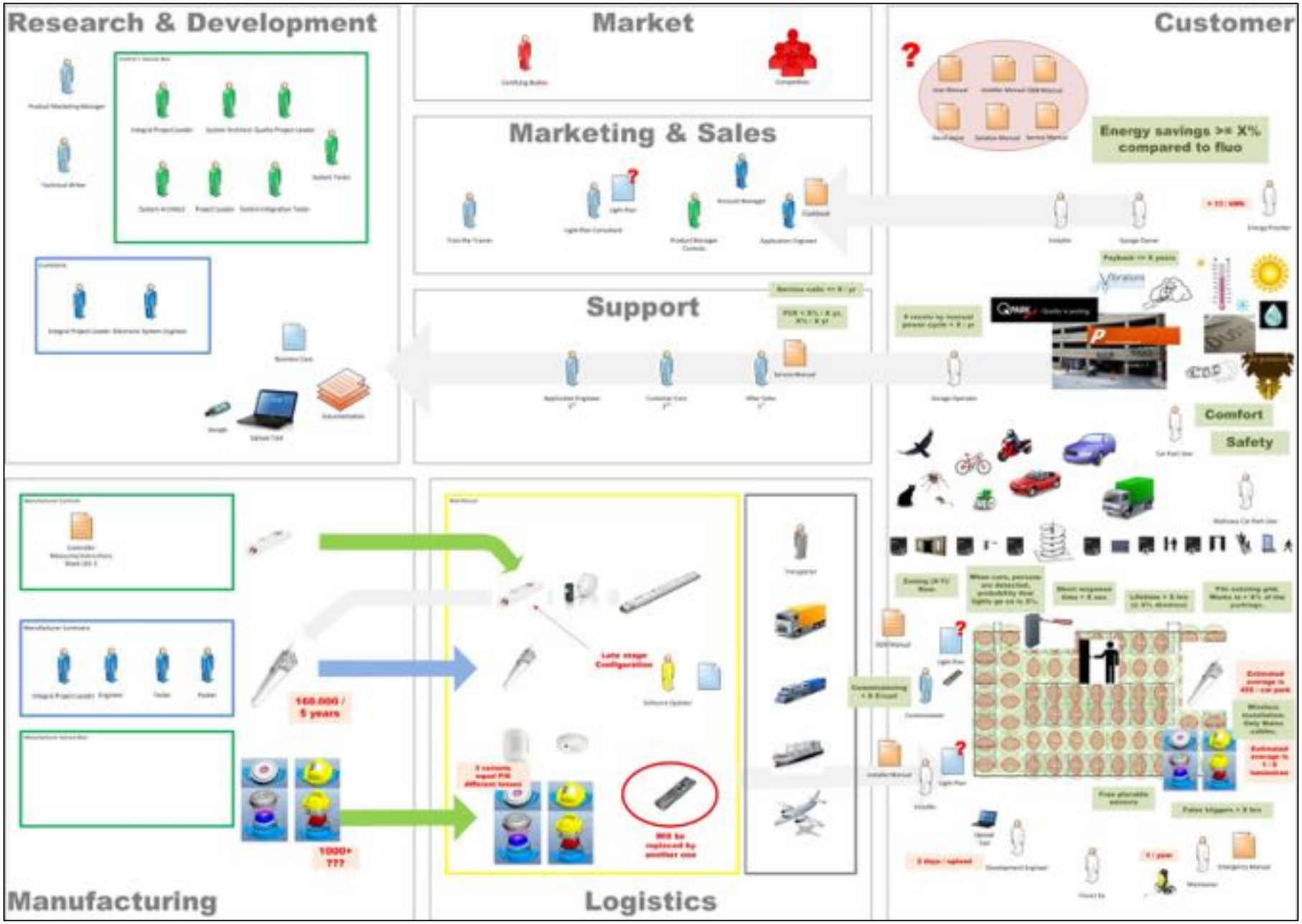

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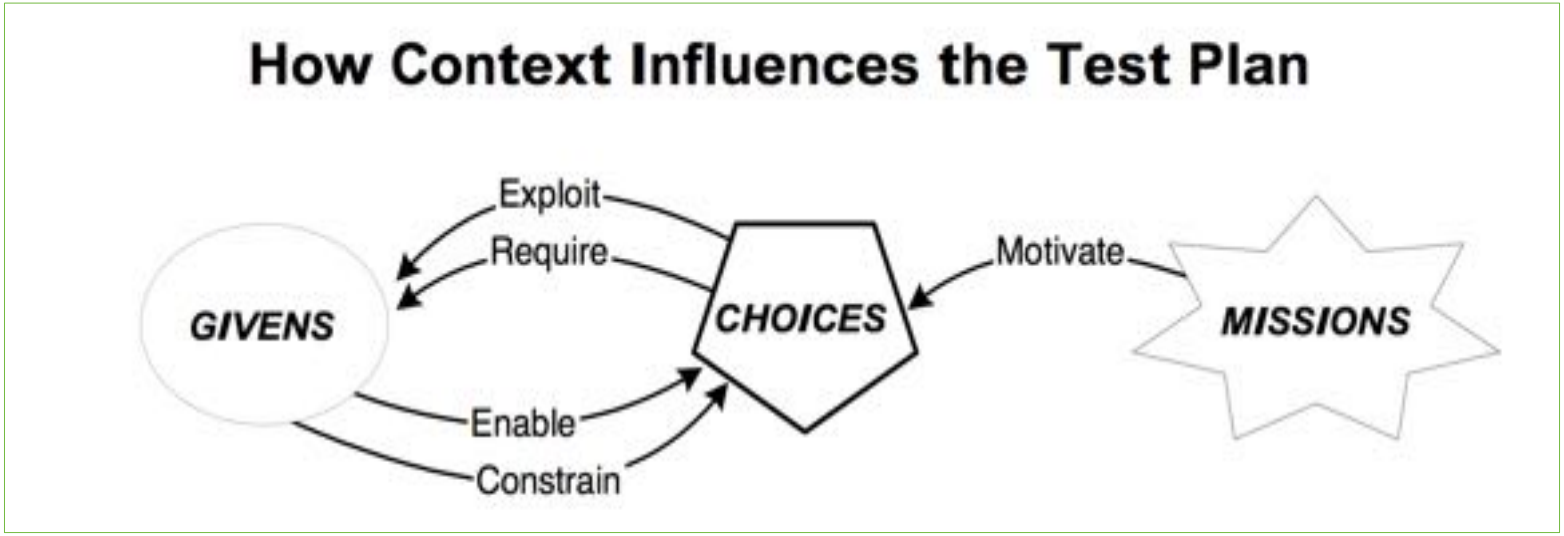
So?



1. Understand who is involved in the project and how they matter.
2. Understand and negotiate the GIVENS so that you understand the constraints on your work, understand the resources available, and can test effectively.
3. Negotiate and understand the MISSIONS of testing in your project.
4. Make CHOICES about how to test that exploit the GIVENS and allow you to achieve your MISSIONS.
5. Monitor the status of the project and continue to adjust the plan as needed to maintain congruence among GIVENS, CHOICES, and MISSIONS.

Source: http://www.satisfice.com/tools/satisfice-cm.pdf

Surprise Surprise

You will find that factors you haven't anticipated may play a unexpected role while you are testing your product…

Dealing with Context Change

- Understanding your context enables you to anticipate on future changes!

- Rapid response on changes
- Overview
  - Learning fast
  - New insights
  - Status
  - Impact
  - …

QUESTIONS, YOU HAVE, HMM?

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References

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  http://www.satisfice.com/tools/testable.pdf
- DEWT3
  http://dewt.wordpress.com/2013/04/24/dewt3-experience-reports/
- Many links to great resources on my website
  http://www.huibschoots.nl/links

Exercise:
Product Ecology

1. Make a product ecology of the room you are in.
2. Mission: is this room suitable for a conference?
3. Map context and relations!

Any questions?

10 Minutes

Exercise:
Context changes

1. Given the Product Ecology you made earlier.
2. What could happen that totally changes your approach?

Any questions?

5 Minutes