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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1 Introduction

The CAFCR views and the quality needles are generic means to capture an architecture. The generic nature is powerful, however explorations in more depth are needed to understand the problem. Story telling followed by specific analysis and design work is a complementary method to do in depth exploration of parts of the specification and design. Starting a new product definition often derails in long discussions about generic specification and design issues. Due to lack of reality check these discussions can be very risky, and way too academic.

Figure 1: From story to design

The method provided here, based on story telling, is a powerful means to get the product definition quickly in a concrete factual discussion. The method is especially good in improving the communication between the different stakeholders. This communication is tuned to the stakeholders involved in the different CAFCR views: the story and use case can be exchanged in ways that are understandable for both marketing-oriented people as well as for designers.

Figure 1 positions the story in the customer objectives view and application view. A good story combines a clear market vision with a priori realization know how. The story itself must be expressed entirely in customer terms, no solution jargon is allowed. The story is used to analyze specific parts of the specification: a use case. The use case is then used to explore specific parts of the design.

Section 2 describes how to create a story. The use of the story is explained in Section 3. The criteria for a good story are discussed in Section 4.

2 How to Create a Story?

As shown in Figure 2 a story is a short single page story, preferably illustrated with sketches of the most relevant elements of the story, for instance the look and feel of the system being used. Other media such as cartoons, video or demonstrations
A day in the life of Bob
bla blah bla, rabarber music 
bla bla composer bla bla 
qwwwety30 zeps.

Pjotr jaleski bla bla 
bla brree fgfg gsg hgrg 
jmmb bas engel heeft een 
interressant 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 forever  
because it is so unique and 
valuable that nobody believes the feasibility .

It is great and WOW at the same time ,
highly exciting .

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

He opens his PDA,
logs in and enters his private secure unique non trivial password ,
followed by a thorough authentication .

The PDA asks for the fingerprint of this little left 
to and to pronounce the word shit .

After passing this test Bob can continue .

Figure 2: Example story layout

using mockups can be used also. The duration or the size of the “story” must be
limited to enable focus on the essentials.

Every story has a purpose, something the design team wants to learn or explore. 
The purpose of the story is often in the conceptual and realization views. The scope 
of the story must be chosen carefully. A wide scope is good to understand a wide
context, but leaves many details unexplored. A useful approach is to use recursively
refined stories: an overall story setting the context and a few other stories zooming
in on aspects of the overall story.

The story can be written from several stakeholder viewpoints. The viewpoints
should be carefully chosen. Note that the story is also an important means of
communication with customers, marketing managers and other domain experts.
Some of the stakeholder viewpoints are especially useful in this communication.

3 How to Use a Story?

The story itself must be very accessible for all stakeholders. The story must be
attractive and appealing to facilitate communication and discussion between those
stakeholders. The story is also used as input for a more systematic analysis of the
product specification in the functional view. All functions, performance figures
and quality attributes are extracted from the story. The analysis results are used to
explore the design options.

Normally several iterations will take place between story, case and design
exploration. During the first iteration many questions will be raised in the case
analysis and design, which are caused by the story being insufficiently specific.
This needs to be addressed by making the story more explicit. Care should be
taken that the story stays in the Customers views and that the story is not extended
too much. The story should be sharpened, in other words made more explicit, to
answer the questions.

After a few iterations a clear integral overview and understanding emerges for
this very specific story. This insight is used as a starting point to create a more
complete specification and design.

4 Criteria

Figure 3 shows the criteria for a good story. It is recommended to assess a story against this checklist and either improve the story such that it meets all the criteria or reject the story. Fulfillment of these criteria helps to obtain a useful story. The set of five criteria is a necessary but not sufficient set of criteria. The value of a story can only be measured in retrospect by determining the contribution of the story to the specification and design process.

- accessible, understandable
  "Do you see it in front of you?"
- valuable, appealing
  attractive, important
  "Are customers queuing up for this?"
- critical, challenging
  "What is difficult in the realization?"
  "What do you learn w.r.t. the design?"
- frequent, no exceptional niche
  "Does it add significantly to the bottom line?"
- specific
  names, ages, amounts, durations, titles, ...

Figure 3: Criteria for a good story

Subsections 4.1 to 4.5 describe every criterion in more detail.

4.1 Accessible, Understandable

The main function of a story is to make the opportunity or problem communicable with all the stakeholders. This means that the story must be accessible and understandable for all stakeholders. The description or presentation should be such that all stakeholders can live through, experience or imagine the story. A “good” story is not a sheet of paper, it is a living story.

4.2 Valuable, Appealing

The opportunity or problem (idea, product, function, or feature) must be significant for the target customers. This means that it should be important for them, or valuable; it should be appealing and attractive.
Most stories fail on this criterium. Some so-so opportunity (whistle and bell-type) is used, where nobody gets really enthusiastic. If this is the case more creativity is required to change the story to a useful level of importance.

### 4.3 Critical, Challenging

The purpose of the story is to learn, define, and analyze new products or features. If the implementation of a story is trivial, nothing will be learned. If all other criteria are met and no product exists yet, then just do it, because it is clearly a quick win!

If the implementation is challenging, then the story is a good vehicle to study the trade-offs and choices to be made.

### 4.4 Frequent, no Exceptional Niche

Especially in the early exploration it is important to focus on the main line, the typical case. Later in the system design more specialized cases will be needed to analyze for instance more exceptional worst case situations.

A typical case is characterized by being frequent, it should not be an exceptional niche.

### 4.5 Specific

The value of a story is the specificity. Most system descriptions are very generic and therefore very powerful, but at the same time very non-specific. A good story provides focus on a single story, one occasion only. In other words, the thread of the story should be very specific.

A common pitfall for story writers is to show all possibilities in one story. For example one paragraph that describes all the potential goodies. Simply leave out such a paragraph, it only degrades the focus and value of the story.

A good story is in all aspects as specific as possible, which means that:

- persons playing a role in the story preferably have a name, age, and other relevant attributes
- the time and location are specific (if relevant)
- the content is specific (for instance is listening for 2 hours to songs of the Beatles)

This kind of specific data is often needed to assess the other criteria, to bring it more alive, and in further analysis. If during the use of the story numbers have to be “invented”, it is recommended to improve the story by adding specific facts to the story.
5 Summary

Story telling is a means to become specific and concrete in the early product creation phases. Five criteria are described to create and to assess stories: accessibility, value, challenge, frequency and specificity.

Unfortunately, the research in this area took place many years after the case study in Part III. Some comparable effort in the case will be discussed in Chapter ??.

In Part IV some more evidence from a different context will be provided for the story telling submethod.

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References