

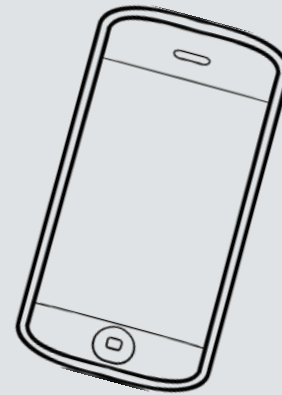
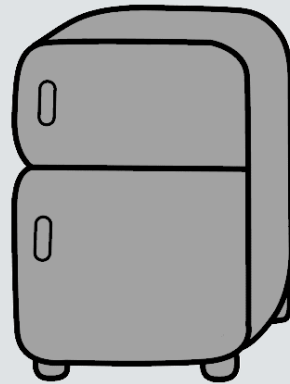
# INTERNET OF THINGS

Architectures and  
Technologies



**Universidade do Minho**  
Escola de Engenharia

# O QUE É A INTERNET OF THINGS?



# PRINCIPAIS DESAFIOS ASSOCIADOS

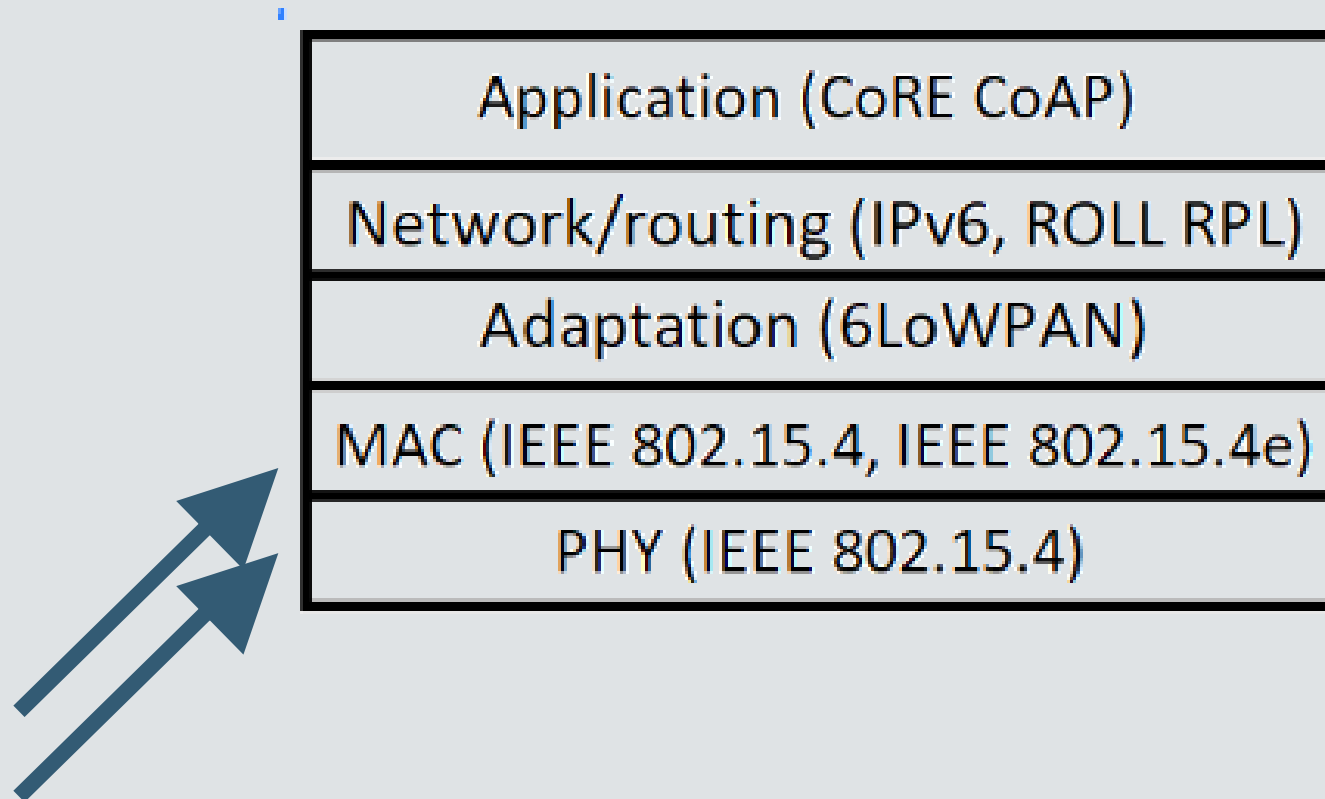
PHY (IEEE  
802.15.4) &  
MAC (IEEE  
802.15.4,  
IEEE  
802.15.4e)

Adaptation  
(6LoWPAN)

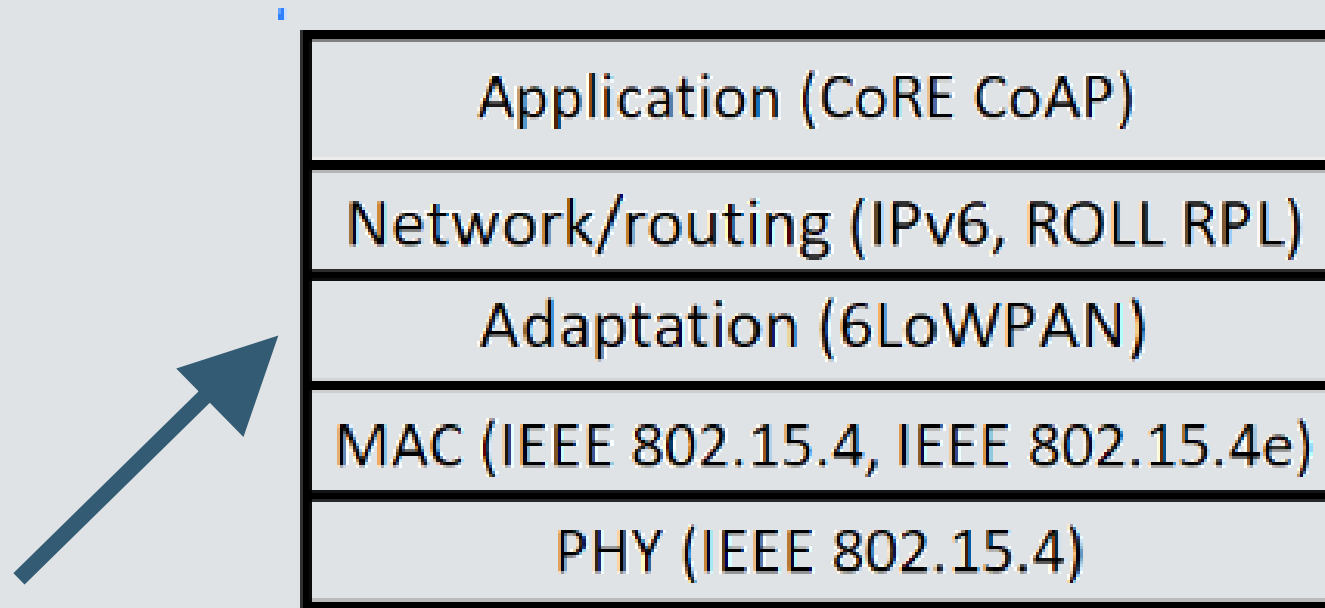
Network/  
routing  
(IPv6,  
ROLL RPL)

Application  
(CoRE  
CoAP)

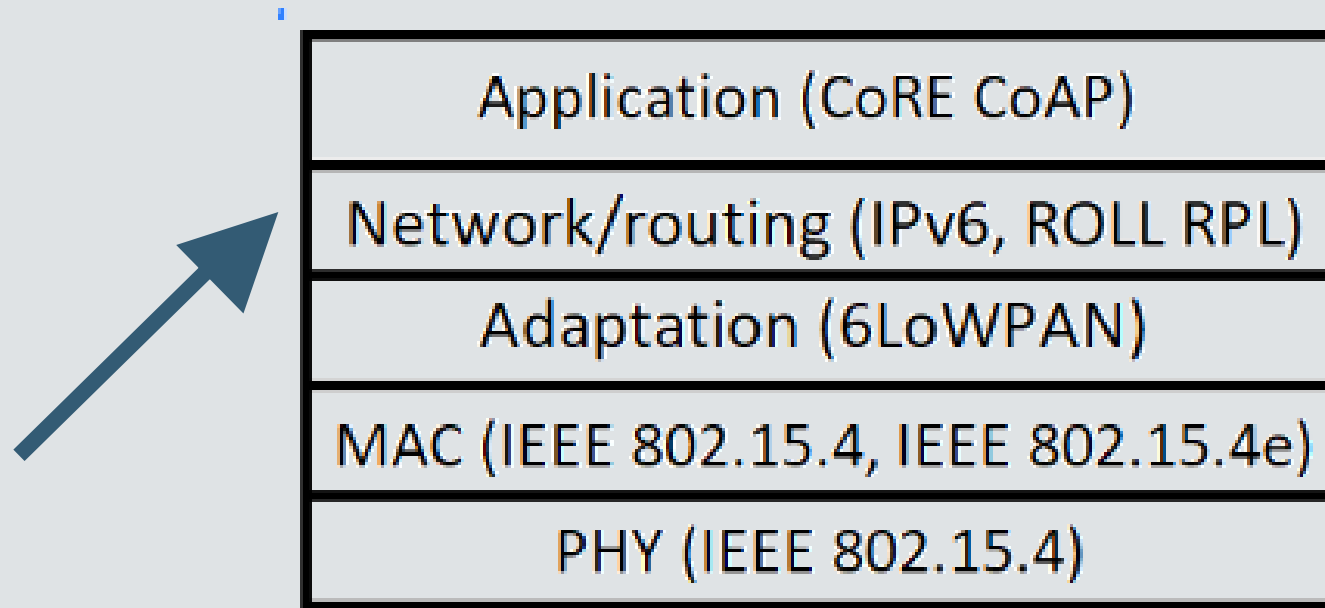
# PHY (IEEE 802.15.4) & MAC (IEEE 802.15.4, IEEE 802.15.4e)



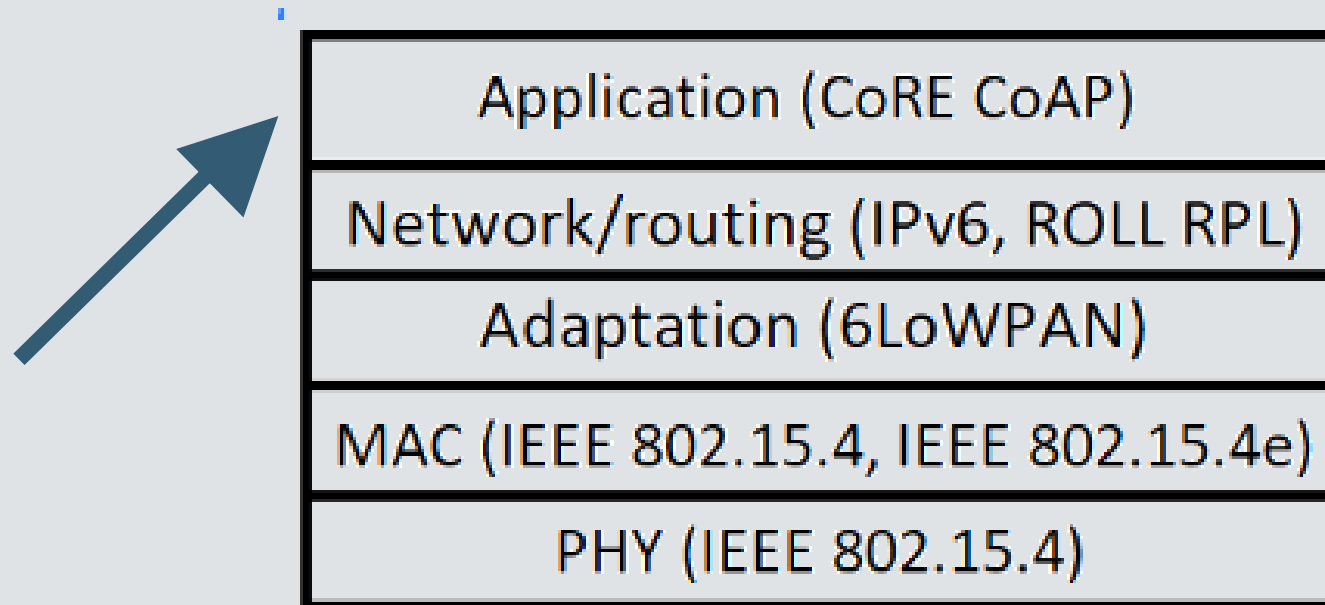
# Adaptation (6LoWPAN)



# Network/routing (IPv6, ROLL RPL)



# Application (CoRE CoAP)



# AQUITETURA DA IoT

Objects  
Layer

Object  
Abstraction  
Layer

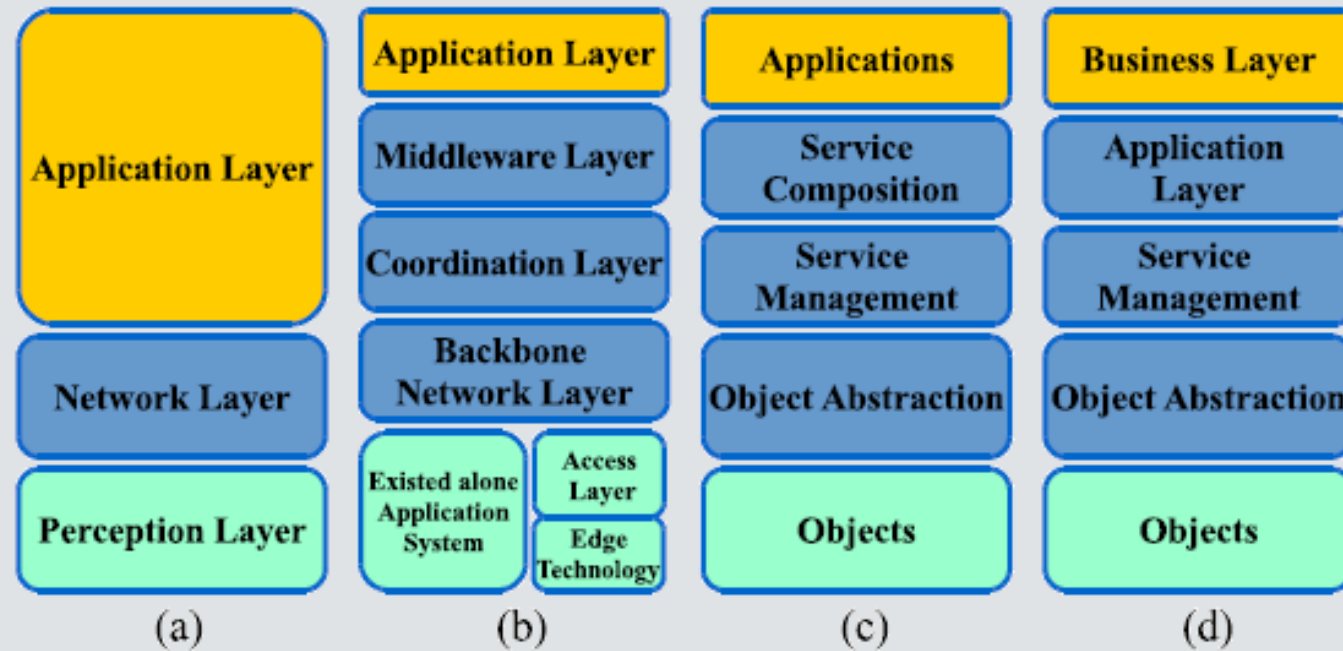
Service  
Management  
Layer

Application  
Layer

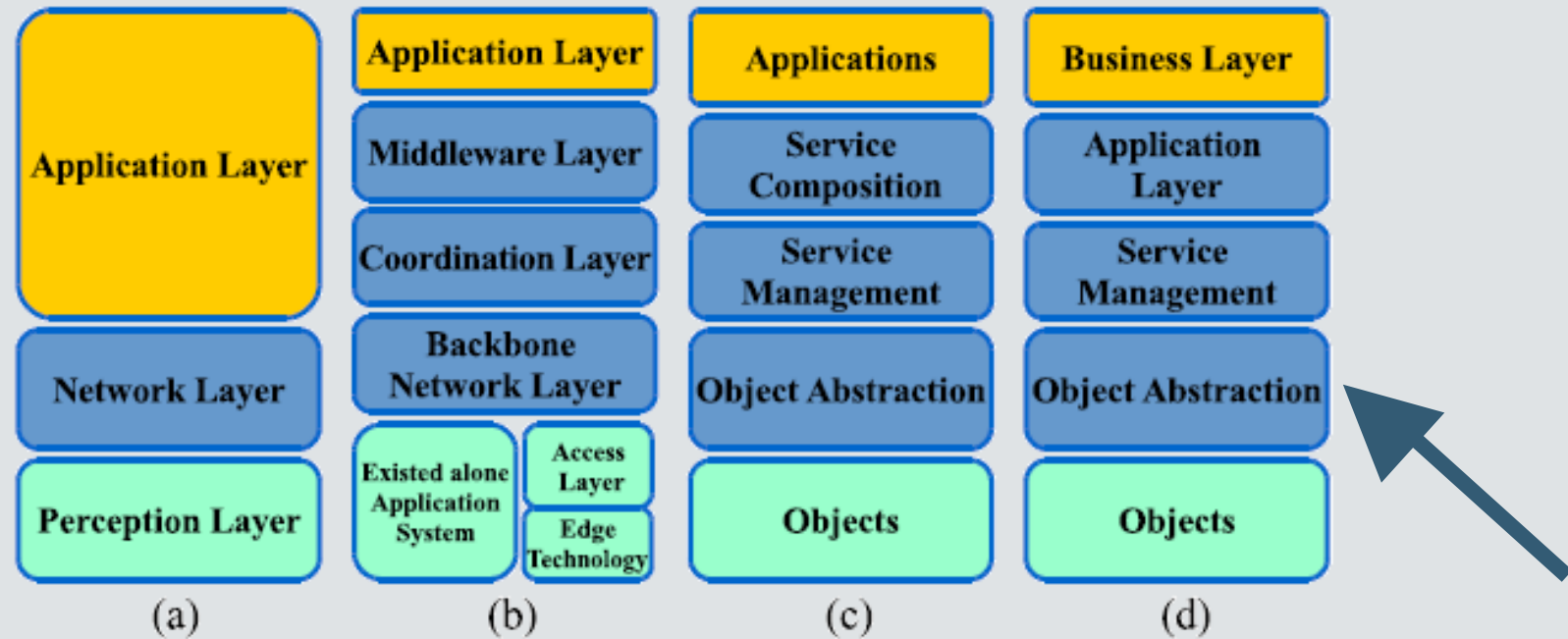
Business  
Layer



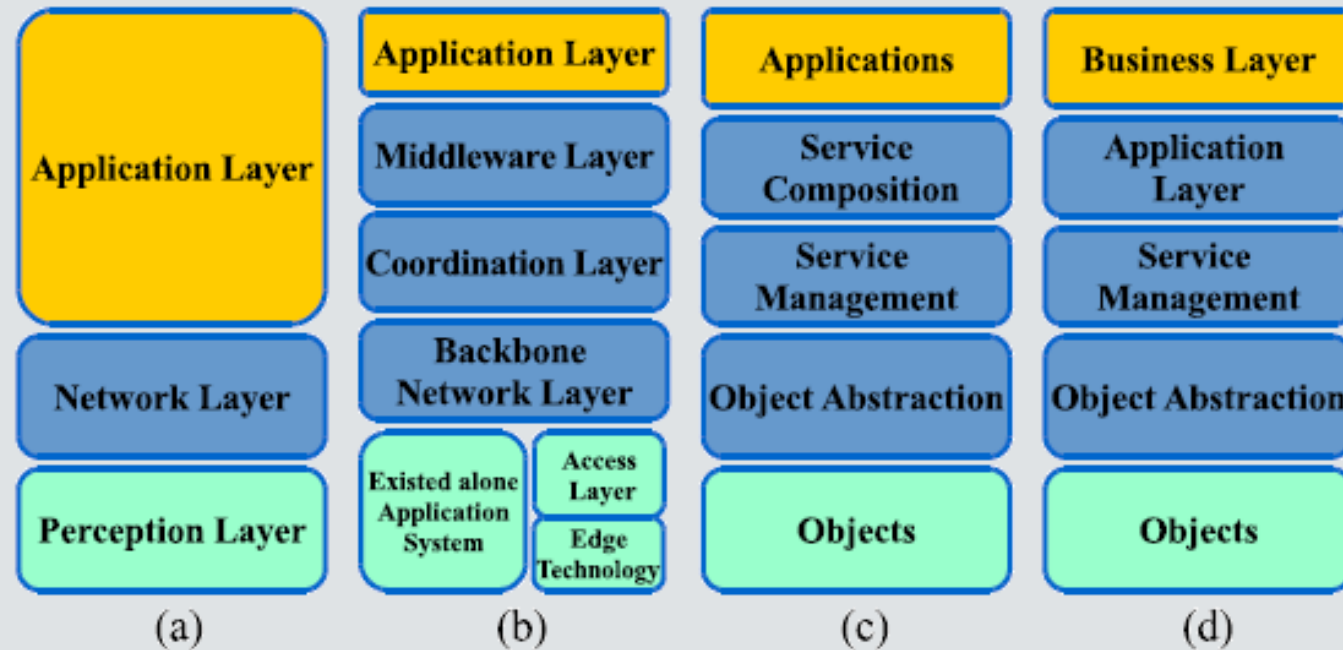
# Objects Layer



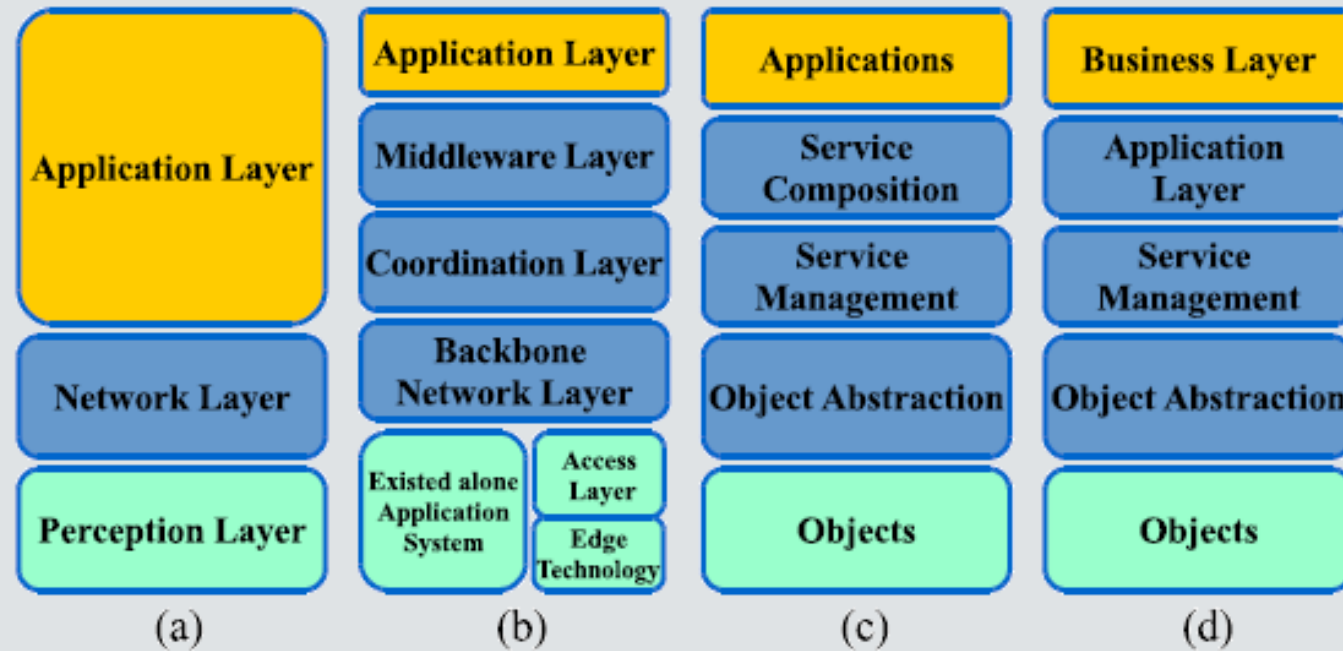
# Object Abstraction Layer



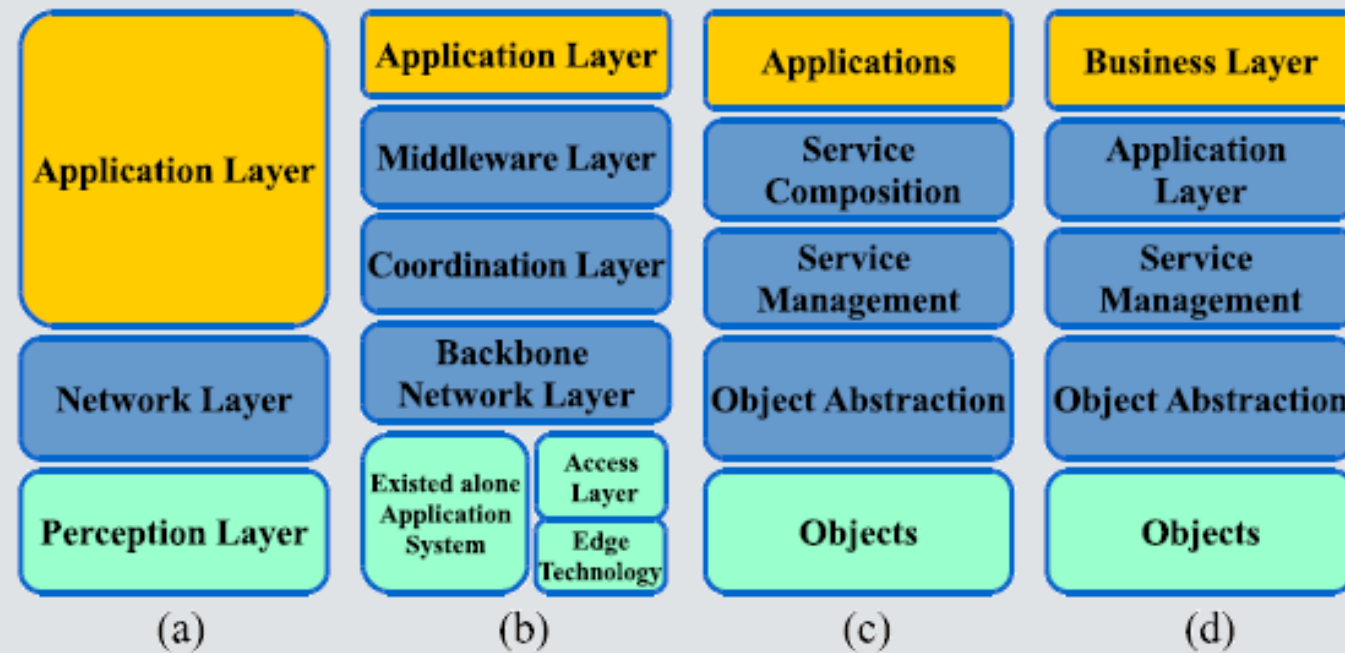
# Service Management Layer



# Application Layer



# Business Layer

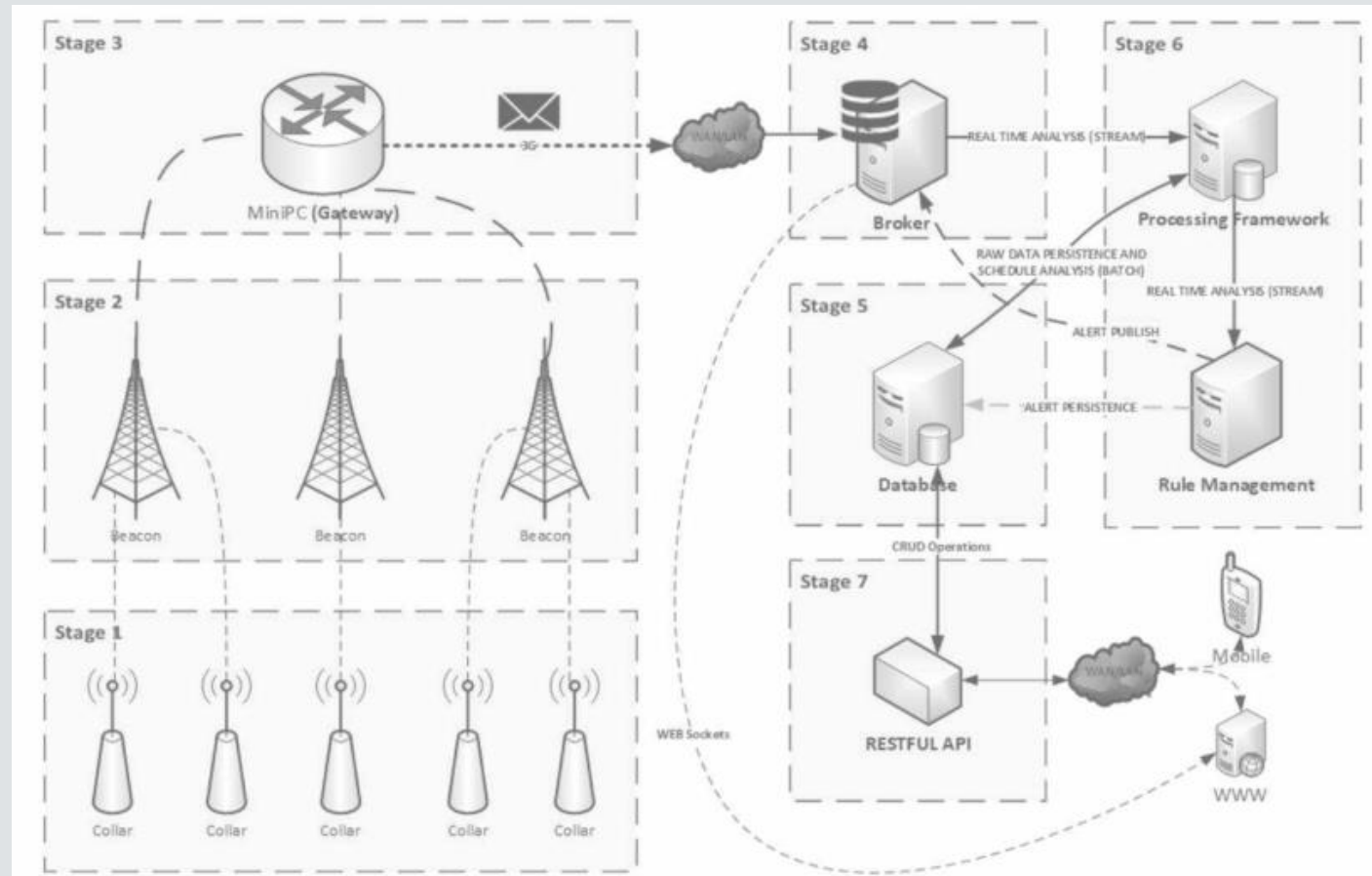


# PROJETOS ATUAIS RELACIONADOS COM A TEMÁTICA

Monitorização  
de animais  
baseada em  
tecnologias  
IoT

Smart  
Homes

# Monitorização de animais baseada em tecnologias IoT



# Smart Homes

Alerta

Controlo

Monitorização

Inteligência



# Smart Homes

