



# **Interview**

# **PCS Cargonaut Solution**

Pillar: Message Management



# Agenda

- Introduction  
Sustainability
- Interview
- Further Questions

# Introduction

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# “Framing Sustainability as a Property of Software Quality”<sup>[1]</sup>

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[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*

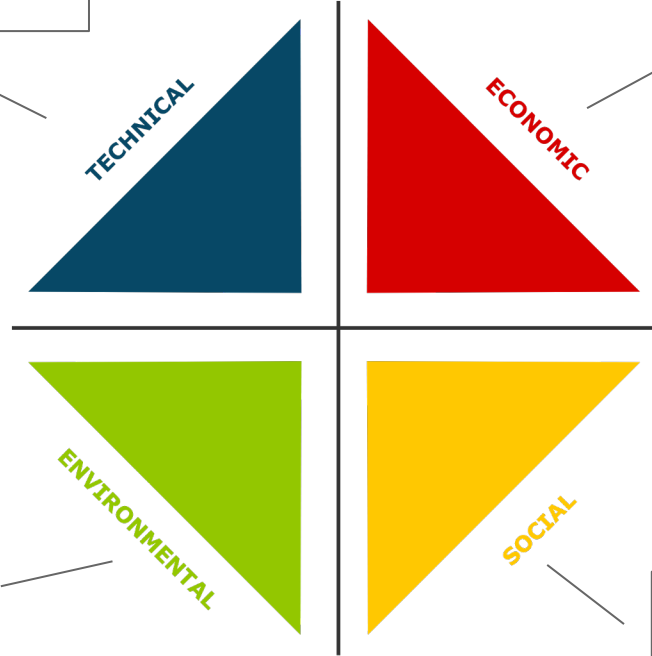
**ECONOMIC**

*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**

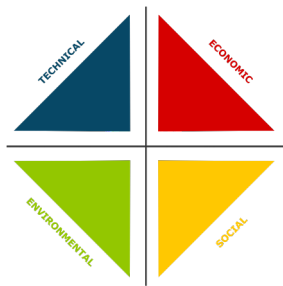




Software  
Architectural  
Principles



1



Sustainability  
Mapping



2



Impact  
Measurement



3



Long Term  
Evaluation

# Interview

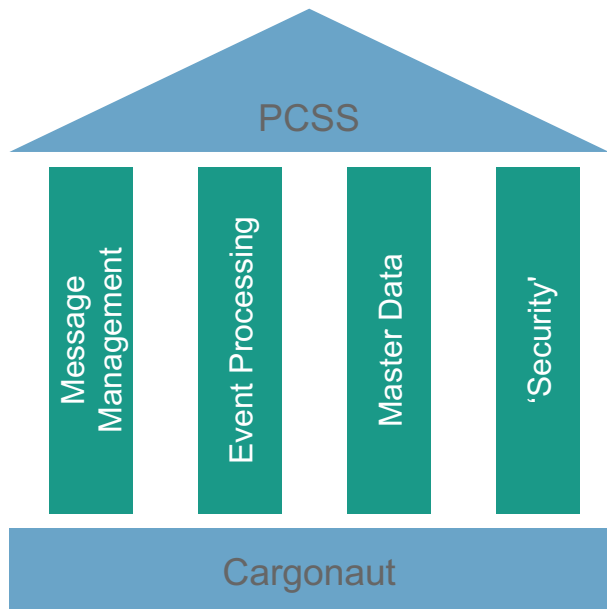
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A solid orange circle containing the text "Q#1" in white.

Q#1

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

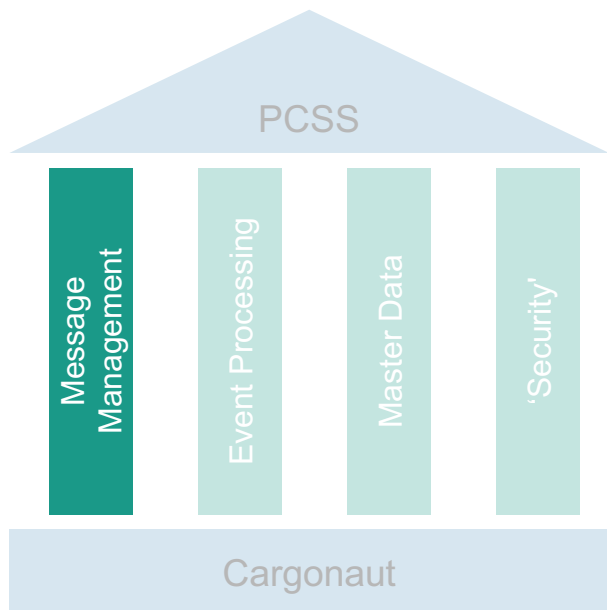




Q#2

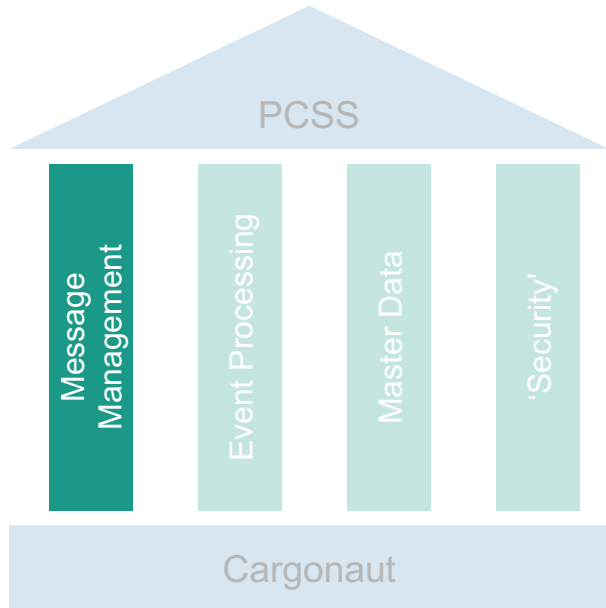
Would you confirm that this abstraction represents the major components of the PCS solution sufficiently?

Or would you add/change certain pillars?



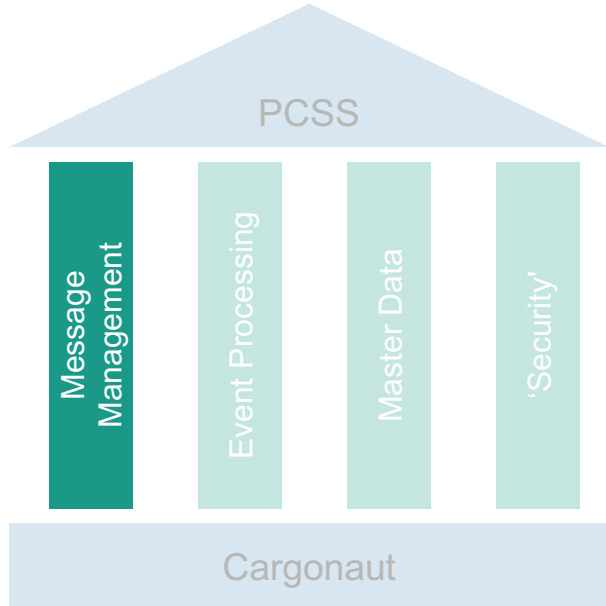
Q#3

What are the responsibilities of this pillar regarding the PCS solution?



Q#4

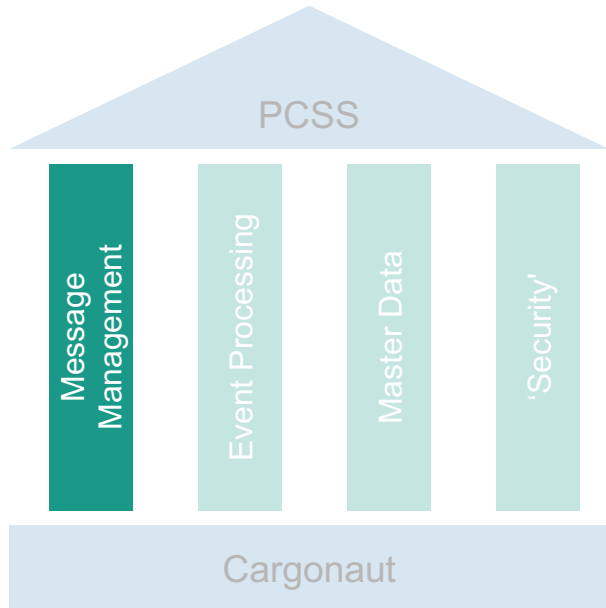
Which main stakeholder(s) are involved / addressed by this pillar?



Q#5

Which SAAS / ETO building-blocks / PAAS solutions are used in the implementation of this pillar, and why?

*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?

Q#9

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



**Thank you!**

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