

WP02

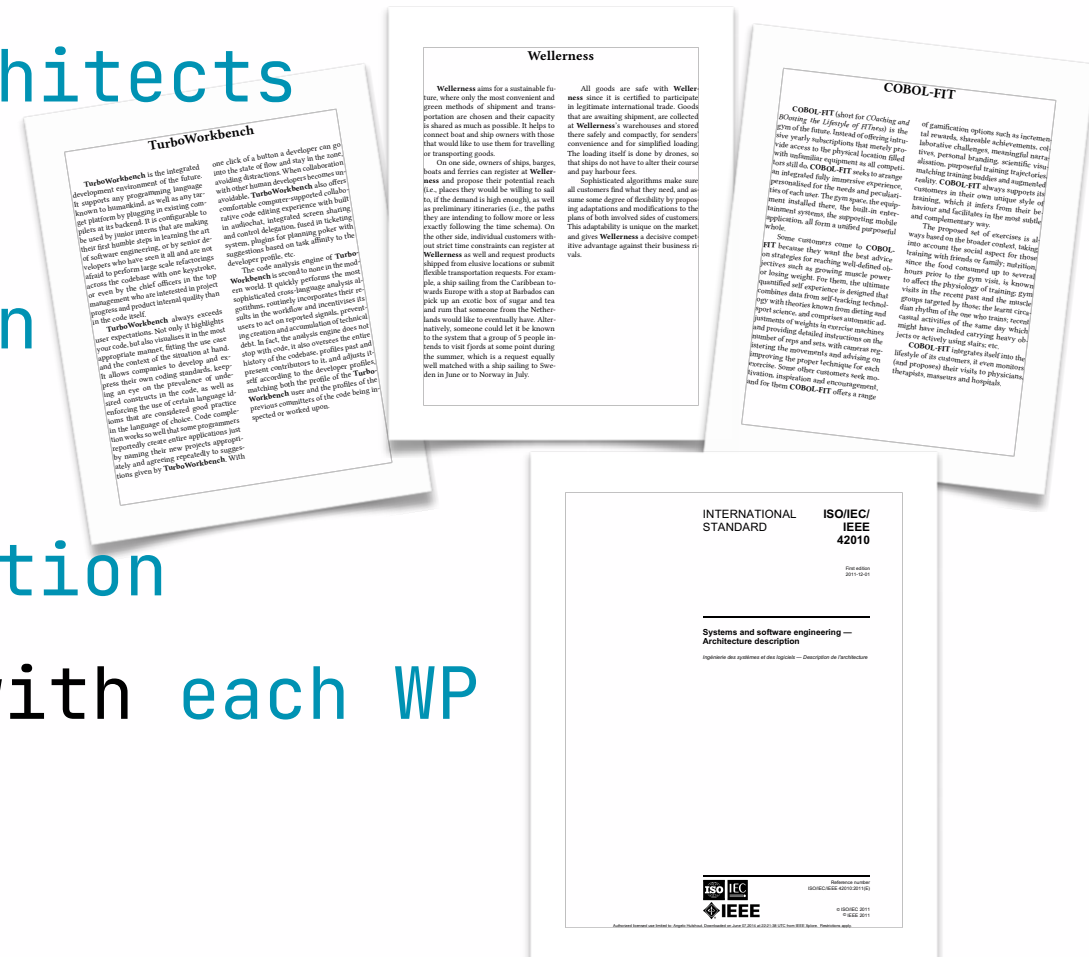
Basic Concepts in SA

Design of Software Architectures

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WP00/WP01 Recap

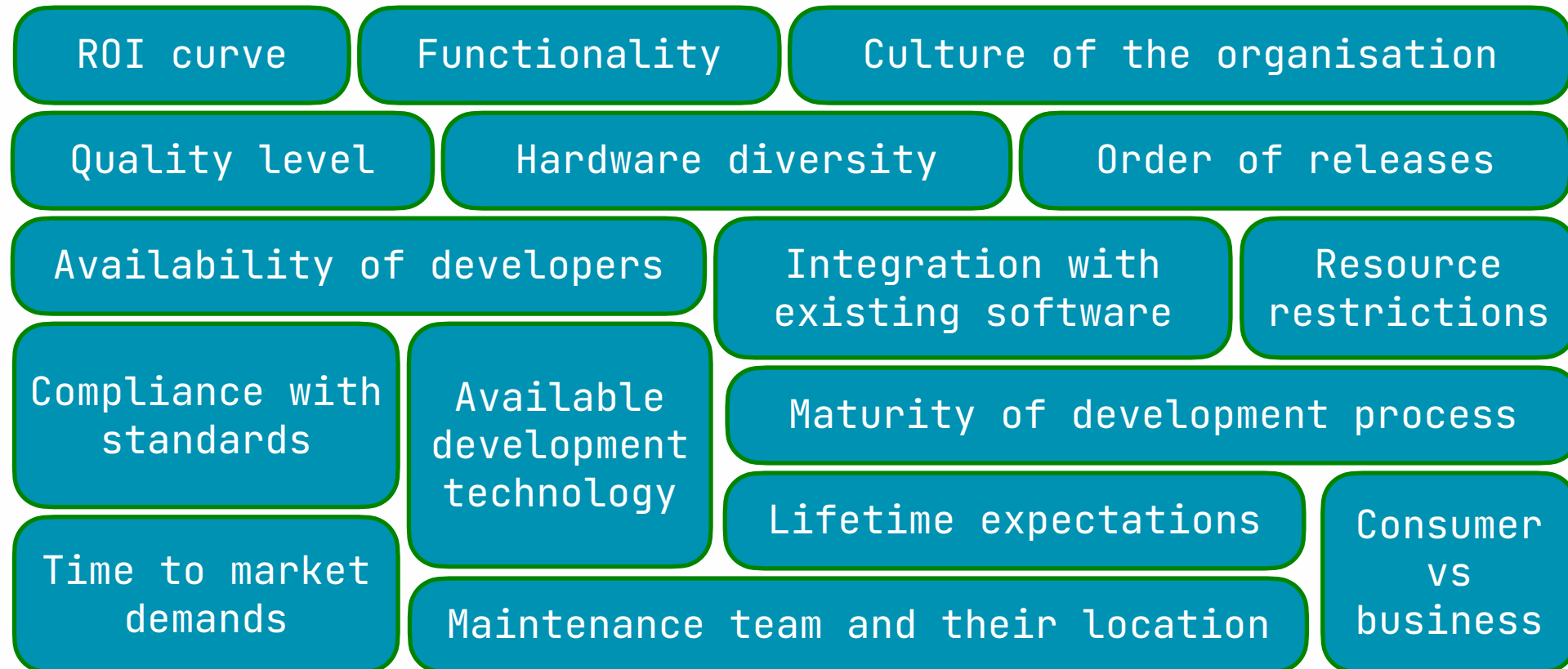
- You are a team of software architects
- working on a case
- Start with the case description
- refine throughout the course
- Create an architecture description
 - extend/improve/synchronise with each WP
- ISO/IEC/IEEE 42010:2011(E)



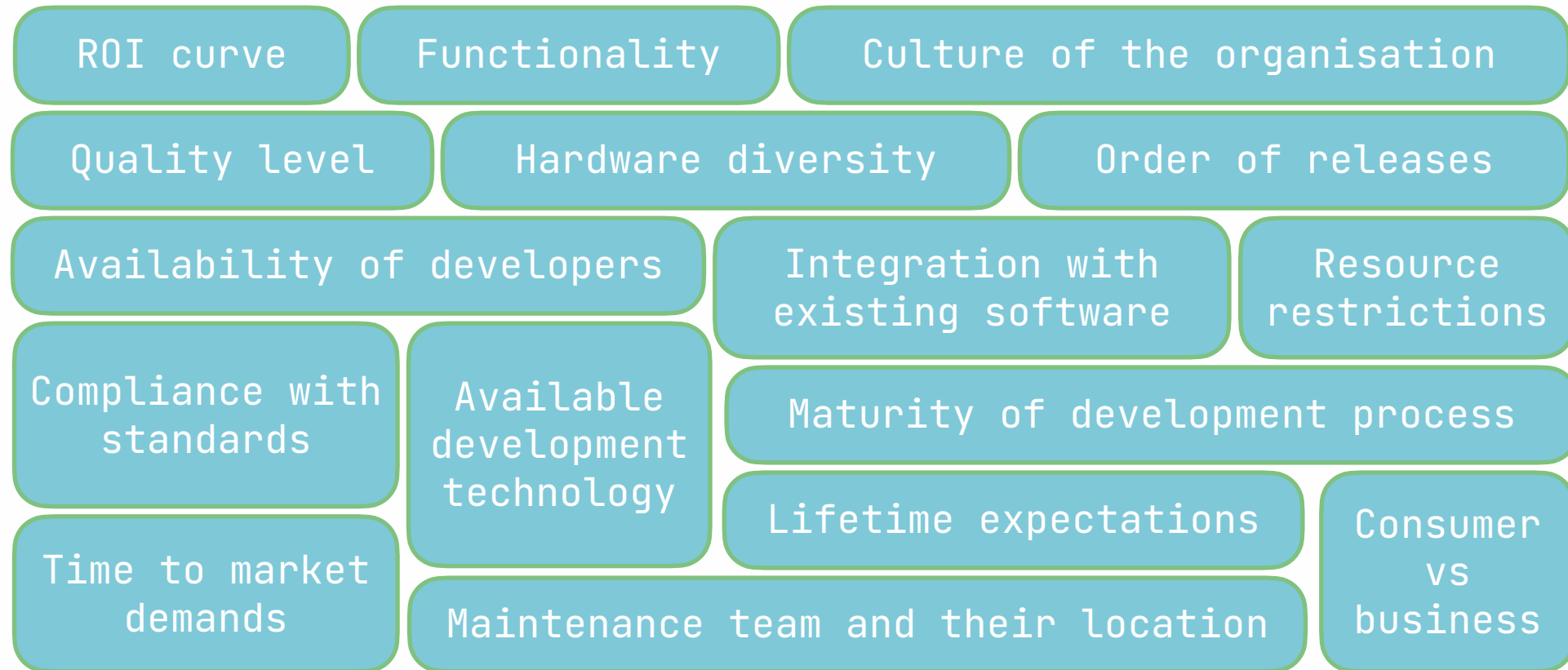
What is important in software?

- planning
- simplicity
- something that a stakeholder wants
- it should do what it is meant to do
- performance
- adaptability
- security
- maintainability
- usability
- feasibility
- interface
- documentation
- testing
- integration
- coding standards

What is important in software?



Why is all software not the same?



Architectural differences



Stakeholder

- Stakeholder is
 - an individual,
 - a system,
 - a team,
 - an organisation
 - or classes thereof
- having an interest in a system

Anyone who influences
and/or
is being influenced
by the system



Concern

- **Concern is an**
 - interest in a system
 - relevant to 1+ stakeholders
- Anything 1+ stakeholders
 - worry about
- Any influence on a system
 - in its environment

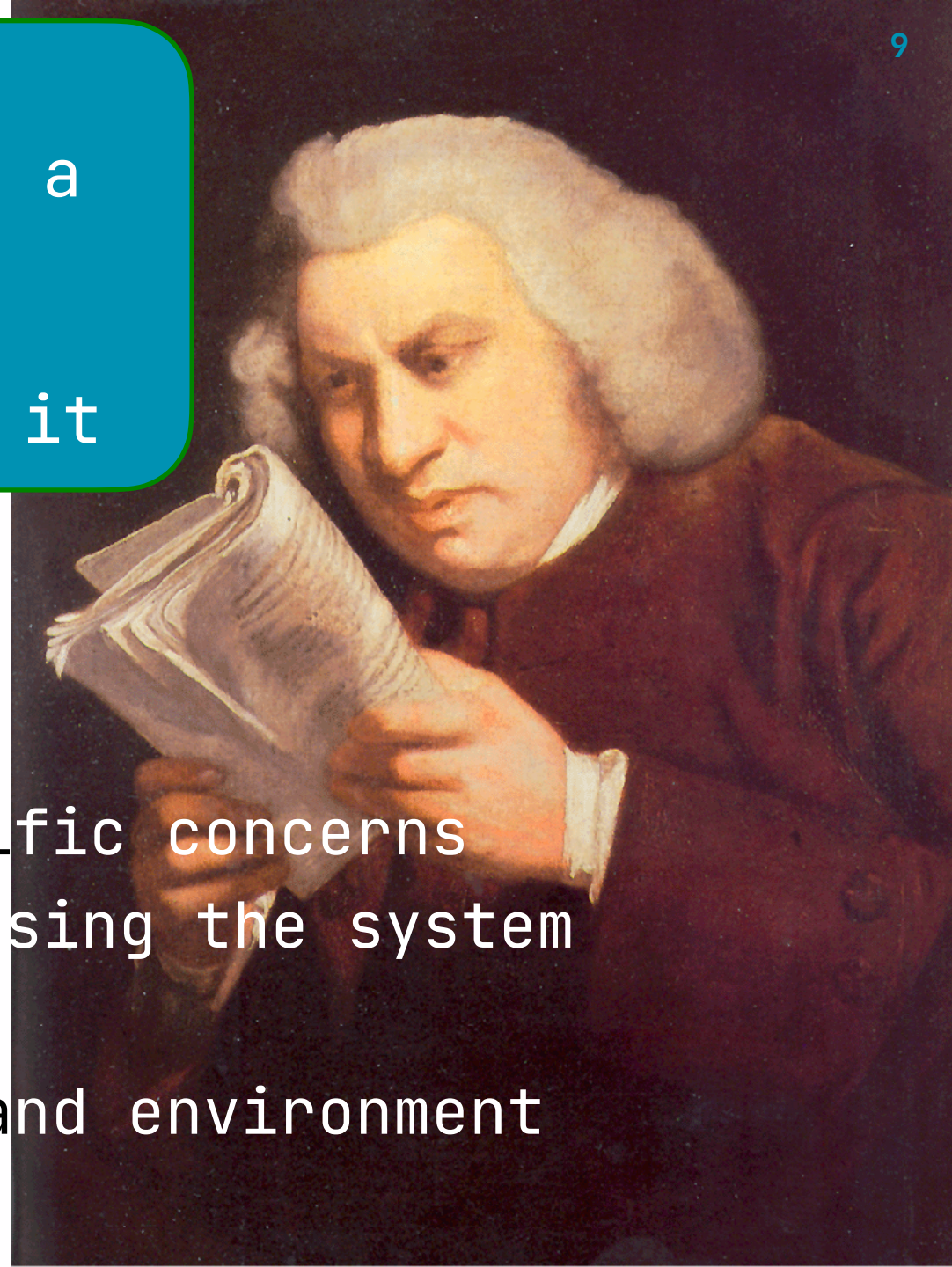


developmental,
technological,
business,
operational,
organisational,
political,
economic,
legal,
regulatory,
ecological

View

A view is governed by a viewpoint and conforms to it

- **Architecture View is**
 - a work product
 - expressing the architecture
 - from the perspective of specific concerns
- Views are not limited to expressing the system
 - environment
 - relation between the system and environment



What can be software?

- Think of things that could be software in **your system**
 - How does it look like? **Language? Protocol? Terminology?**
 - What are its **applications**? Where do you use it for?
 - What is the *“machine”* that processes it?
- **Softwarisation** is:
 - automation of activities
 - offering a specification environment
 - replicability and testability

