#### How to Create an Architecture Overview

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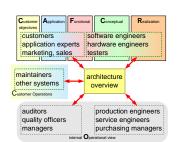
#### **Abstract**

A short specific overview of an architecture is a powerful means during product creation. This article addresses how to create such an overview. One of the main issues is the need for *breadth*, what needs to be included and for whom, and the balancing act of providing sufficient *depth*, what are crucial details that are part of this top-level description. Also the way of describing is discussed, from stakeholder needs to ambiguity and the level of formalism.

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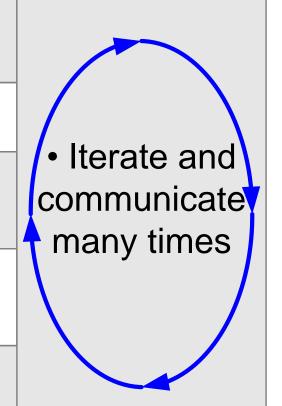
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March 6, 2021 status: draft version: 1.2

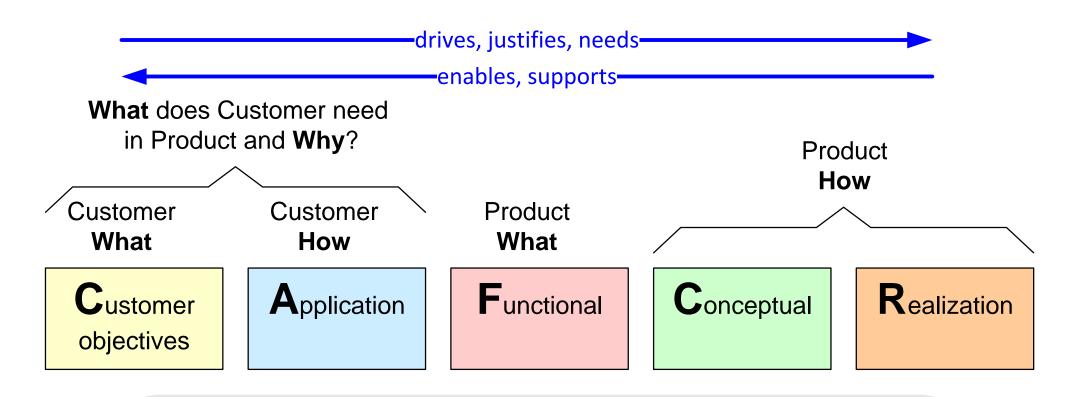


## Approach to Create Architecture Overview

- Identify scope: *product, market, system,* context
- Bottom-up fact finding and quantification
- Top-down identify stakeholders, concerns, views and models
- Determine most relevant issues: important, valuable, critical, costly, ...
- Define overview structure and presentation







internal Operational view

(process, organization, people, sales, service, purchasing, manufacturing, suppliers)



# Bottom up fact finding and quantification

Customer objectives figures of merit

patients/physician physician income success rate failure rate integral cost

## **A**pplication

typical quantities

# patients
# physicians
# exams/day
# exams/patient
# information/
 patient

## Functional

critical specs

productivity response time capacity

## Conceptual

working ranges

# transactions# queriespeak&average

#### Realization

critical numbers

network speed
CPU speed
memory size
power consumption
query duration
transaction overhead

## internal Operational view

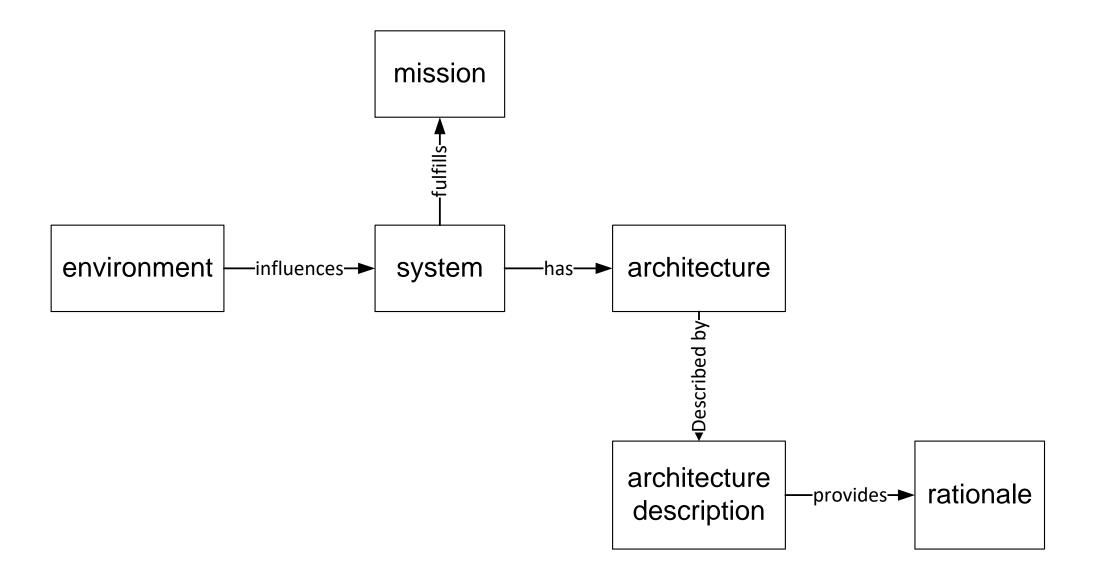
market size market share growth rate product life cycle business model market segments maintenance effort update frequency service crew

# suppliers partners competitors

effort cost time project size
# engineers/discipline
# teams

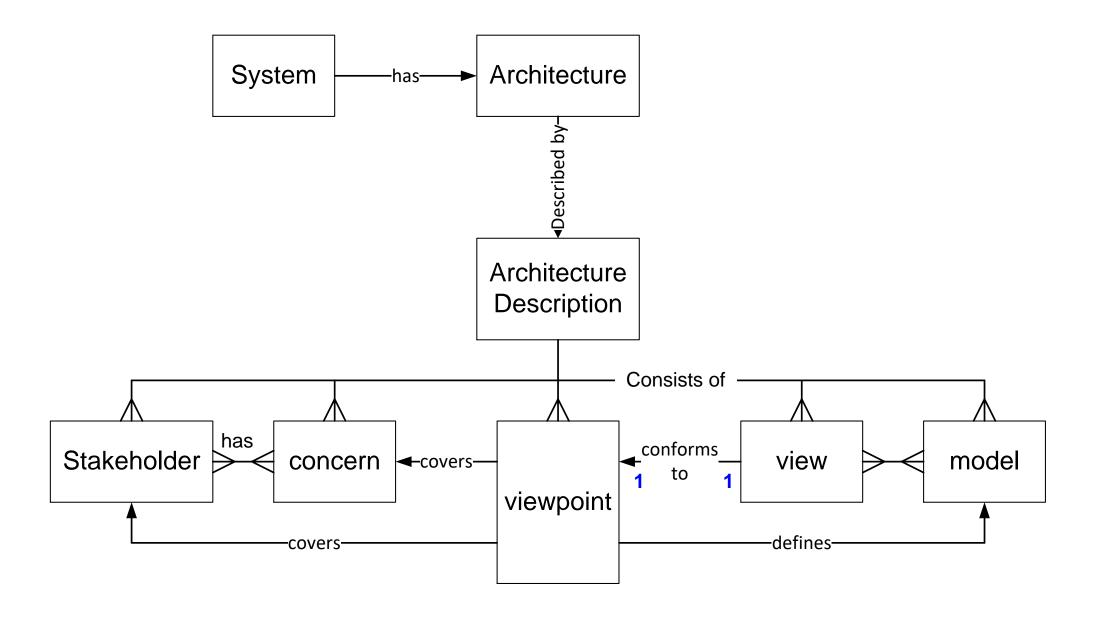


## IEEE 1471 top level



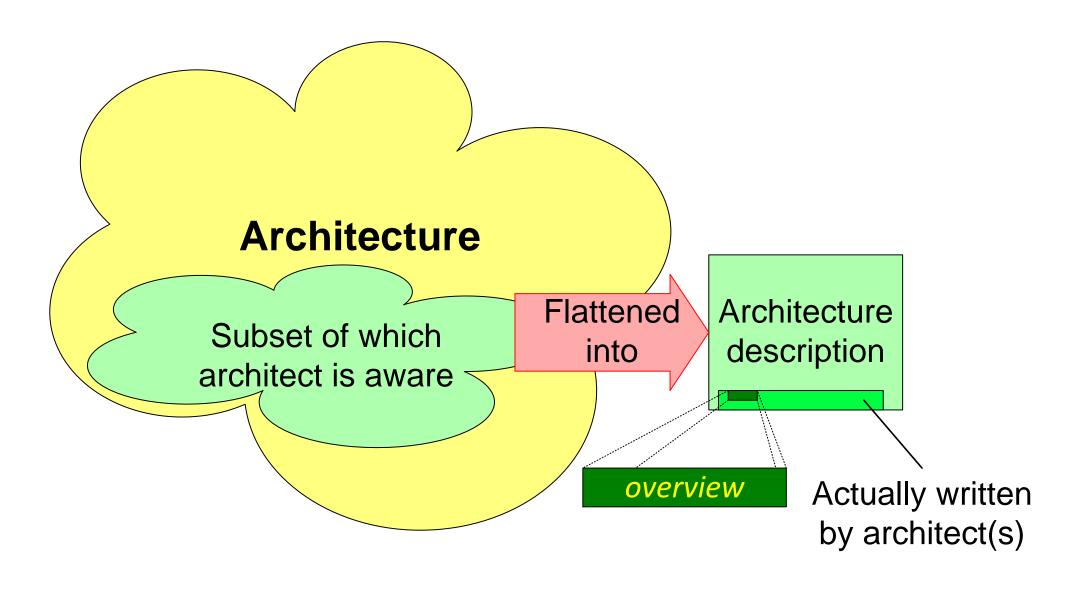


## IEEE 1471 view level



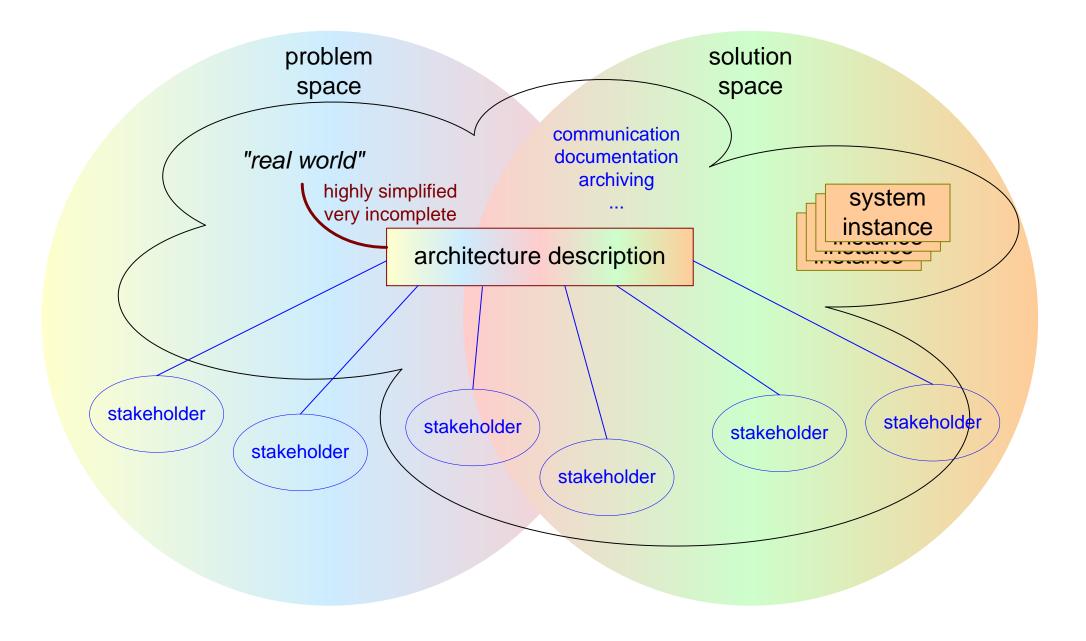


## **Architecture Overview**



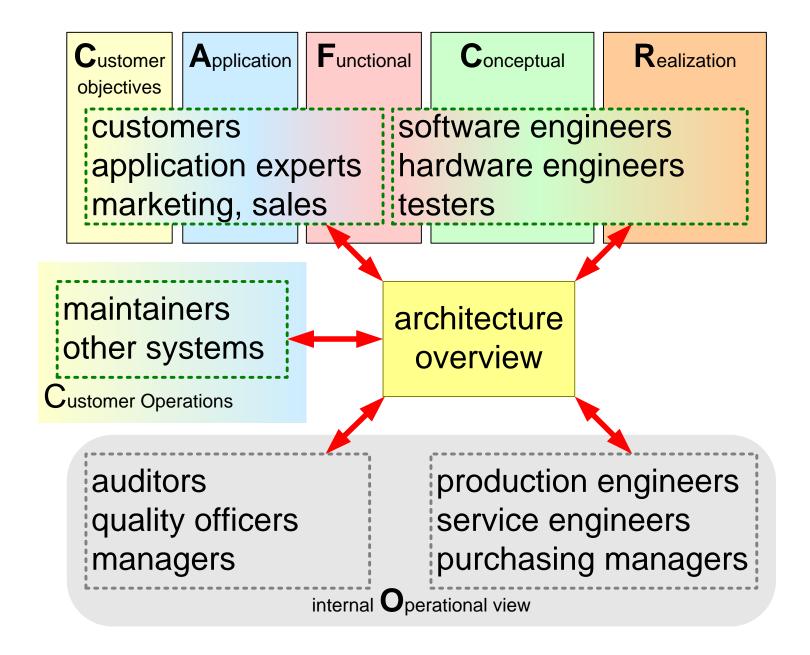


## Role of Architecture Description



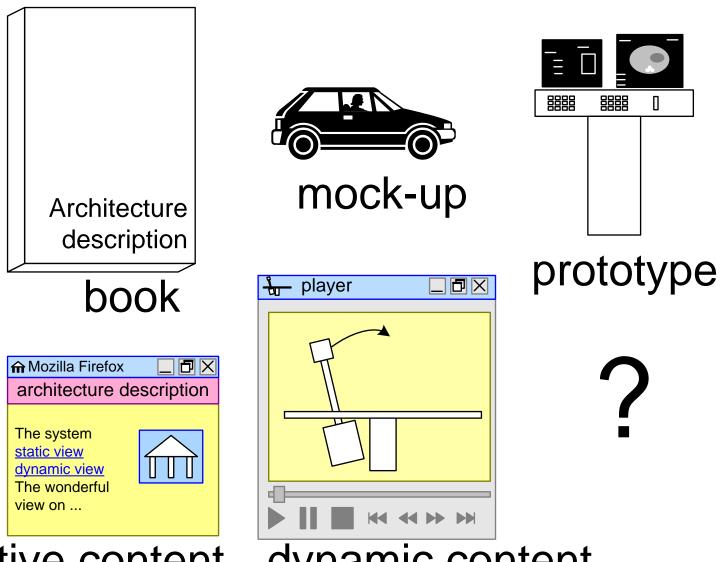


#### Stakeholder of an Architecture Overview





## Form and Medium





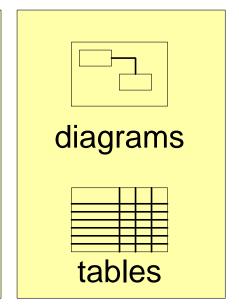


## Payload: the Ratio between Content and Overhead

#### front page

title
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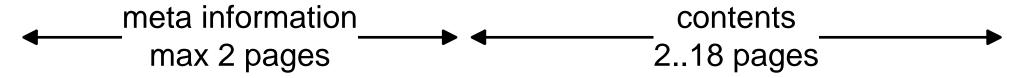
history changes



- 1. aap
- 2. noot
- 3. mies

lists

and ca 50% text





## Language Recommendations

- Keep your sentences short
- Prefer active verbs
- Use 'you' and 'we' Not for academic
   Choose words appropriate for the reader writing
- Don't be afraid to give instructions
- Avoid nominalisations
- Use positive language
- Use lists where appropriate

from Plain English Campaign http://www.plainenglish.co.uk/files/howto.pdf



#### Ideal Structure does not Exist

