SIEMENS

Siemens Corporate Technology | April 2015

Document structure for dissemination of use cases

Talk on Document Structure

Agenda

Motivation

Document Structure

Example

Contributing

Use cases are our reality check for technology picks

Why do we collect use cases?

- Provide real-world scenarios of technology usage

- Gather non-functional requirements of scenarios

- Define and explain common building blocks based on the scenarios

- Get each IG member on a broader scope of the WoT scenarios

- The aim is not full coverage, but the ability to map a technology to different scenarios

The future applications cannot be forseen now therefore we need reusable building blocks

- When the Web was invented, the use case was static pages.
- **Tim Barners-Lee did not have cat videos in mind**
- Nobody thought of these use cases

- However, the technology was planned to be generic
  - Modular and layered
  - Open for extension
  - Easy to use
  - Applicable to many different use cases

  Therefore, we should identify generic technological building blocks that fit many use cases
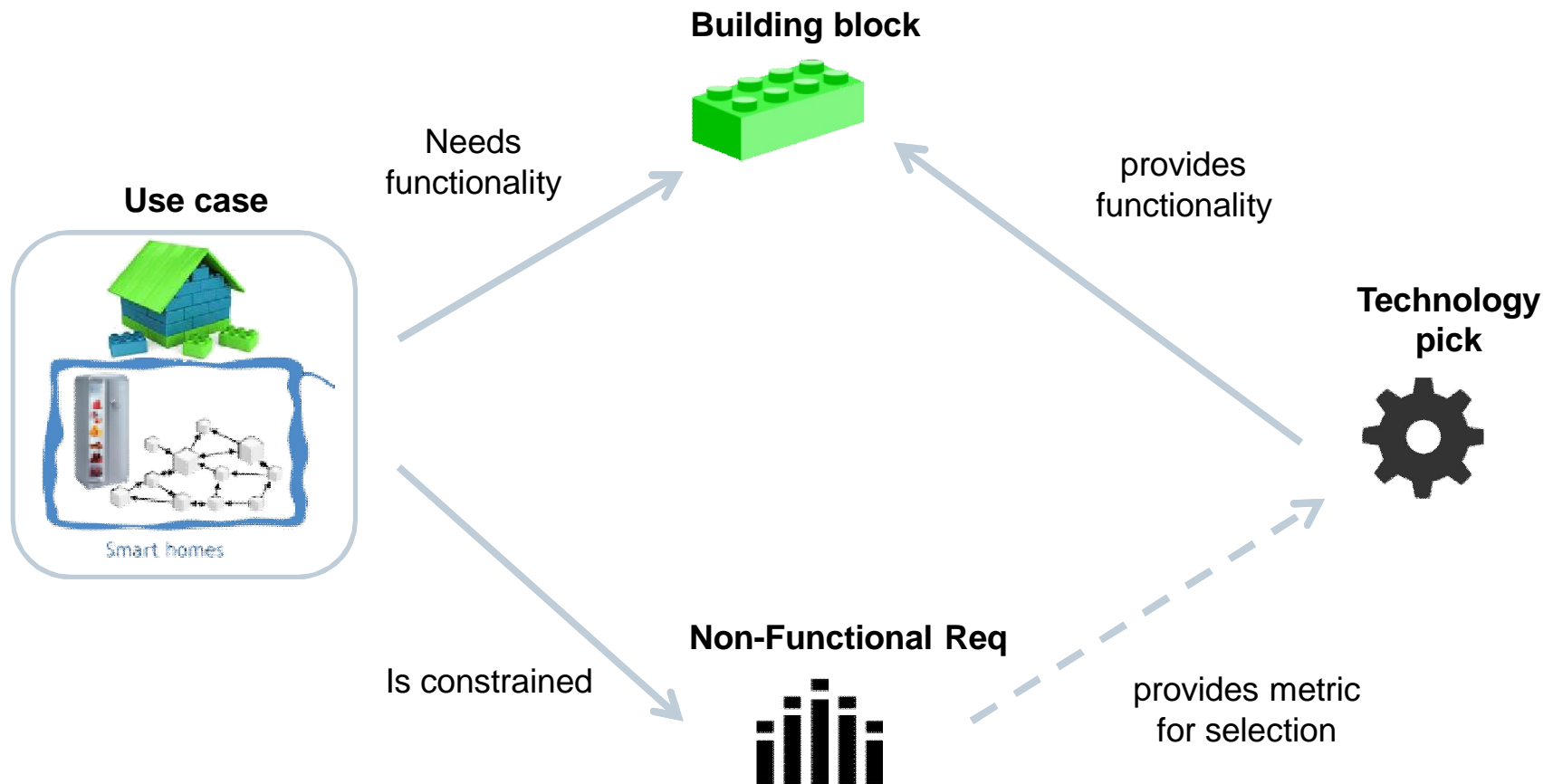
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Use cases and technologies are linked through technological building blocks

Interrelation of building blocks, technologies, use cases and non-functional requirements

Building block

Use case

Needs functionality

provides functionality

Technology pick

Smart homes

Is constrained

Non-Functional Req

provides metric for selection

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Examples for linking
technologies, use cases and building blocks

Smart Hotel room
(image: koreatimes.co.kr)

Smart veding machine
(image: coca cola company)

Self-Order app
(image: straits times)

Discovery

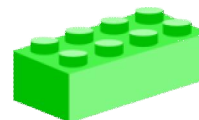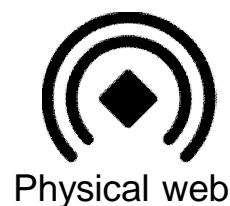Self-description

QR code

Physical web

UPnP

SPARQL

mDNS

RAML

RDF

Swagger

JSON-LD

Examples for evaluating technology picks on the use cases

Discovery

SSDP

QR code

Physical web

mDNS

	SSDP	QR code	Physical web	mDNS
Connectivity	Local IP	Camera	Bluetooth	Local IP
Onboarding	Join Wifi	Scan code	Spatial proximity	Join Wifi
Local range	IP network	Line of sight	Bluetooth network	IP network
Wide-Area discovery	In roadmap	No	No	Possible, but Privacy issues

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Document and Sources

Unofficial Draft

Use Cases and Requirements for the Web of Things

Unofficial Draft

Document: http://w3c.github.io/wot/wot-ucr.html

Sources on **GitHub** : https://github.com/w3c/wot

How to Contribute

We are using github workflow with a continous delivery toolchain

1. Go to repo **w3c / wot**

2. **Fork** the repo to create your local copy

3. Add & commit your changes to your fork of **wot / ucr-doc / wot-ucr.xml**

4. **Create pull request** Discuss and review the changes in this comparison with others.

5. The pull request is **Merged**

6. The document is automatically updated

Questions? Comments?
Contact us!

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