

# Module Story Telling

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## Abstract

This module addresses Story Telling as a means to explore customer needs and as a means for communication.

### Distribution

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September 9, 2018  
status: draft  
version: 0

logo  
TBD

# Story How To

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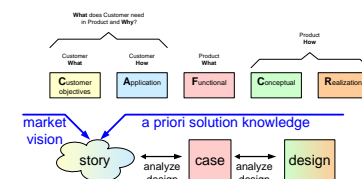
## Abstract

A story is an easily accessible story or narrative to make an application live. A good story is highly specific and articulated entirely in the problem domain: the native world of the users. An important function of a story is to enable specific (*quantified, relevant, explicit*) discussions.

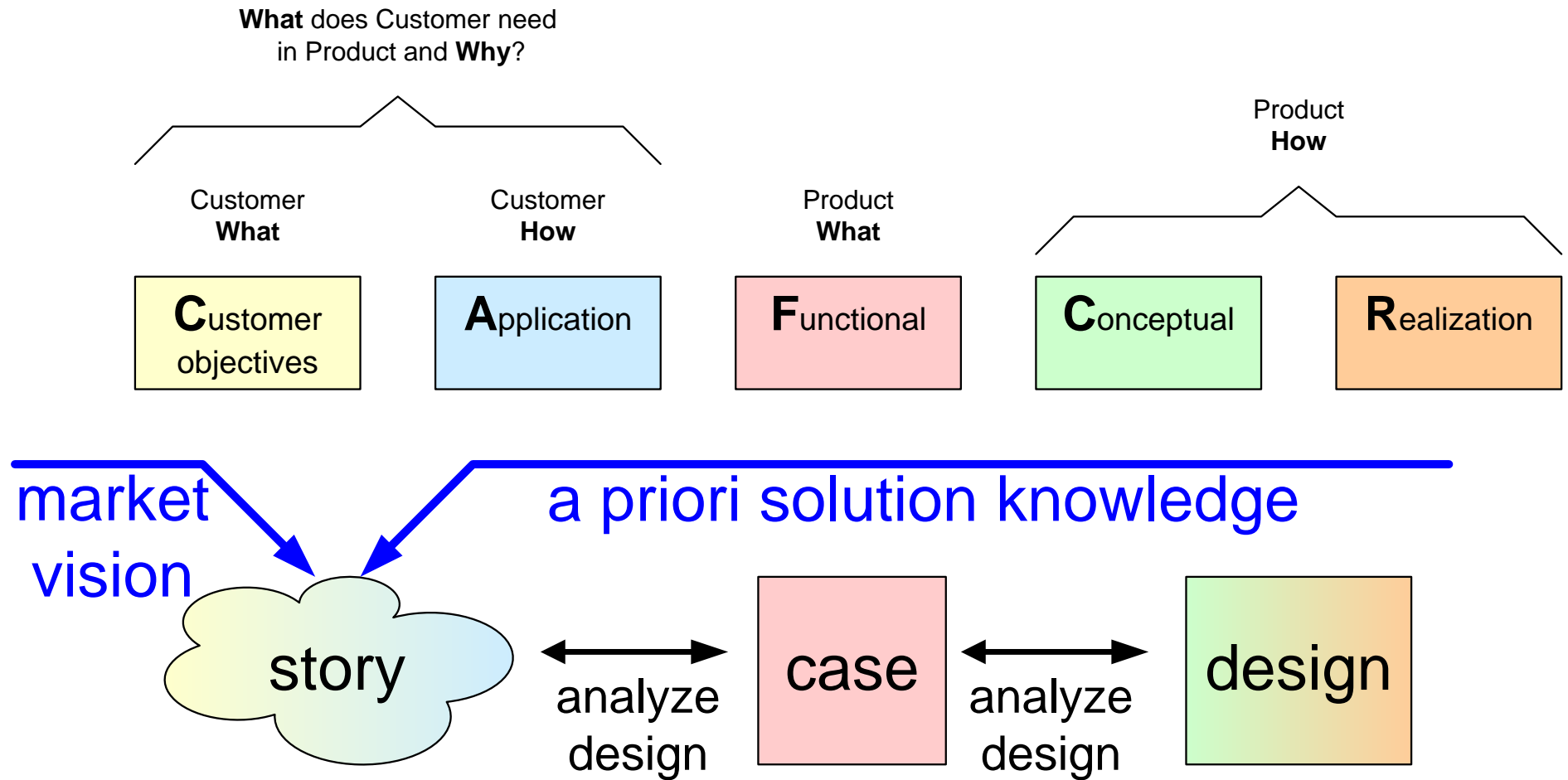
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# From story to design



# Example story layout

ca. half a page of  
plain English text

## A day in the life of Bob

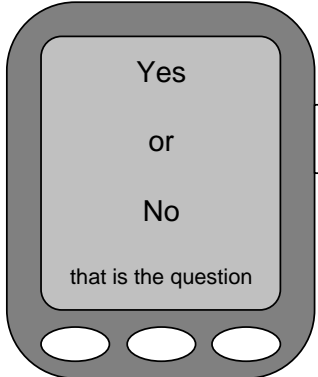
bla blah bla, rabarber music  
bla bla composer bla bla  
qwwwwety30 zeps.

nja nja njet njippie est quo  
vadis? Pjotr jaleski bla bla  
bla brree fgfg gsg hgrg

mjmm bas engel heeft een  
interessant excuus, lex stelt  
voor om vanavond door te  
werken.

In the middle of the night he  
is awake and decides to  
change the world forever.

The next hour the great  
event takes place:



This brilliant invention will change the world foreverbecause it is so unique and  
valuable that nobody beliefs the feasibility. It is great and WOW at the same time,  
highly exciting.

Vtables are seen as the sollution for an indirection problem. The invention of Bob will  
obsolete all of this in one incredibke move, which will make him famous forever.

He opens his PDA, logs in and enters his provate secure unquie non trivial password,  
followed by a thorough authentication. The PDA asks for the fingerprint of this little left  
toe and to pronounce the word shit. After passing this test Bob can continue.

draft or sketch of  
some essential  
appliance



# Criteria for a good story

**C**ustomer objectives

**A**pplication

- accessible, understandable

"Do you see it in front of you?"

**C**ustomer objectives

**A**pplication

- valuable, appealing

attractive, important

"Are customers queuing up for this?"

**C**onceptual

**R**ealization

- critical, challenging

"What is difficult in the realization?"

"What do you learn w.r.t. the design?"

**A**pplication

- frequent, no exceptional niche

"Does it add significantly to the bottom line?"

**A**pplication

**F**unctional

- specific

names, ages, amounts, durations, titles, ...

# Example of a story

Betty is a 70-year-old woman who lives in Eindhoven. Three years ago her husband passed away and since then she lives in a home for the elderly. Her 2 children, Angela and Robert, come and visit her every weekend, often with Betty's grandchildren Ashley and Christopher. As so many women of her age, Betty is reluctant to touch anything that has a technical appearance. She knows how to operate her television, but a VCR or even a DVD player is way to complex.

When Betty turned 60, she stopped working in a sewing studio. Her work in this noisy environment made her hard-of-hearing with a hearing-loss of 70dB around 2kHz. The rest of the frequency spectrum shows a loss of about 45dB. This is why she had problems understanding her grandchildren and why her children urged her to apply for hearing aids two years ago. Her technophobia (and her first hints or arthritis) inhibit her to change her hearing aids' batteries. Fortunately her children can do this every weekend.

This Wednesday Betty visits the weekly Bingo afternoon in the meetingplace of the old-folk's home. It's summer now and the tables are outside. With all those people there it's a lot of chatter and babble. Two years ago Betty would never go to the bingo: "I cannot hear a thing when everyone babbles and clatters with the coffee cups. How can I hear the winning numbers?!". Now that she has her new digital hearing instruments, even in the bingo cacophony, she can understand everyone she looks at. Her social life has improved a lot and she even won the bingo a few times.

That same night, together with her friend Janet, she attends Mozart's opera The Magic Flute. Two years earlier this would have been one big low rumbly mess, but now she even hears the sparkling high piccolos. Her other friend Carol never joins their visits to the theaters. Carol also has hearing aids, however hers only "work well" in normal conversations. "When I hear music it's as if a butcher's knife cuts through my head. It's way too sharp!". So Carol prefers to take her hearing aids out, missing most of the fun. Betty is so happy that her hearing instruments simply know where they are and adapt to their environment.



source: Roland Mathijssen  
Embedded Systems Institute  
Eindhoven

# Value and Challenges in this story

**C**ustomer objectives  
**A**pplication

Value proposition in this story:  
quality of life:  
    active participation in different social settings  
usability for nontechnical elderly people:  
    "intelligent" system is simple to use  
    loading of batteries

**C**onceptual  
**R**ealization

Challenges in this story:  
Intelligent hearing instrument  
Battery life — at least 1 week  
No buttons or other fancy user interface on the hearing instrument, other than a robust On/Off method  
The user does not want a technical device but a solution for a problem  
Instrument can be adapted to the hearing loss of the user  
Directional sensitivity (to prevent the so-called cocktail party effect)  
Recognition of sound environments and automatic adaptation (adaptive filtering)

source: Roland Mathijssen, Embedded Systems Institute, Eindhoven



# Exercise Story Telling

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- Create a story using the criteria.
- Transform the story into a case (functional, as well as quantitative).
- Perform a short design exploration based on the case.
- Improve the story based on the use in the case and the design.
- Use time boxes to ensure that you make all the indicated steps.