



Interview

PCS Cargonaut Solution

PCS Core - Governance & Security



Agenda

- Introduction
Sustainability
- Interview
- Further Questions

Introduction

“Framing Sustainability as a Property of Software Quality”^[1]

[1] P. Lago, S. A. Koçak, I. Crnkovic, and B. Penzenstadler, “Framing sustainability as a property of software quality,” *Commun. ACM*, vol. 58, no. 10, pp. 70–78, Sep. 2015, doi: 10.1145/2714560.

*long-term use of software intensive
systems and their appropriate
evolution*

TECHNICAL

*preserving capital and
(economic) value*

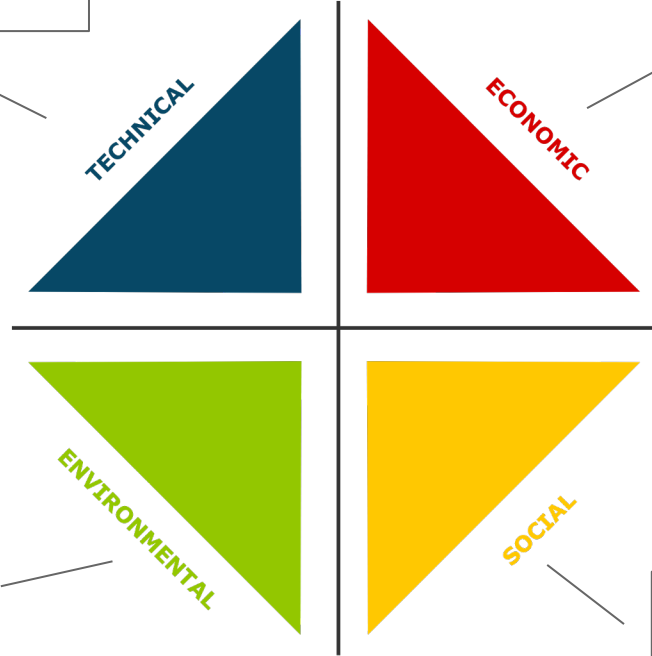
ECONOMIC

*ecological requirements, energy
efficiency and creation of ecological
awareness*

ENVIRONMENTAL

*support of social communities in any
domain; activities or processes that
indirectly create benefits for social
communities*

SOCIAL

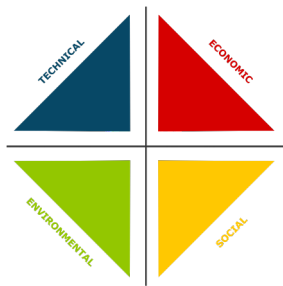




Software
Architectural
Principles



1



Sustainability
Mapping



2



Impact
Measurement



3



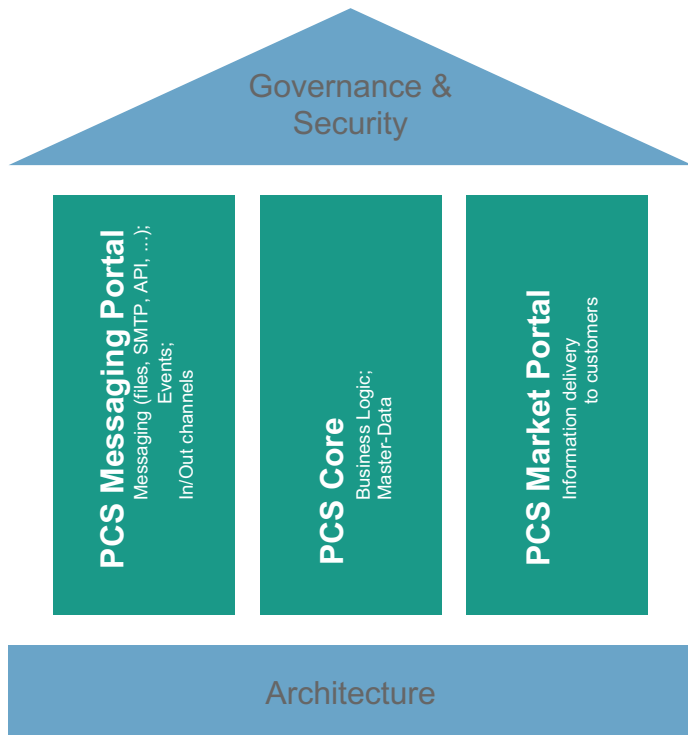
Long Term
Evaluation

Interview



Q#1

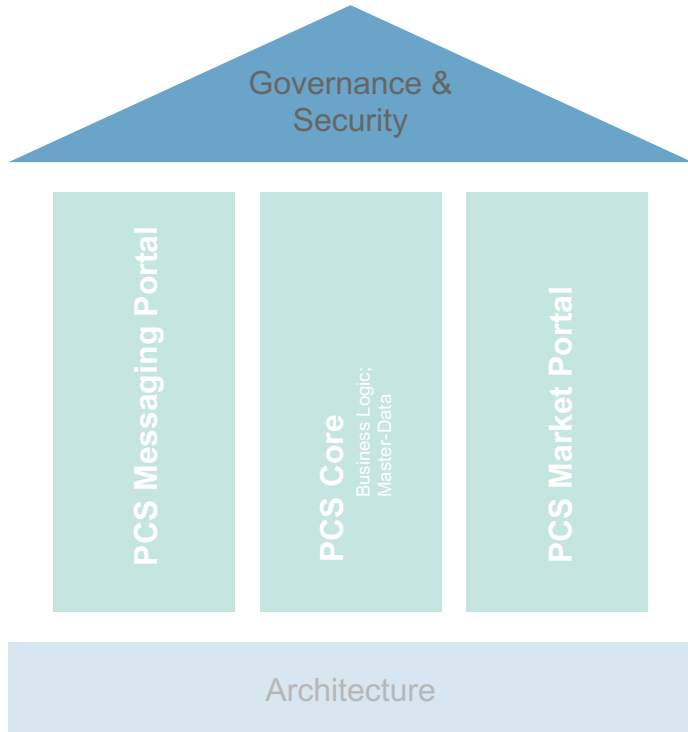
What architectural tiers would you define to structure the PCS Cargonaut solution?



Q#2

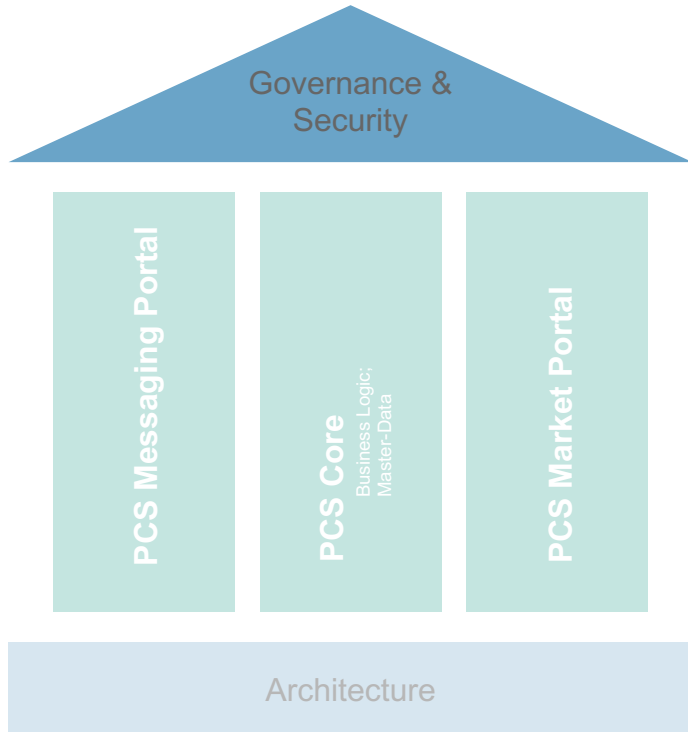
Would you confirm that this abstraction represents the major components of the PCS solution sufficiently?

Or would you add/change certain pillars?



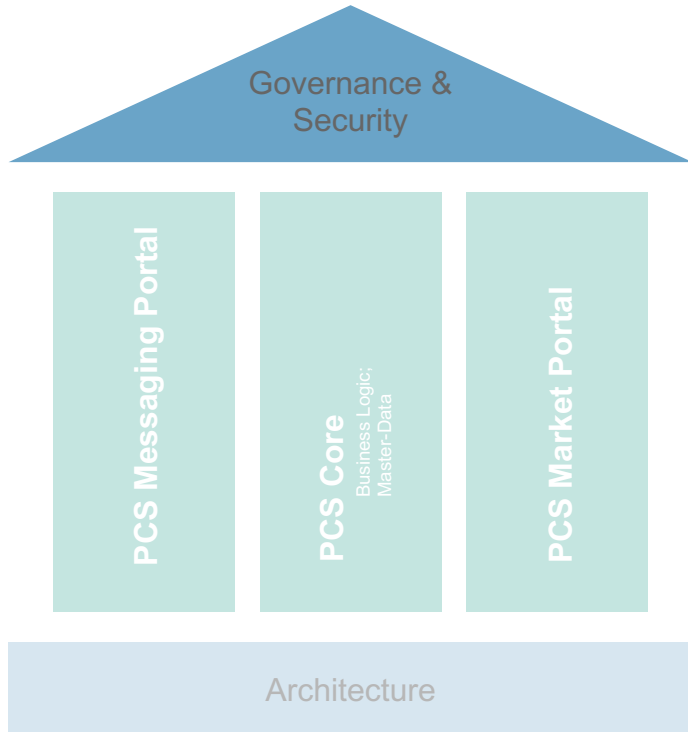
Q#3

What are the "Governance & Security" **responsibilities** associated with the PCS?



Q#4

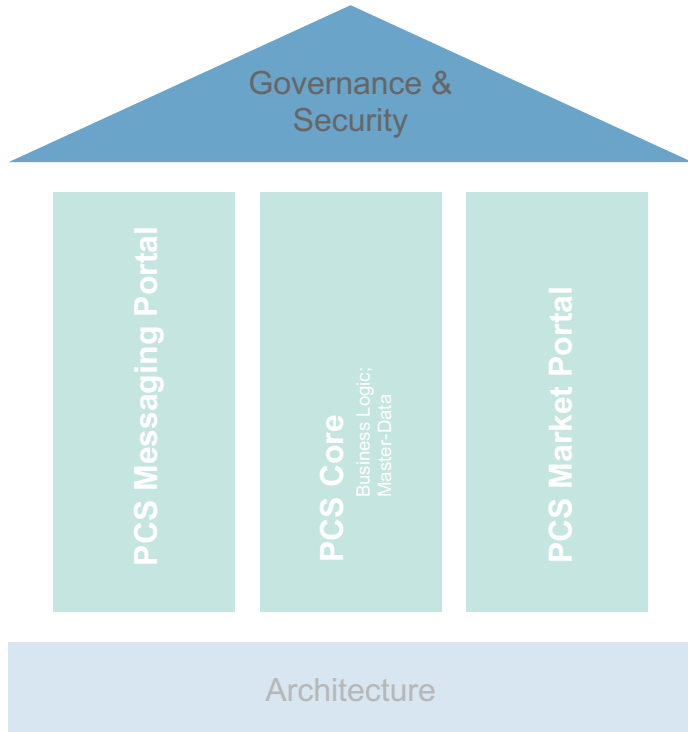
Which main stakeholder(s) are involved/addressed by this tier?



Q#5

Are **SaaS** / **ETO** building-blocks / **PaaS** solutions used to provide certain “Governance & Security” implementations for the PCS?

And Why?



Q#6

What architectural principle(s) would you define as **driving** architectural principle(s)?

And why?

Economic	Social	Environmental	Technical
Maintainability	User-friendly	Energy-efficiency	Maintainability
Adaptability	Accessibility	Effectiveness	Usability
Reusability	Usability	Technical correctness	Security
Modularity	Acceptable	Environmental compensation	Adaptability
Usefulness	Security	Environmental purpose	Scalability
Circularity	Usefulness		Robustness
Security	Adaptability		Portability
Usability			Software quality
Well-thought-out			
Interdependancy			
Robustness			

Q#7

For each sustainability dimension: which sustainability quality attribute(s) would you select as the **driving attributes** for the mentioned selected architectural principle?

(provide list [1] only if none are mentioned)



Q#8

For the selected sustainability quality attributes, can you define corresponding **KPIs** to track their impact?

A solid orange circle containing the text "Q#9" in white.

Q#9

The KPI mentioned, how can they be **measured** (automated / manual / surveys, etc.)?

Thank you!
