

# MAS Organisations to Adapt your Composite Service

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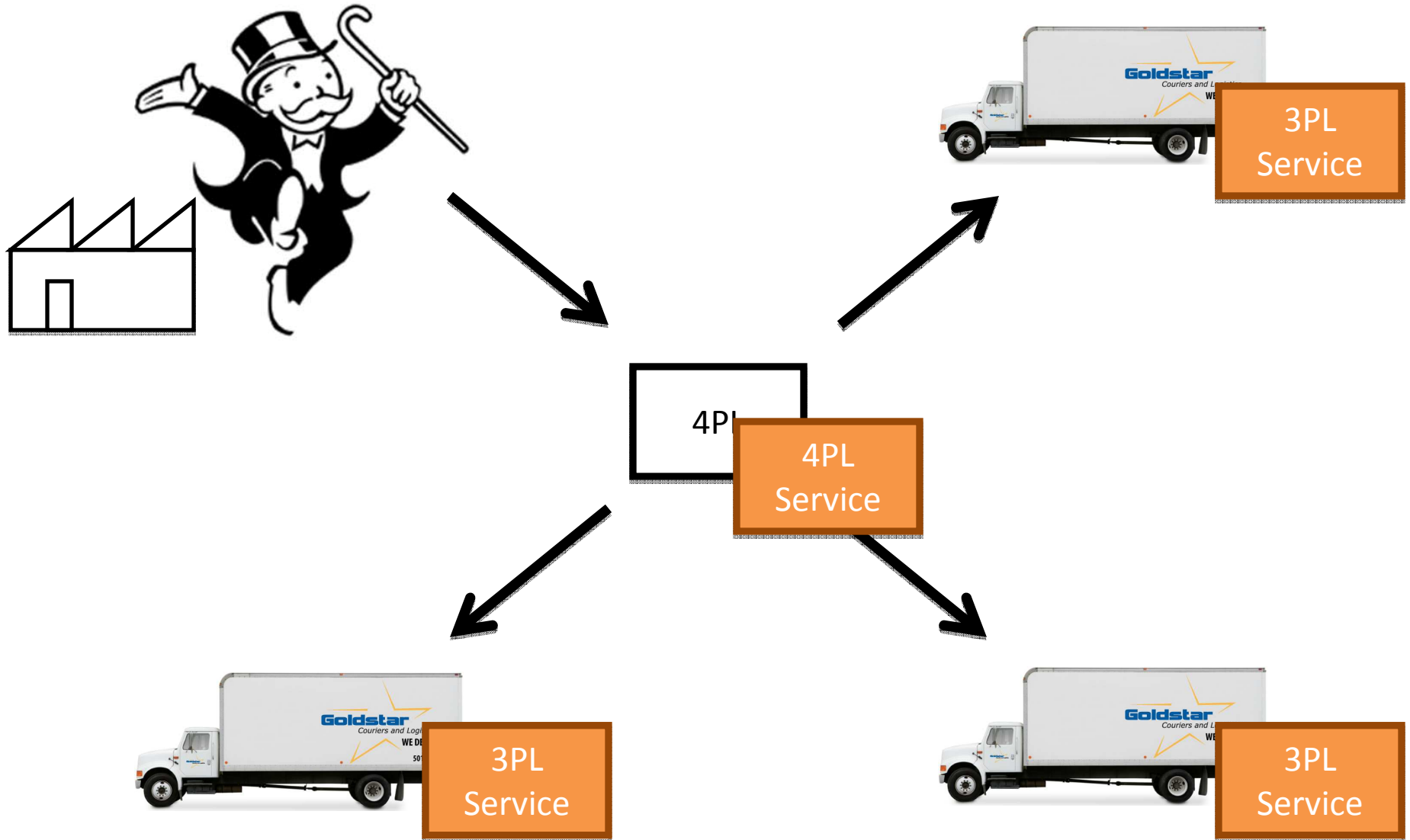
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# Overview

- Motivation
- Current Solution
- Our Solution
- Conclusion

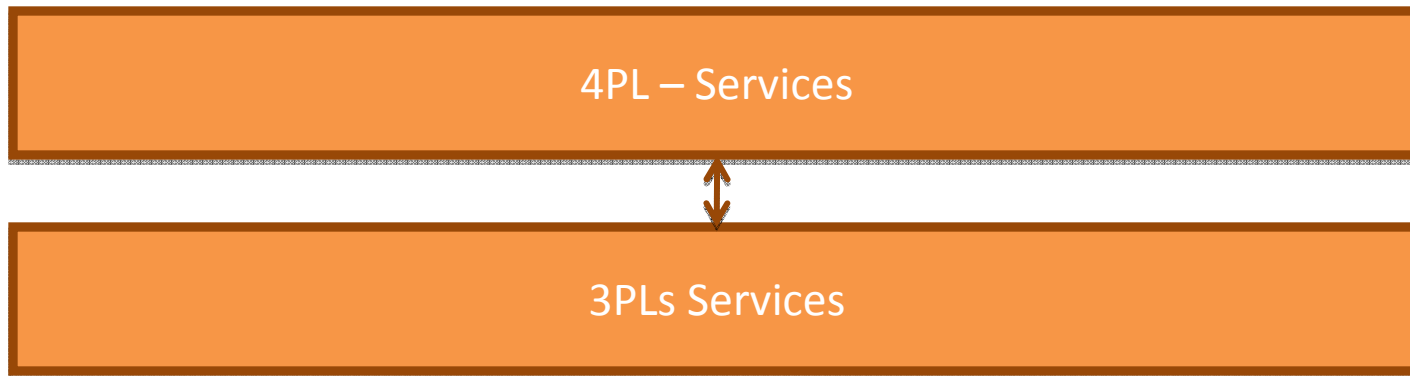
# Motivation Scenario



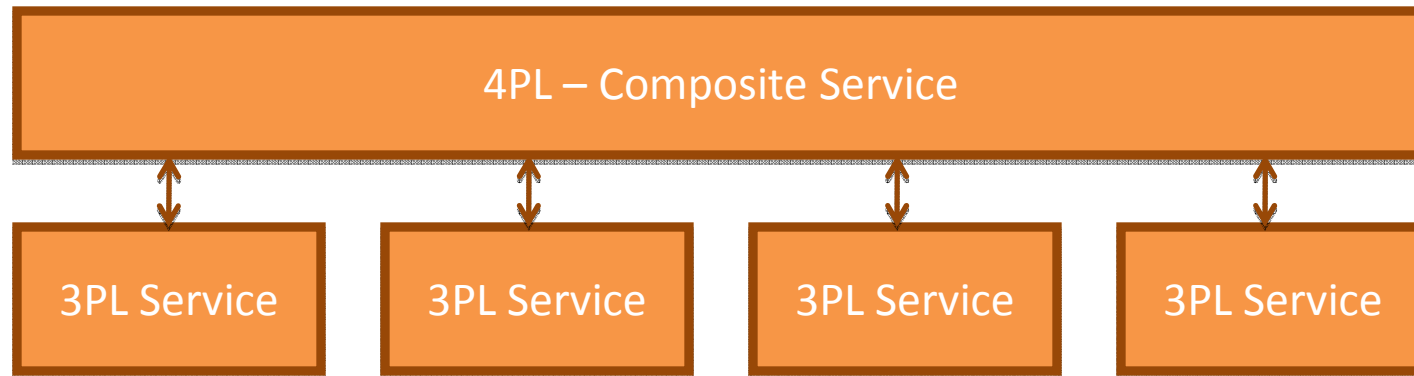
# Motivation Scenario

- Supply Chain Domain
- 4PL - Fourth Party Logistics needs to organize transports
- Assigns sub-transports to 3PLs
- Needs to follow up what is happening

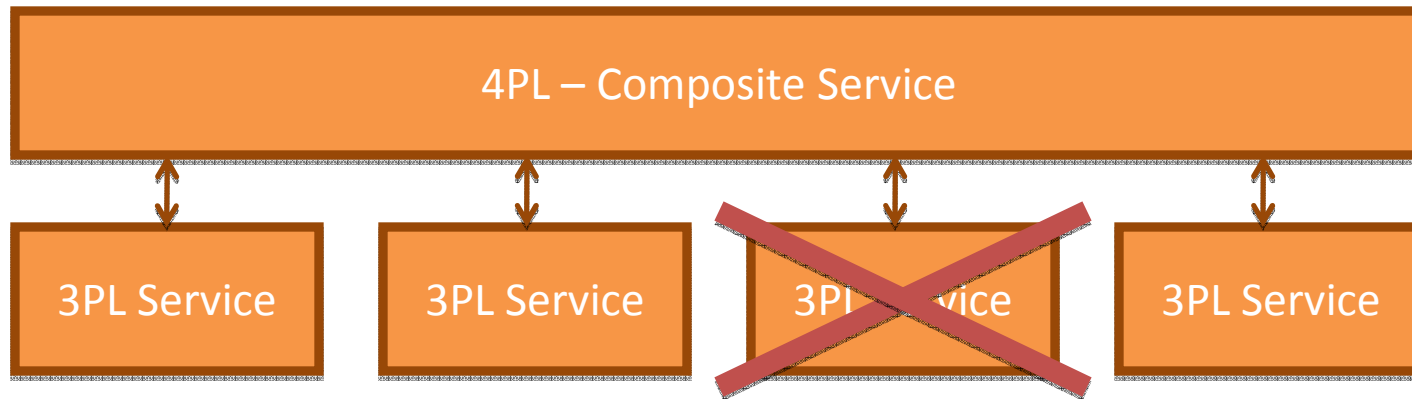
# Services Solution



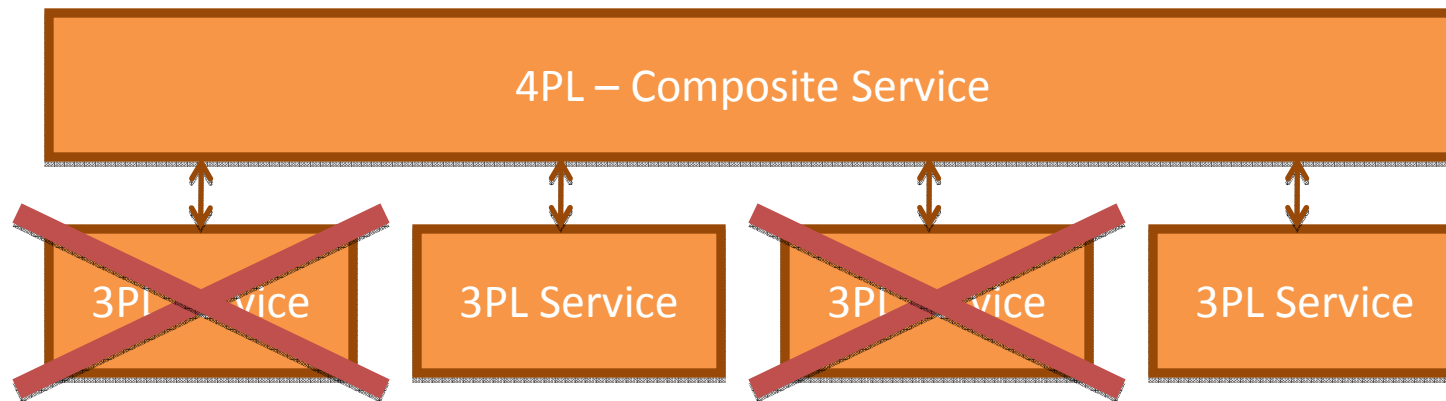
# Services Solution



# Services Problems



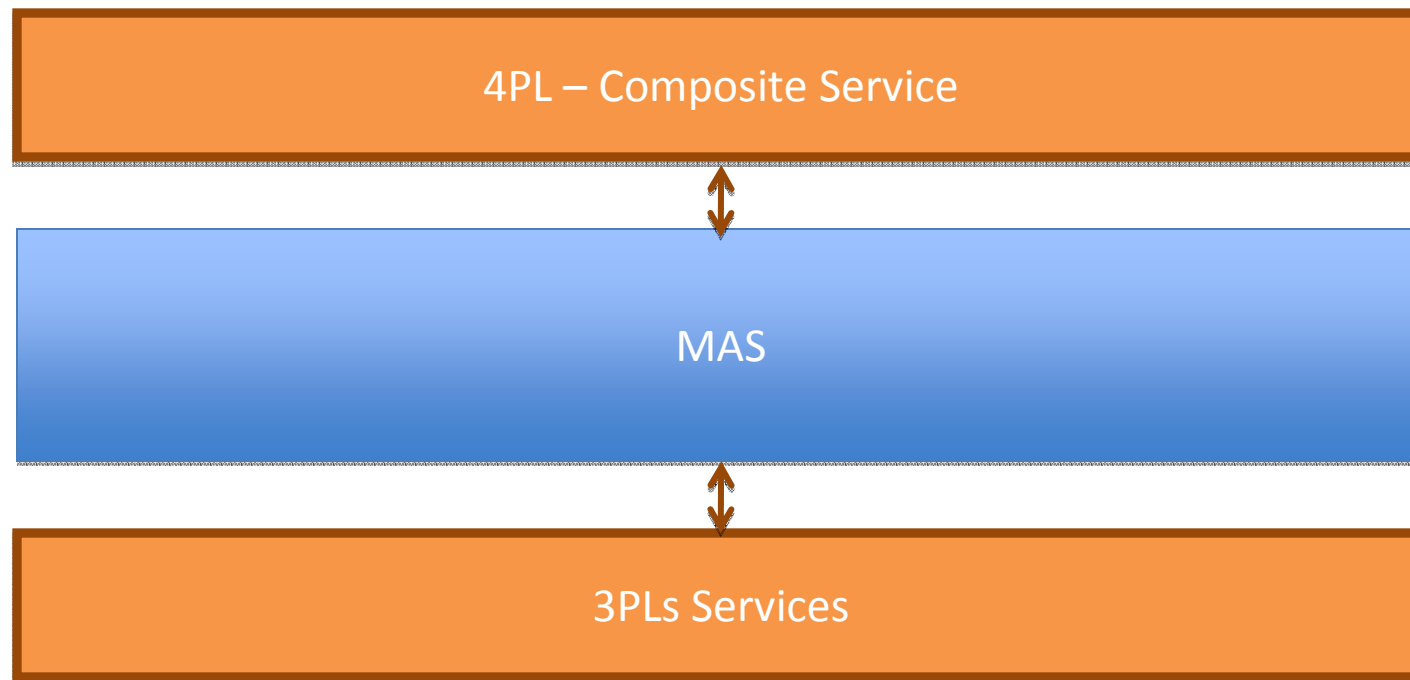
# Services Problems



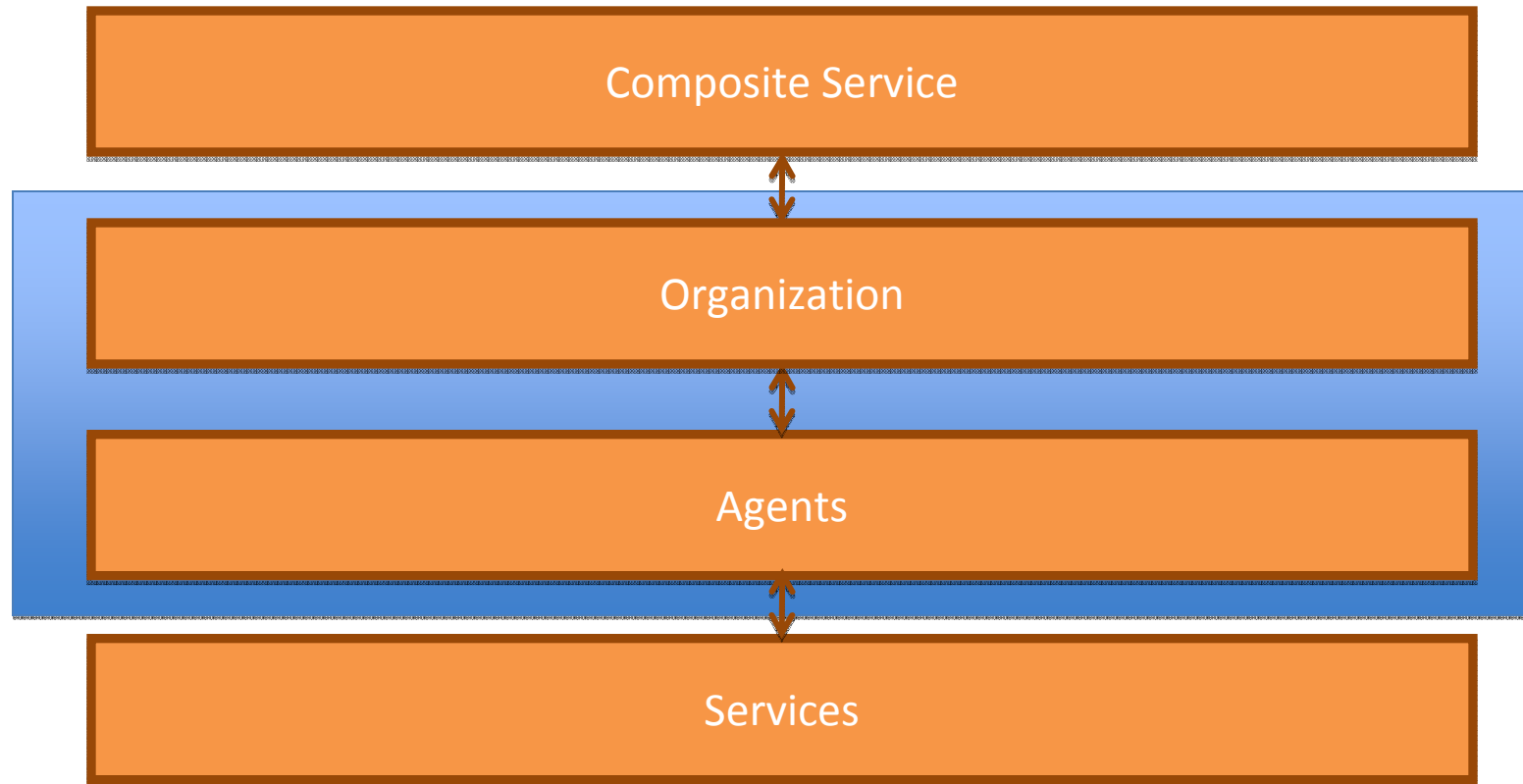
# Solutions to Services Problems



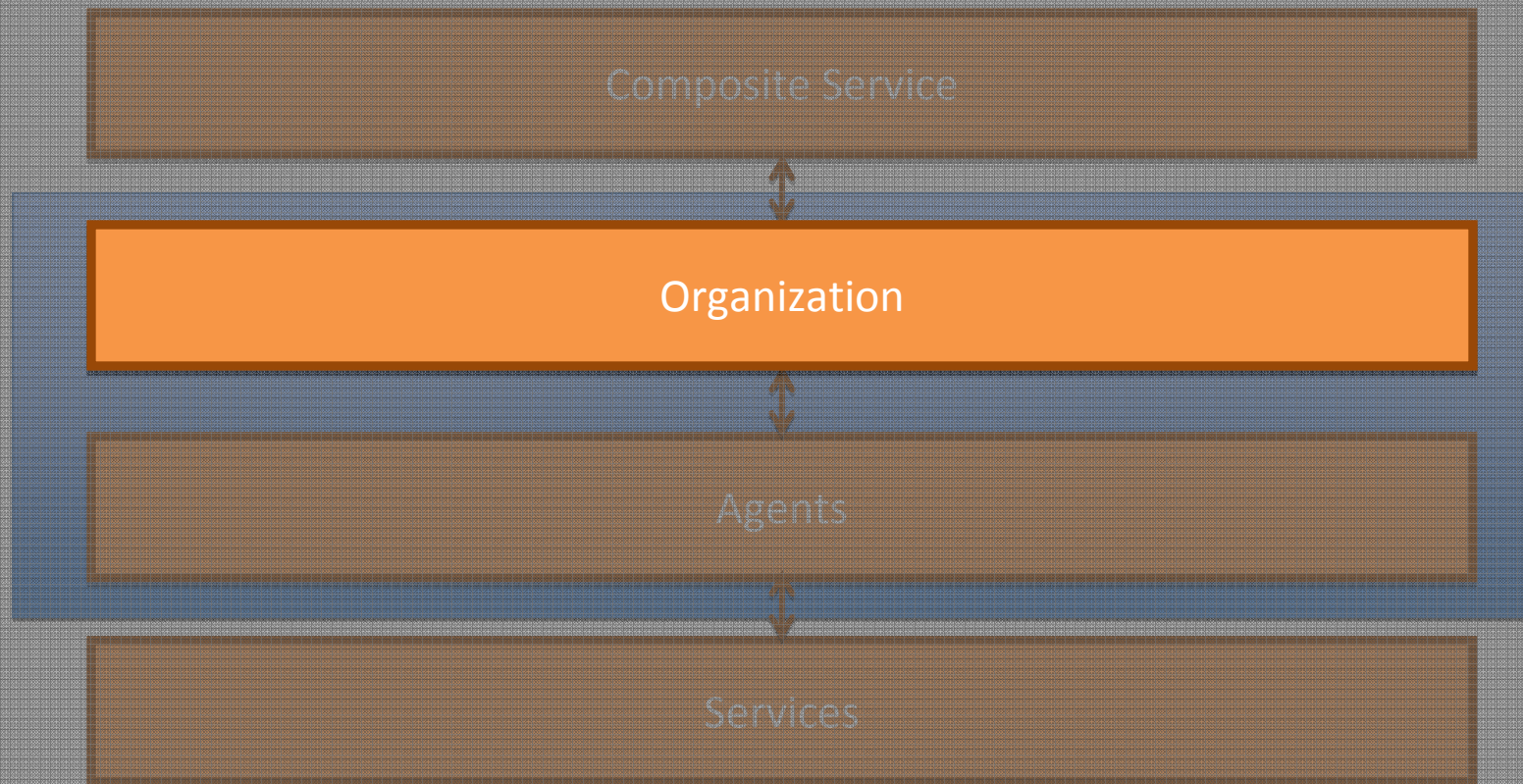
# Adapting Composite Services



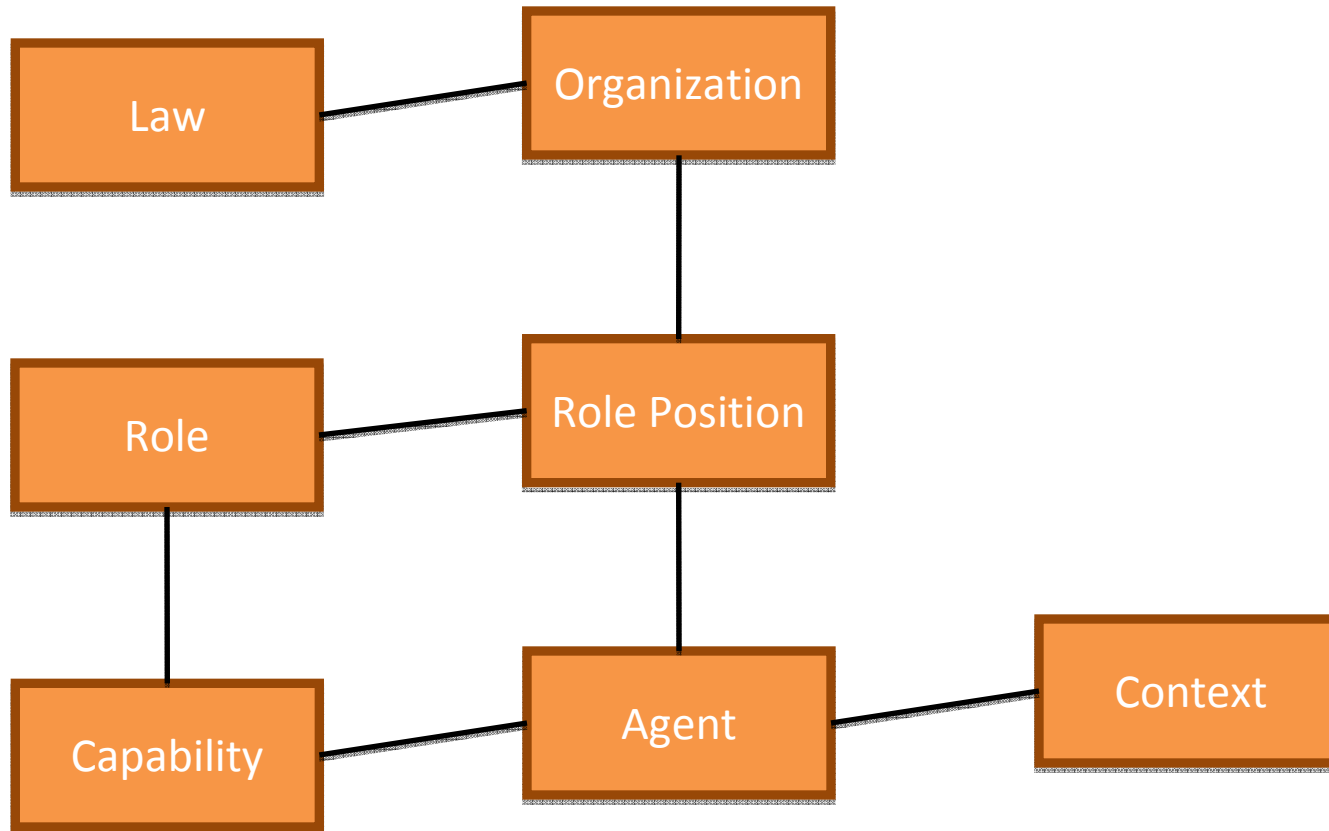
# Adapting Composite Services



# Adapting Composite Services



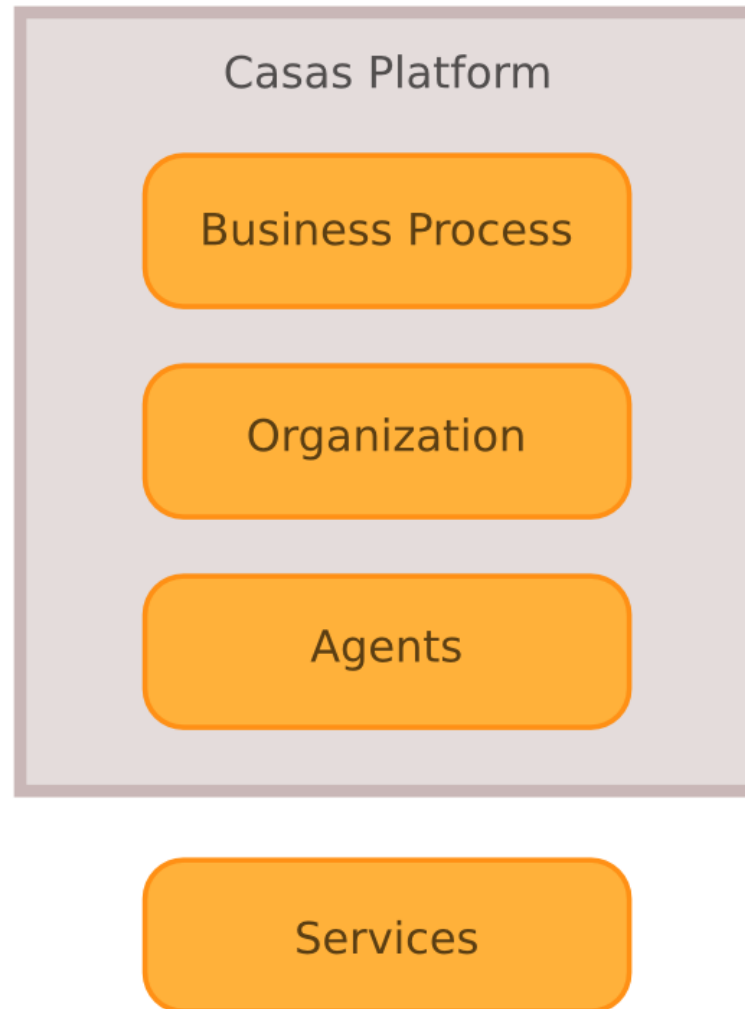
# Organization



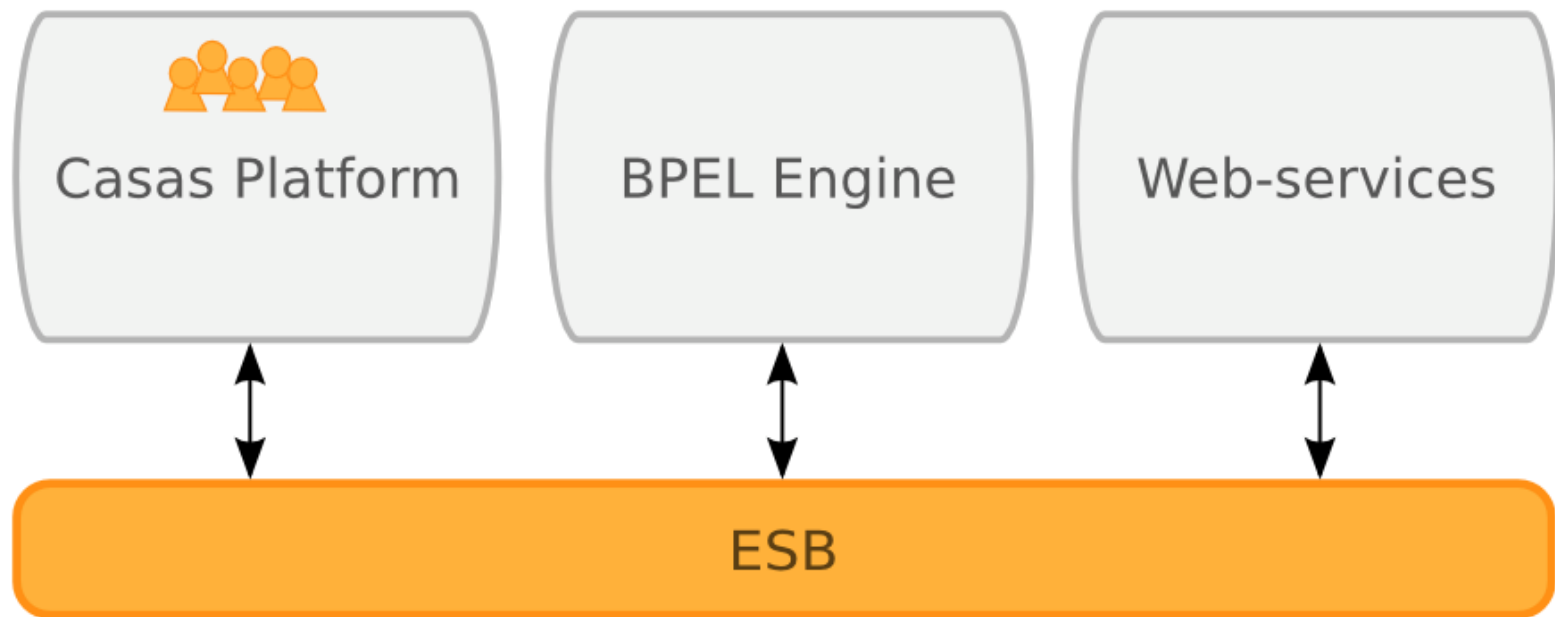
**“The MACODO Organization Model for Context-Driven Dynamic Agent Organizations”**

Danny Weyns, et.al. TAAS 2010

# CASAS Platform



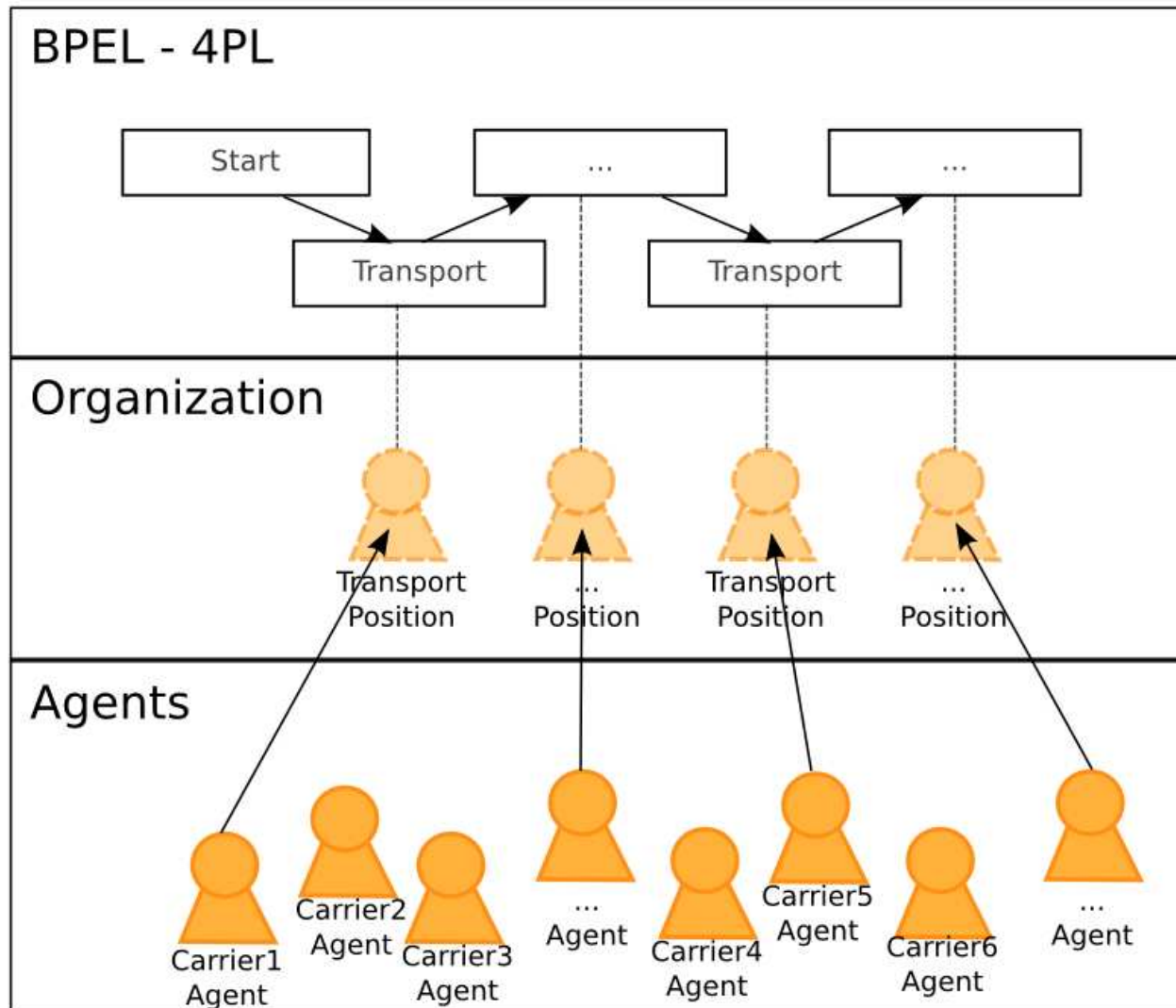
# CASAS Platform Prototype



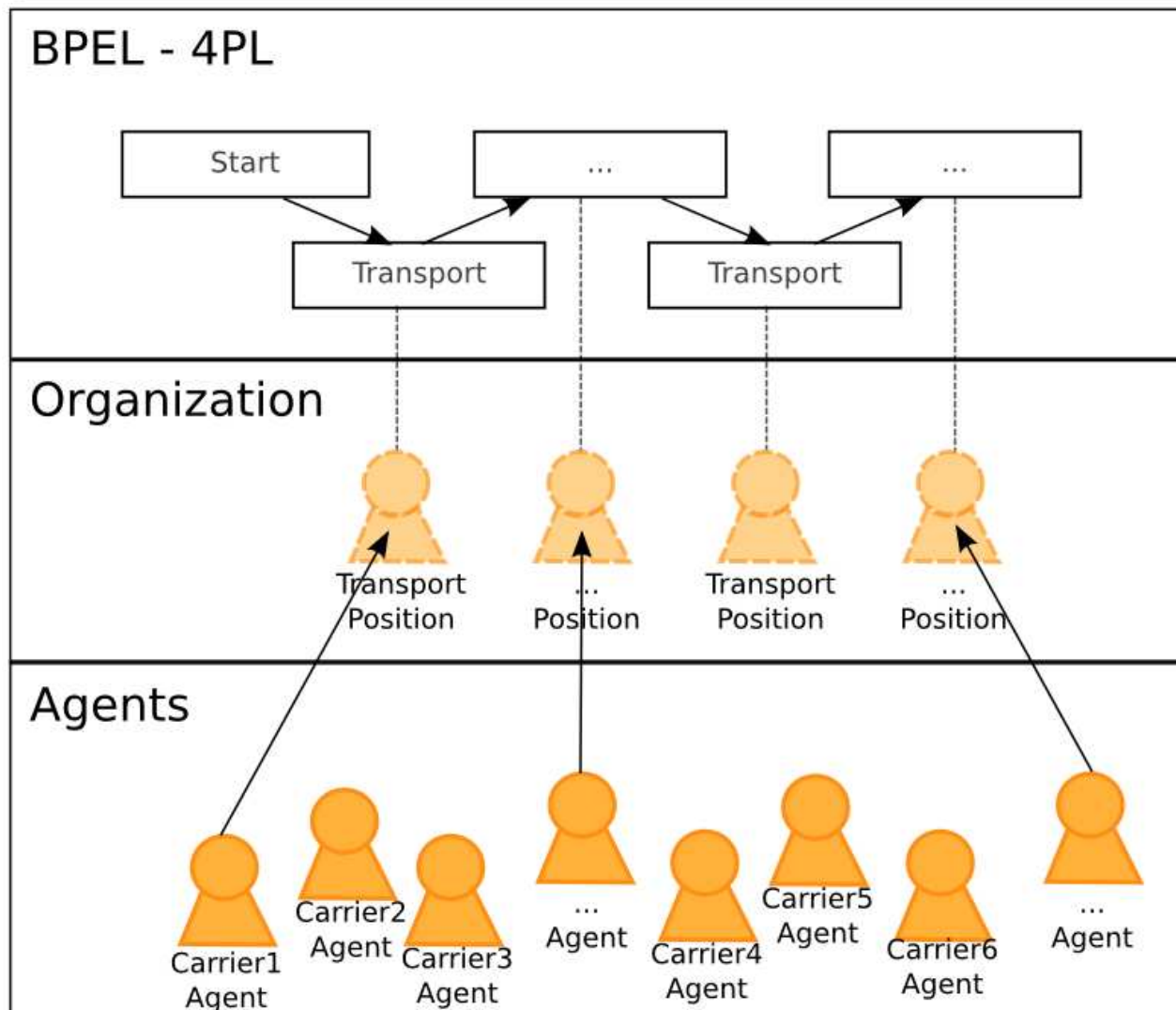
# Macodo and BPEL

<b>Web-services</b>	<b>Macodo</b>
BPEL process	Organisation
PortType	Role
PartnerLink	Role Position
SLA	Capability
SLO	Agent Context

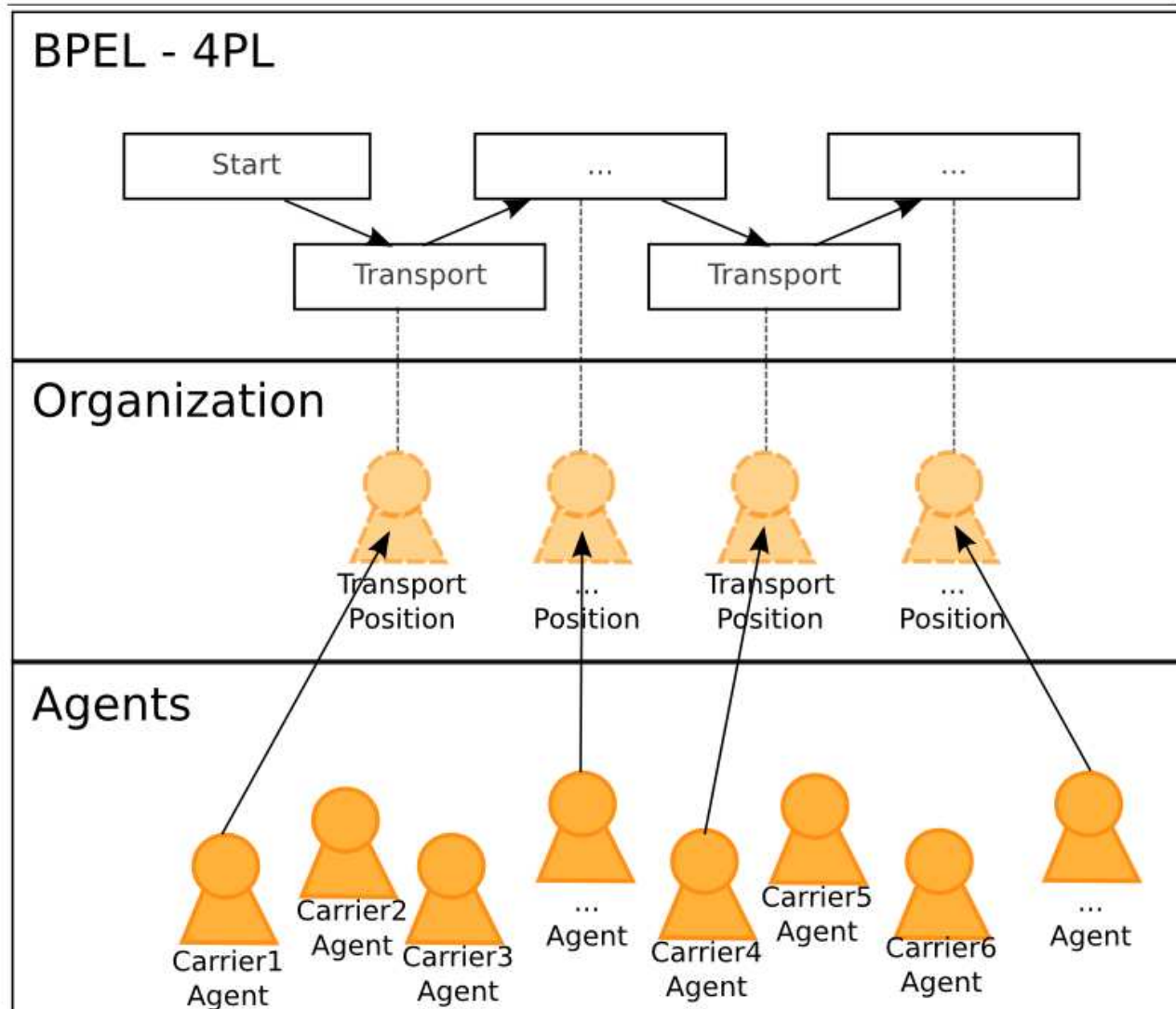
# Prototype



# Prototype



# Prototype



# Conclusions

- High-Level model for composite services adaptation
- CASAS provides means to Pro-actively adapt composite services (maintain SLA)
- Need to do quantitative evaluation

# Ongoing Work

- Coordination layer
- Hypothesis – intention propagation provides better alternatives to service adaptation, than optimization solutions using static context information

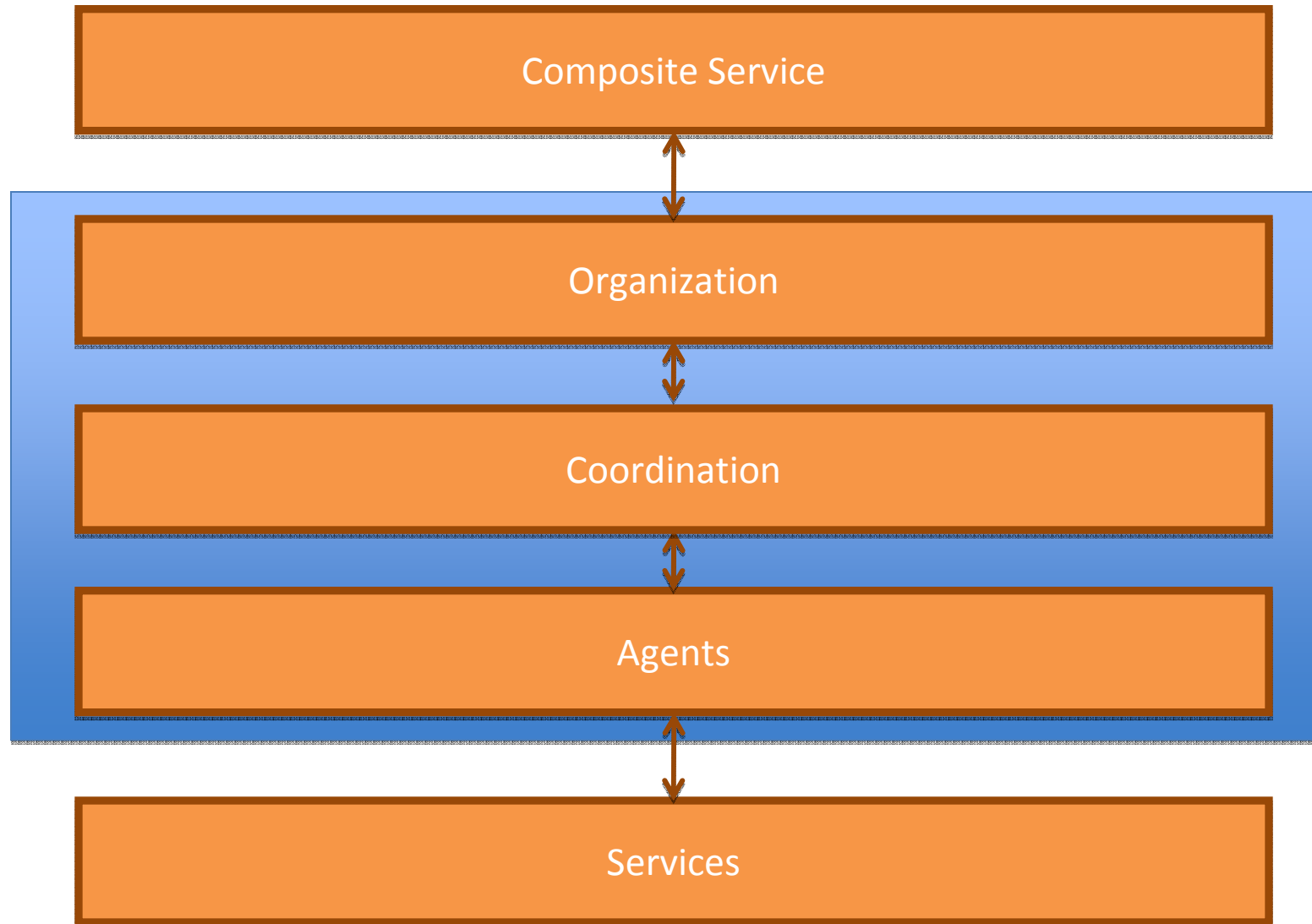
*“it might be worth-while to point out that the purpose of abstracting is not to be vague, but to create a new semantic level in which one can be absolutely precise”*

Edsger Dijkstra

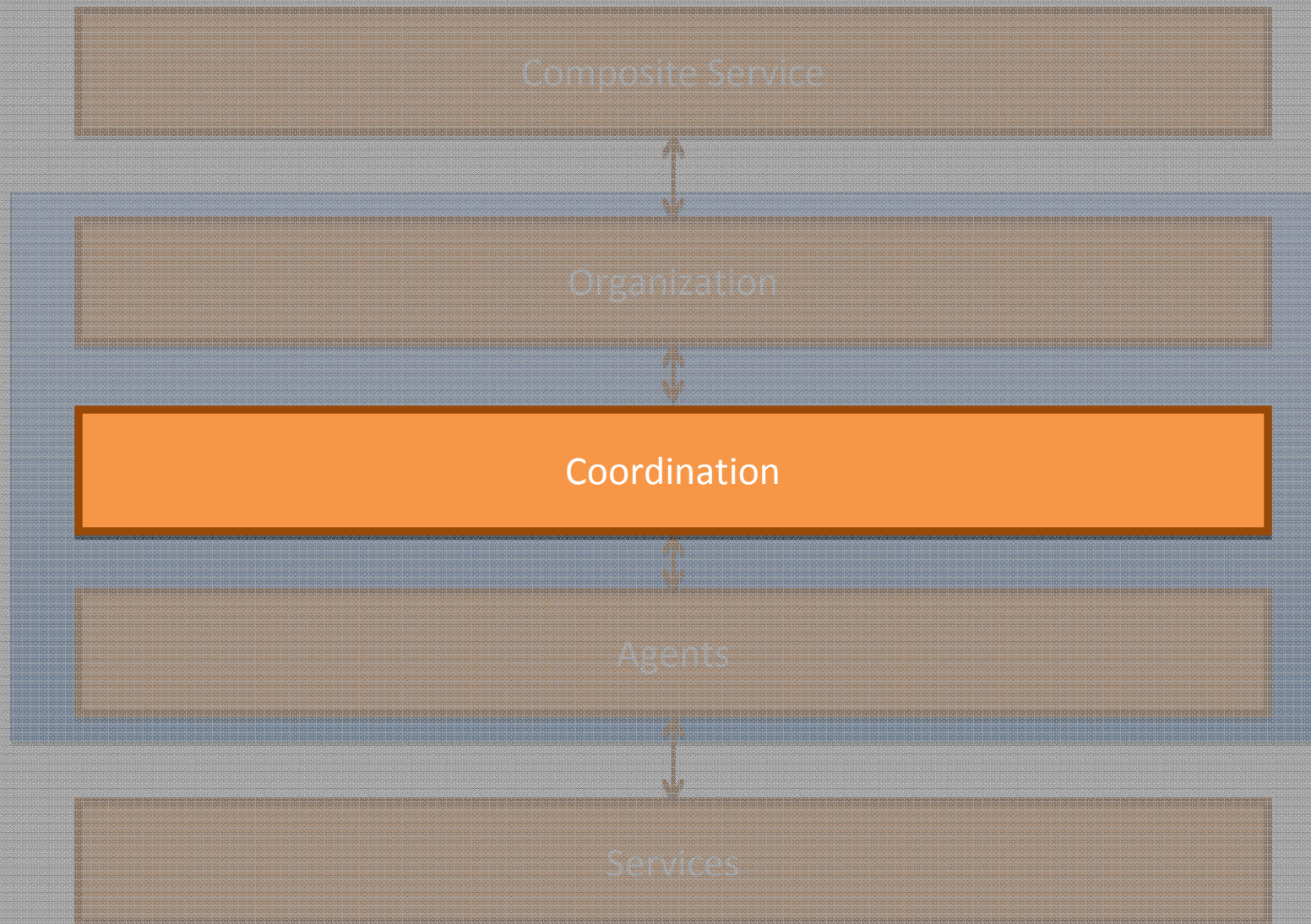
<http://www.cs.utexas.edu/~EWD/transcriptions/EWD03xx/EWD340.htm>

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# Adapting Composite Services



# Adapting Composite Services



# Coordination

