BUILDING A DIGITAL ENTERPRISE – HOW TO MONETIZE YOUR BUSINESS WITH DIGITAL TECHNOLOGIES?

LESSONS FROM THE FRONT LINE FOR BUSINESS AND IT PRACTITIONERS

Mark Skilton

Digital Business, PA Consulting

Professor of Practice, Information Systems Management, WBS

Mark.Skilton@paconsulting.com
@mskilton @GoDigitalPA

Objectives

“Digital barometer” showing the leadership, cultural and organizational **challenges facing businesses and practitioners** as they grapple with the “digital economy” paradigm shift.

Examples of a Digital Business Model and its ramifications for the marketplace and the wider technological, economic and social ecosystem. **- Hilton International, Coca Cola Enterprise, MasterCard**

Some concluding remarks will explore the challenges and opportunities that practitioners are looking for answers and direction for **best practices in digital business.**

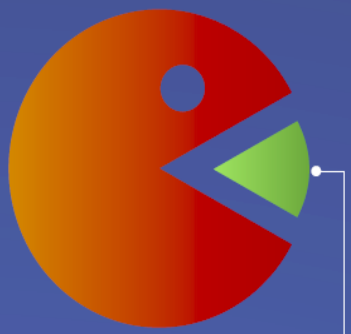
© PA Knowledge Limited 2015

© PA Knowledge Limited 2015

PEOPLE DEMAND IS FUELLING THE REVOLUTION...

Customer needs & demands are the **#1** driving force for digital change.

However, businesses are struggling to adapt:



only **16%** deliver a tailored experience

© PA Knowledge Limited 2015

DIGITAL AMBITION FAR EXCEEDS THE REALITY

62% of organisations have ambitions to be digital leaders.

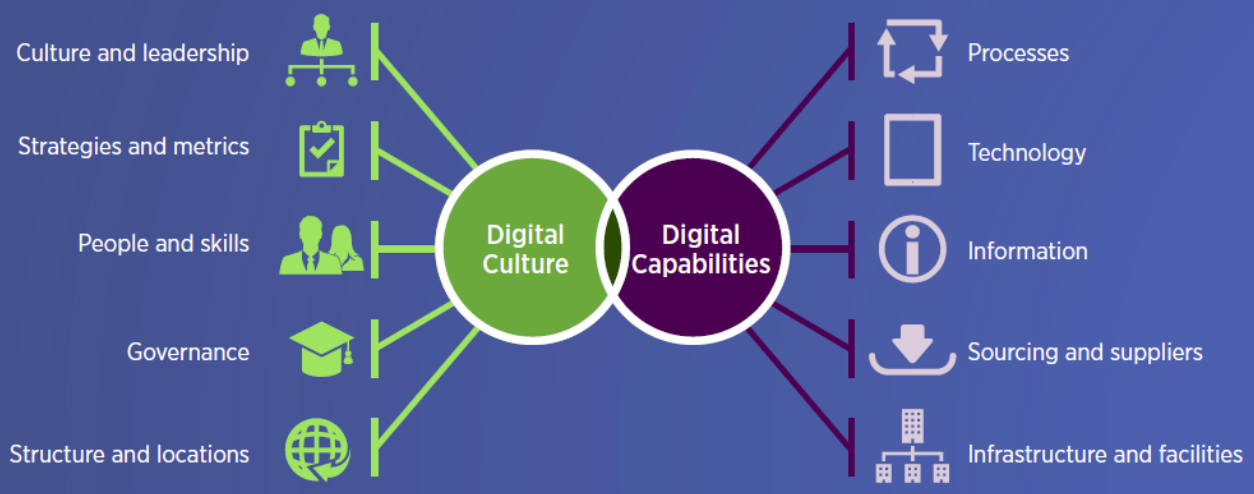
8% only are well on their way to achieving this.

13% of people clearly understand how digital will transform their business.

> What's stopping us? Getting the leadership team to believe and act.
>
> RESPONDENT, DIGITAL BAROMETER

© PA Knowledge Limited 2015

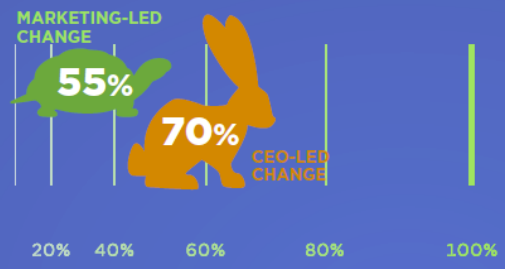
SUCCESS IS DETERMINED BY CULTURE AND PEOPLE AS WELL AS I.T.



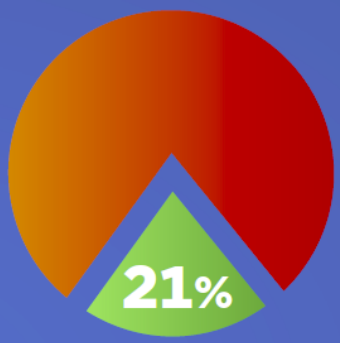
© PA Knowledge Limited 2015

LEADERSHIP IS KEY TO PROGRESSING DIGITAL CHANGE

A huge majority of people **don't think** their leadership team truly understands digital…



Yet, where CEO's are driving digital change, organisations are **further along** their digital journey.



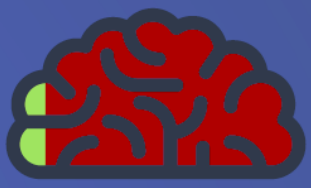
The CEO is driving the digital agenda in just **1 in 5** firms.

© PA Knowledge Limited 2015

CULTURE IS KING

26%

of people think their firm has the right mindset to survive and thrive in the digital age.

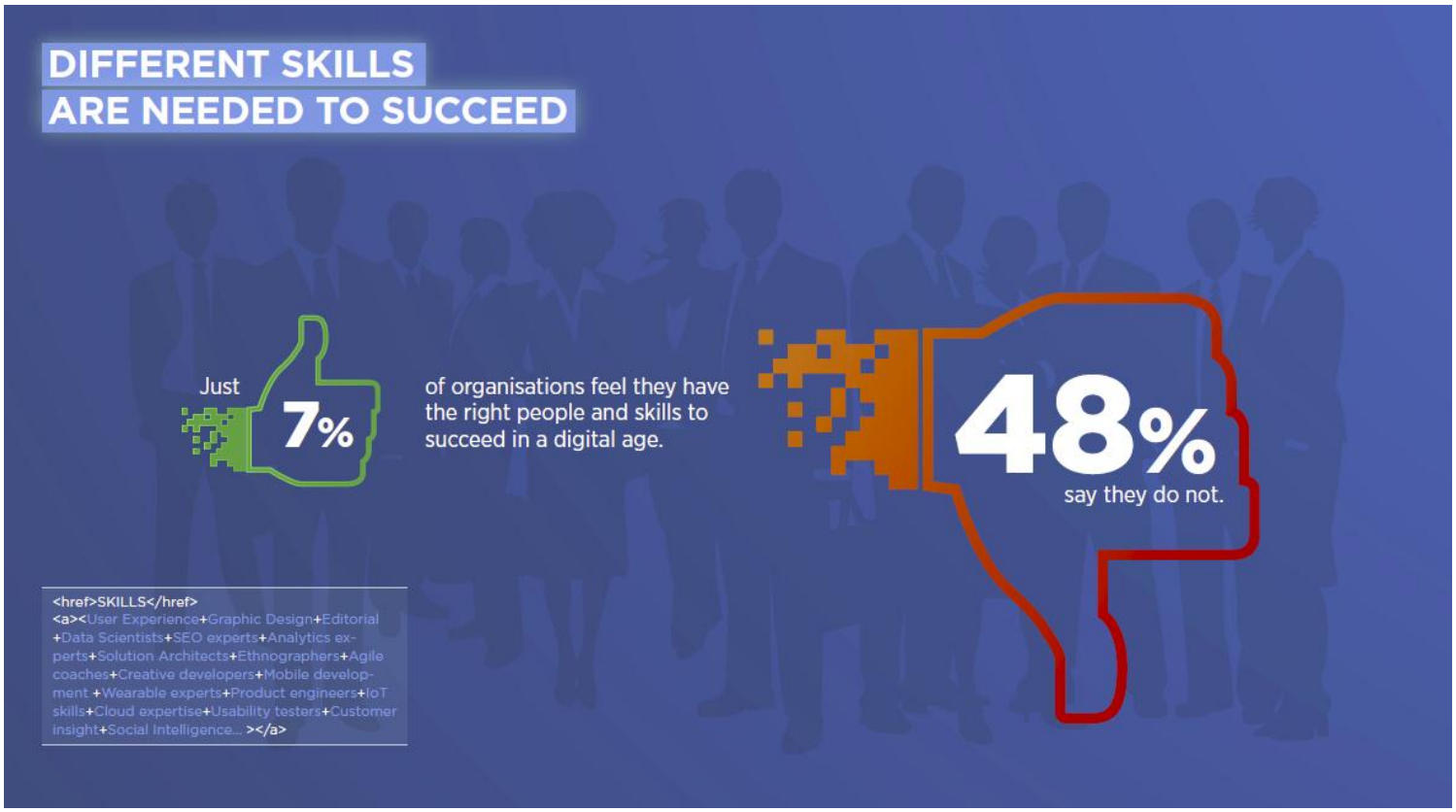


13%

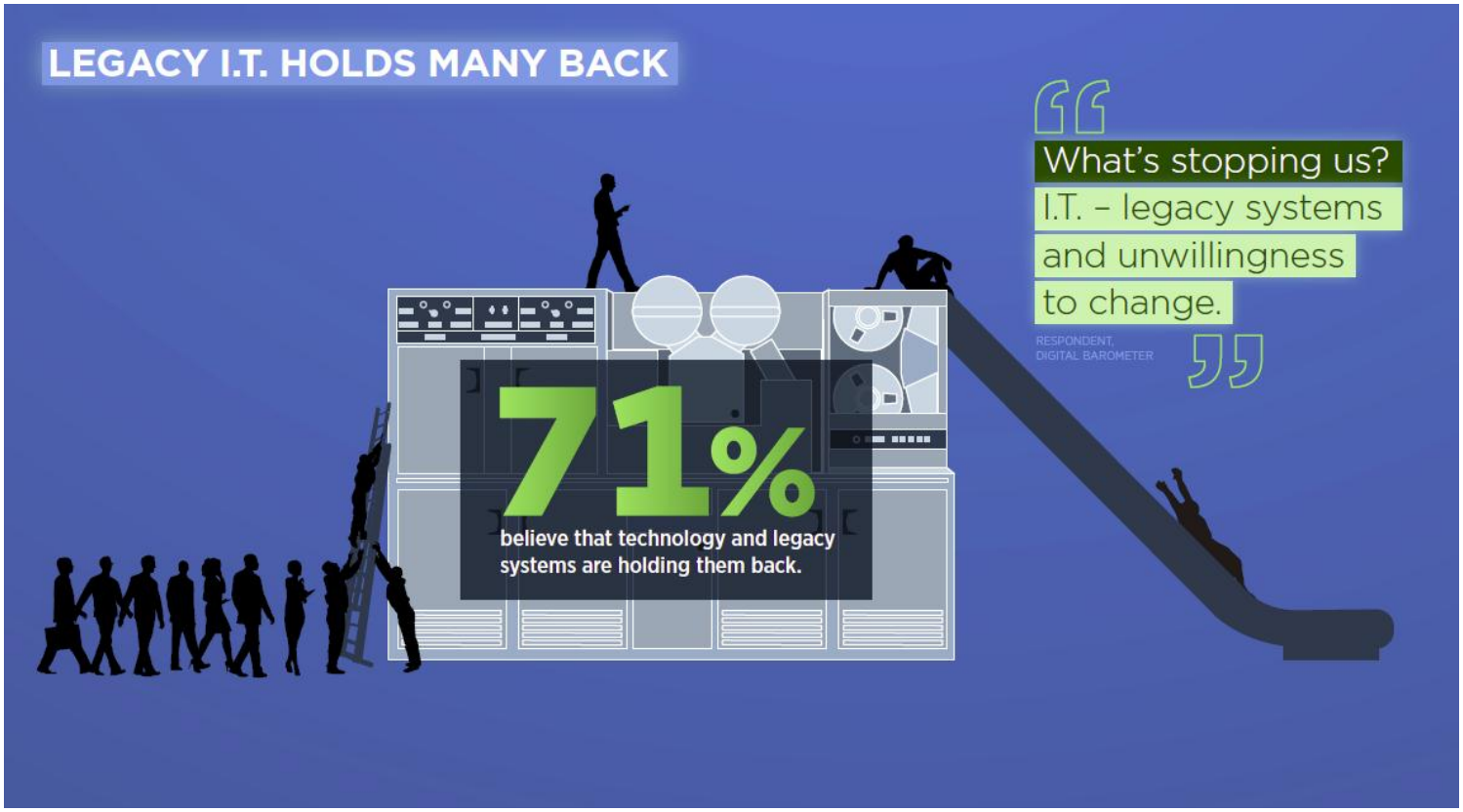
strongly agree that their culture encourages creativity and innovation.

> What's stopping us? Culture, mindset and sticking to what we know.
>
> RESPONDENT, DIGITAL BAROMETER

© PA Knowledge Limited 2015



© PA Knowledge Limited 2015



© PA Knowledge Limited 2015

BUSINESS MODELS NEED TO ADAPT AS WELL

> What's stopping us?
> Lack of a coherent digital business model and insufficient capabilities.
>
> RESPONDENT, DIGITAL BAROMETER

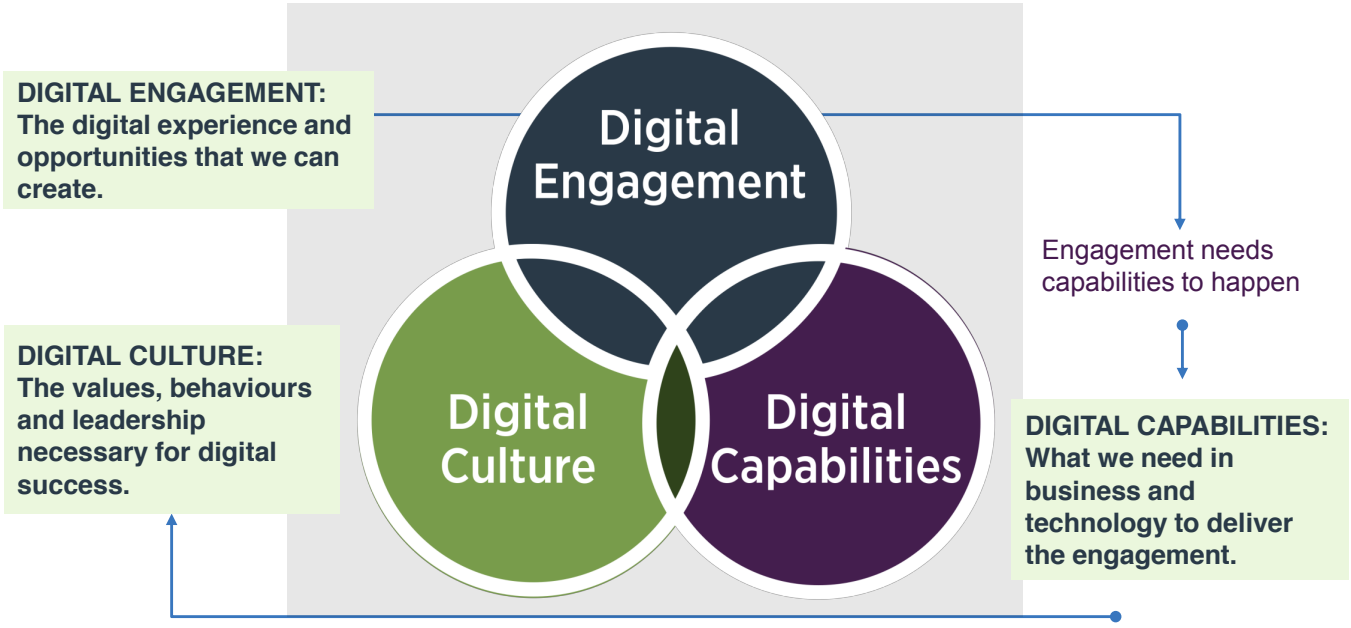
58%
of organisations have failed to adapt their internal processes for digital.

7%
of organisations have restructured themselves to deliver on their digital ambitions.

5%
believe their governance is well adapted to support their digital ambitions.

© PA Knowledge Limited 2015

Summary



© PA Knowledge Limited 2015

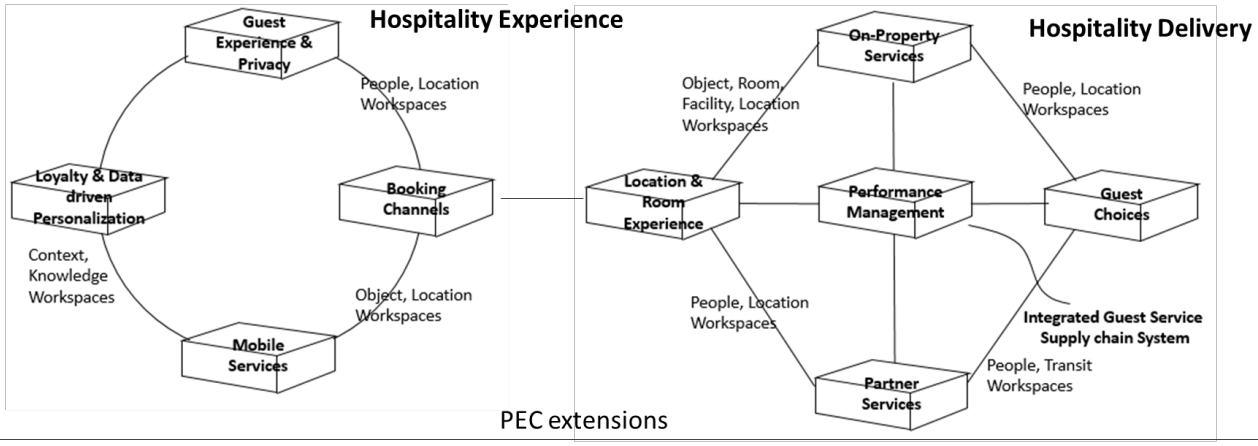
Digital Business Models

© PA Knowledge Limited 2015

HILTON WORLDWIDE

Smart Hospitality – Digital Enterprise

Digital Enterprise

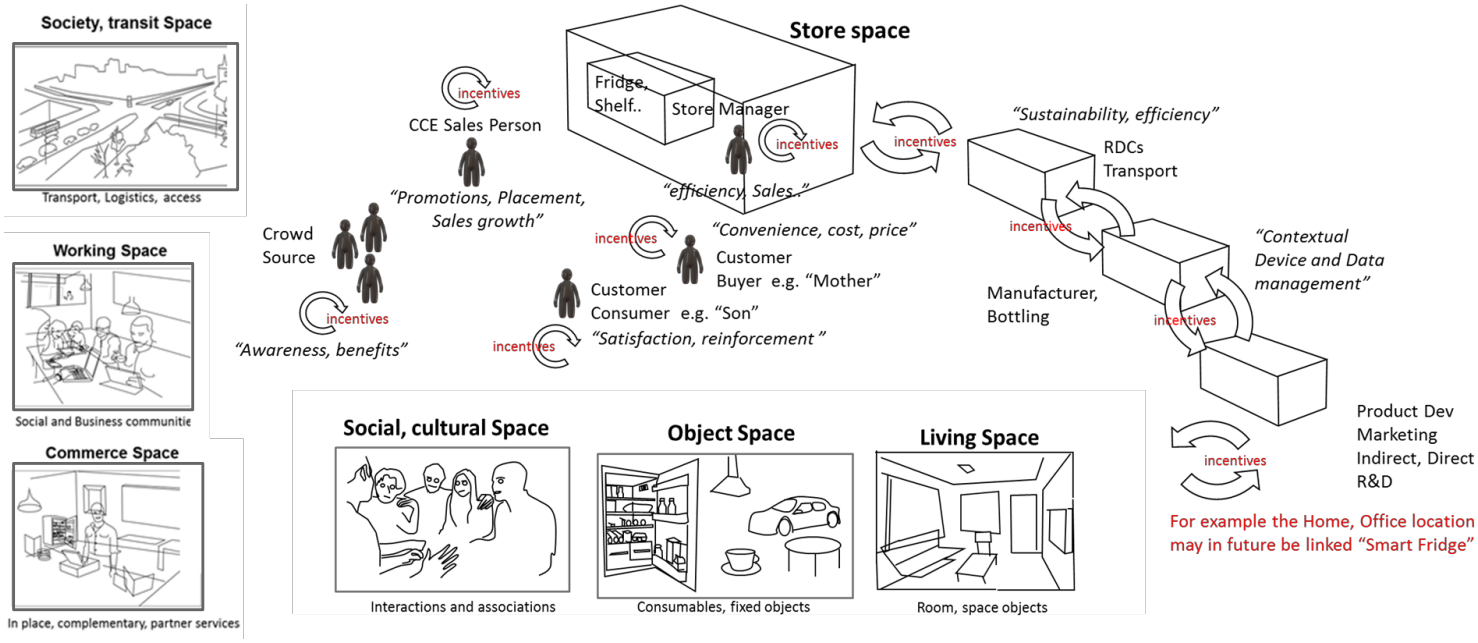


PEC extensions

Crowd Sourcing Innovation	Smart Promotions	Partner Booking Services	Smart Door, Room sensors	Hotel Capacity Management	Guest "FrontDesk" services	Hotel Sustainability management	Business Partner Services (Air, Taxi, Gifts..)
Loyalty Programs	Customer Privacy	Embedded Booking apps	Facility Geo Mappings	Guest Arrival personal services	Guest Partner Services	Guest departure – forward services	Guest "Lifestyle" Services

© PA Knowledge Limited 2015

The Evolving marketplace & Supply chain



For example the Home, Office location may in future be linked "Smart Fridge"

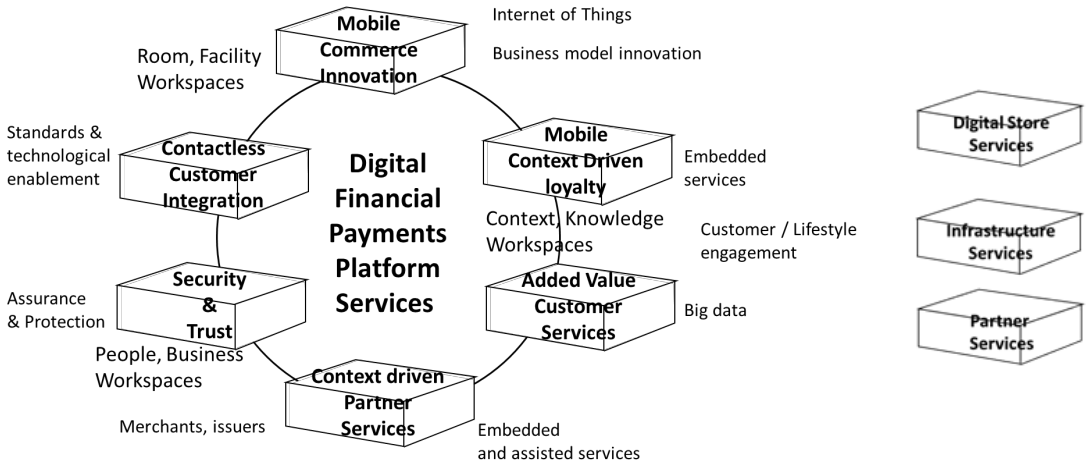
© PA Knowledge Limited 2015

Digital Finance Ecosystem disruption

MasterCard Worldwide

Digital Enterprise

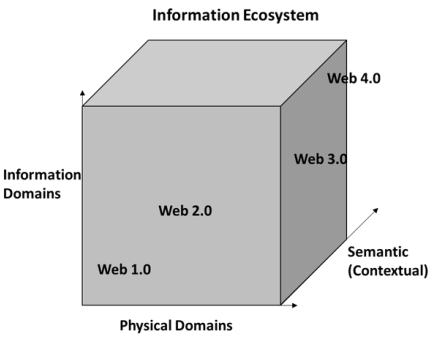
Digital Payments Experience



© PA Knowledge Limited 2015

Evolving Practice

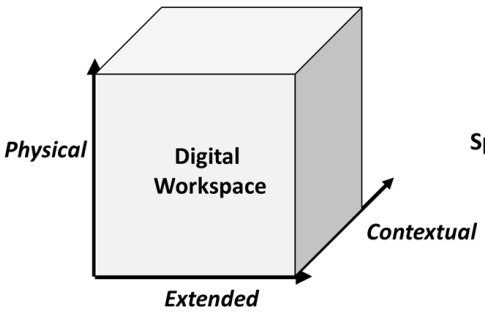
Information centric view



"what data value have I got?"

PEC Model

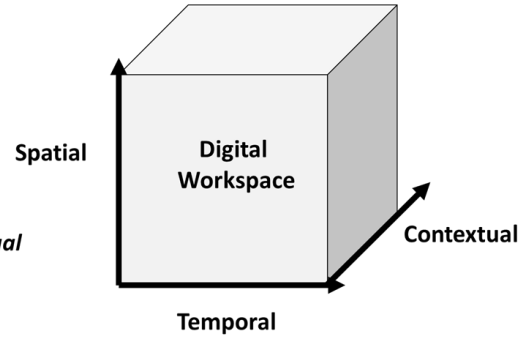
Technology led



"How can technology extend my capabilities and add value?"

STC Model

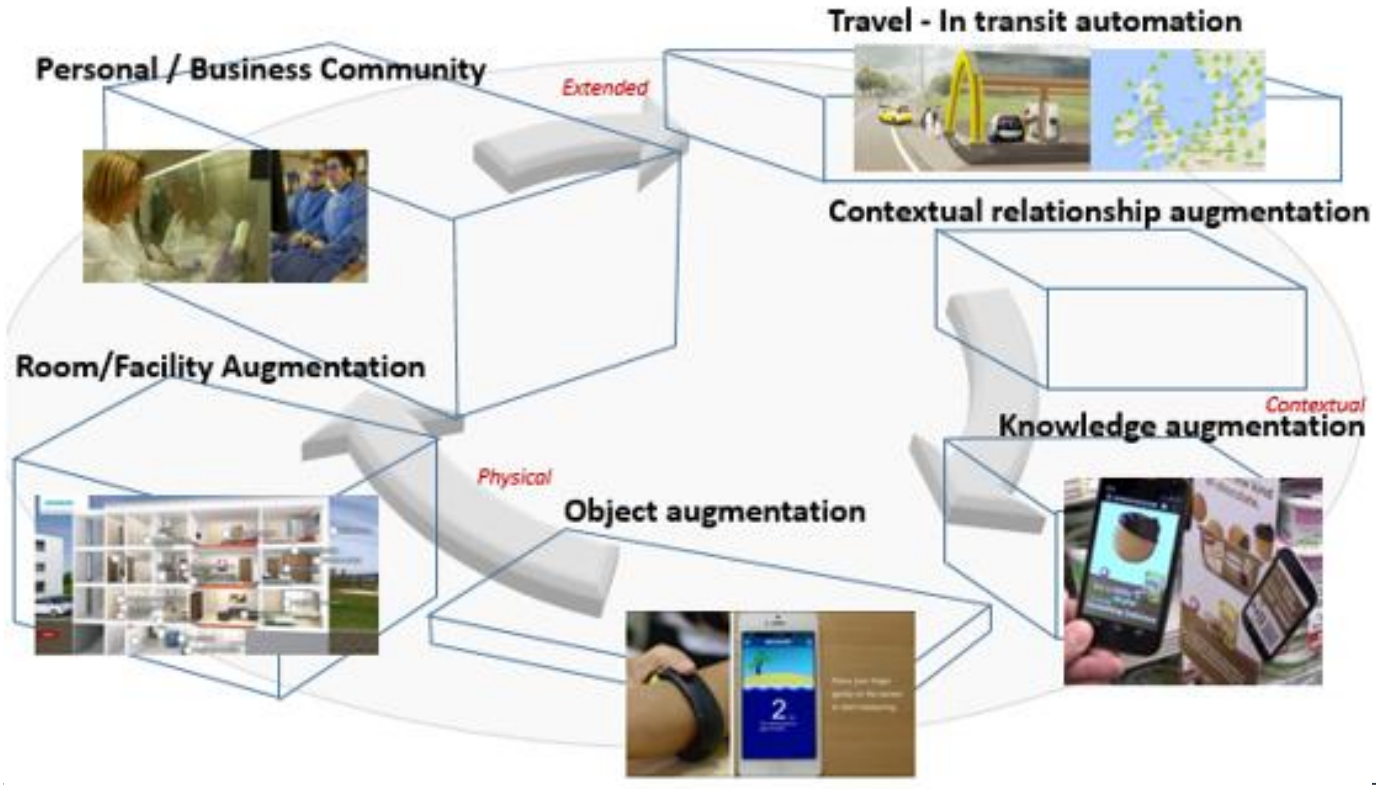
Ecosystem led



"Where can I build better outcomes?"

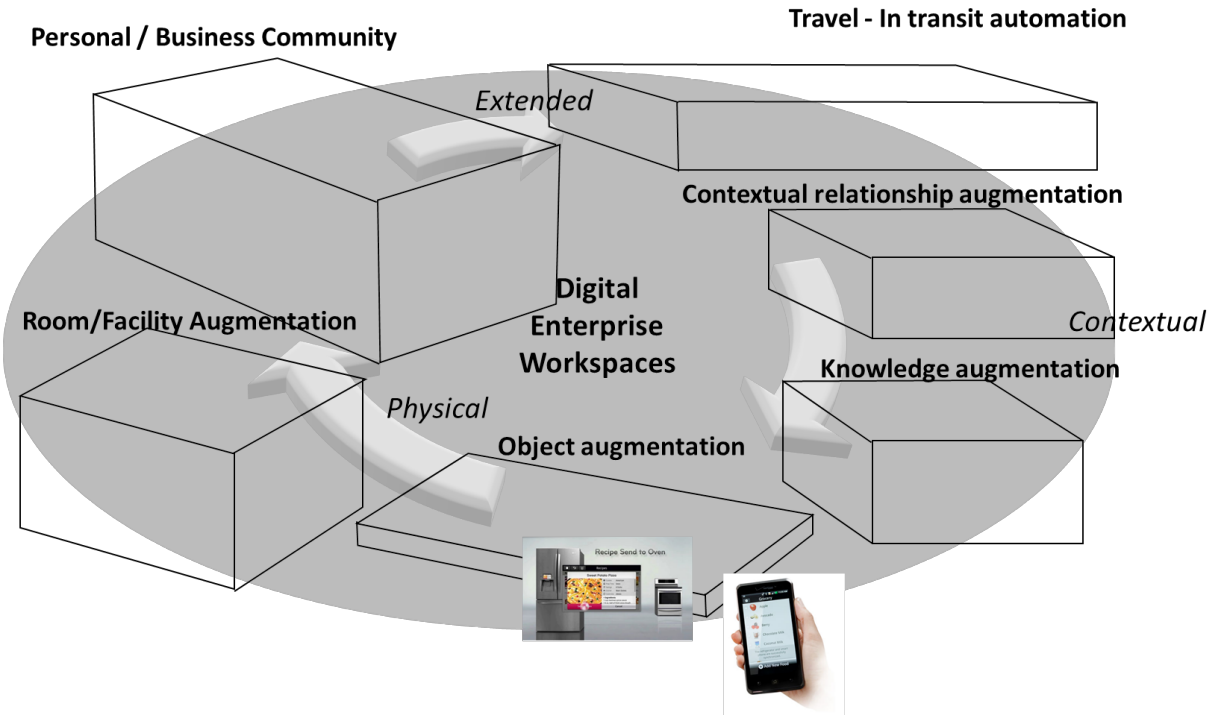
© PA Knowledge Limited 2015

Evolution of technologically enabled (digital) spaces



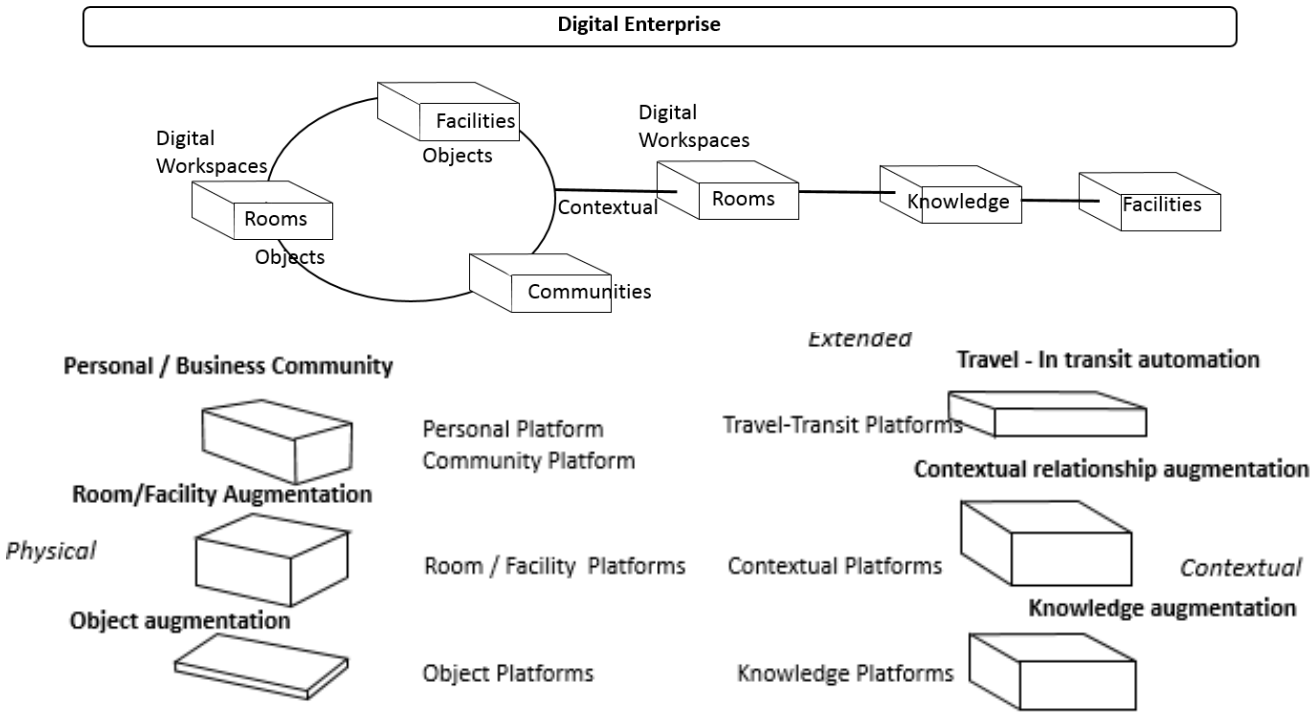
© PA Knowledge Limited 2015

Digitization of Workspaces



© PA Knowledge Limited 2015

Towards Digital spaces



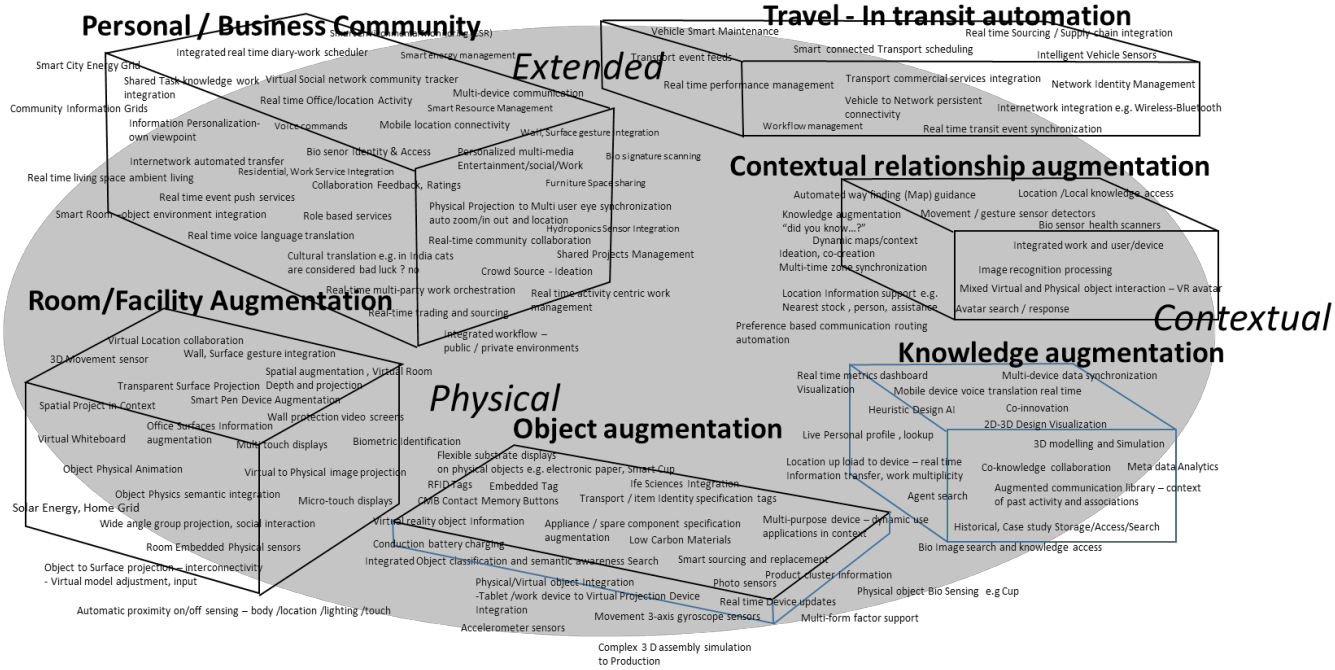
© PA Knowledge Limited 2015

The Microsoft lab 2019 vision
5 minute Youtube video had over 160 innovations

1 every 2 seconds

There is an explosion of systems and end points

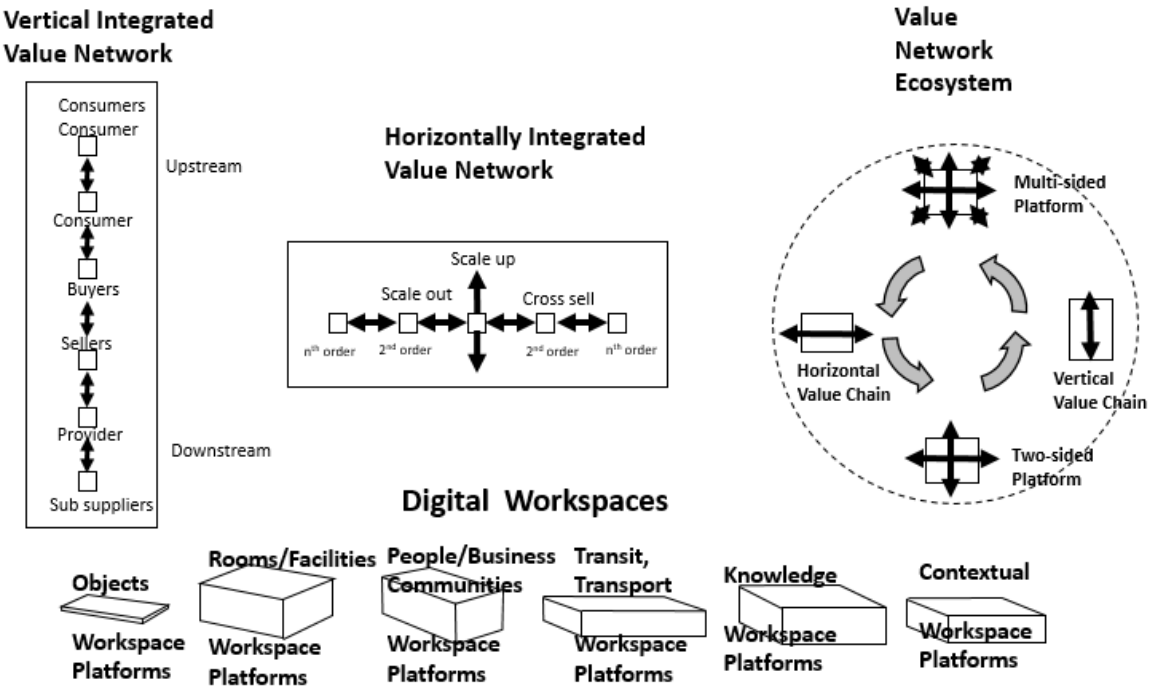
Speed and scale moving beyond human parameters



There is a growing community of objects, sensors and data in these workspaces

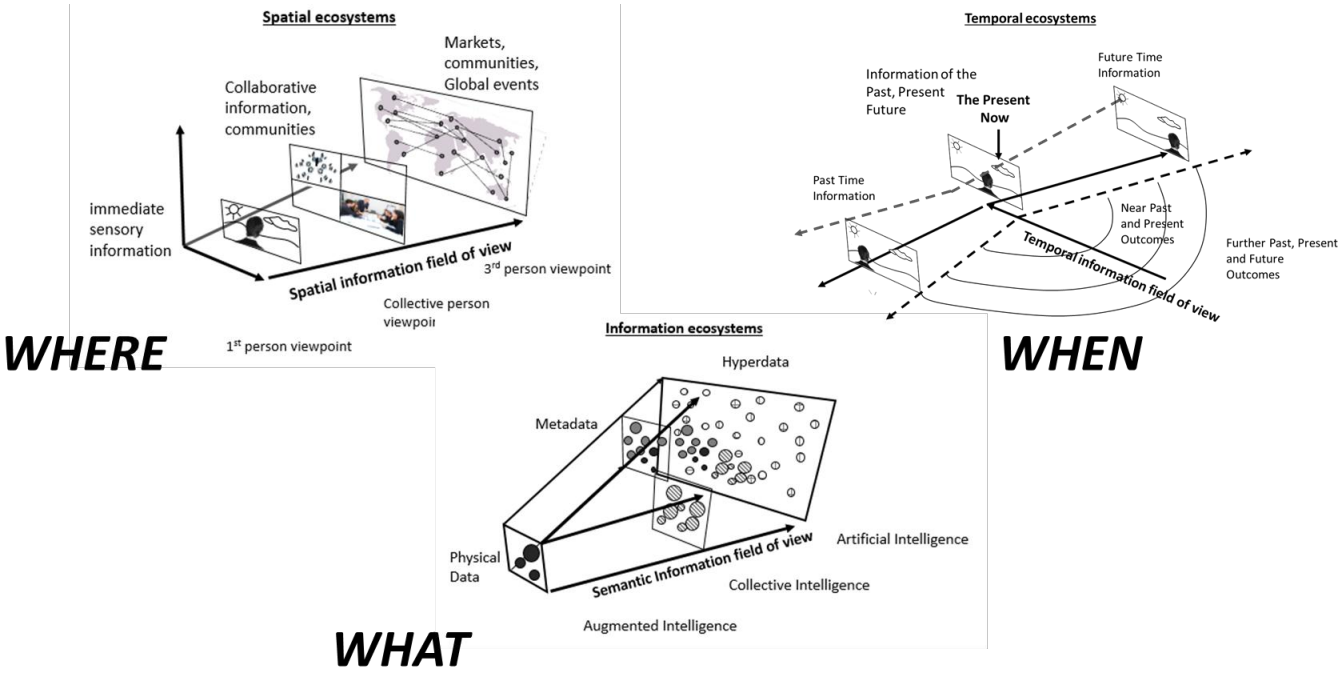
© PA Knowledge Limited 2015

Towards building digital spaces …



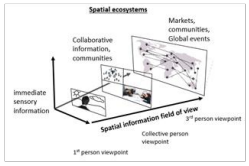
© PA Knowledge Limited 2015

Convergence of digitization of physical and Virtual space and time



© PA Knowledge Limited 2015

Transformation of Workplaces → Workspaces by Digitization



SPACE

Physical location of persons, objects, buildings And places

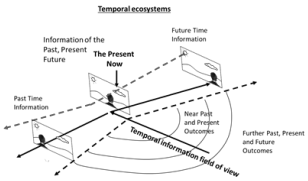
Convergence of Physical and Virtual spaces

Spatial Information View of view

Physical spaces

Temporal Information View of view

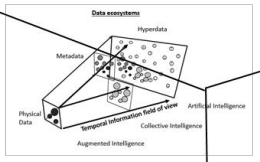
Information in time



TIME

The relation of data to The time it is created And represents

CONTEXT



Semantic and Pragmatic Information View of view

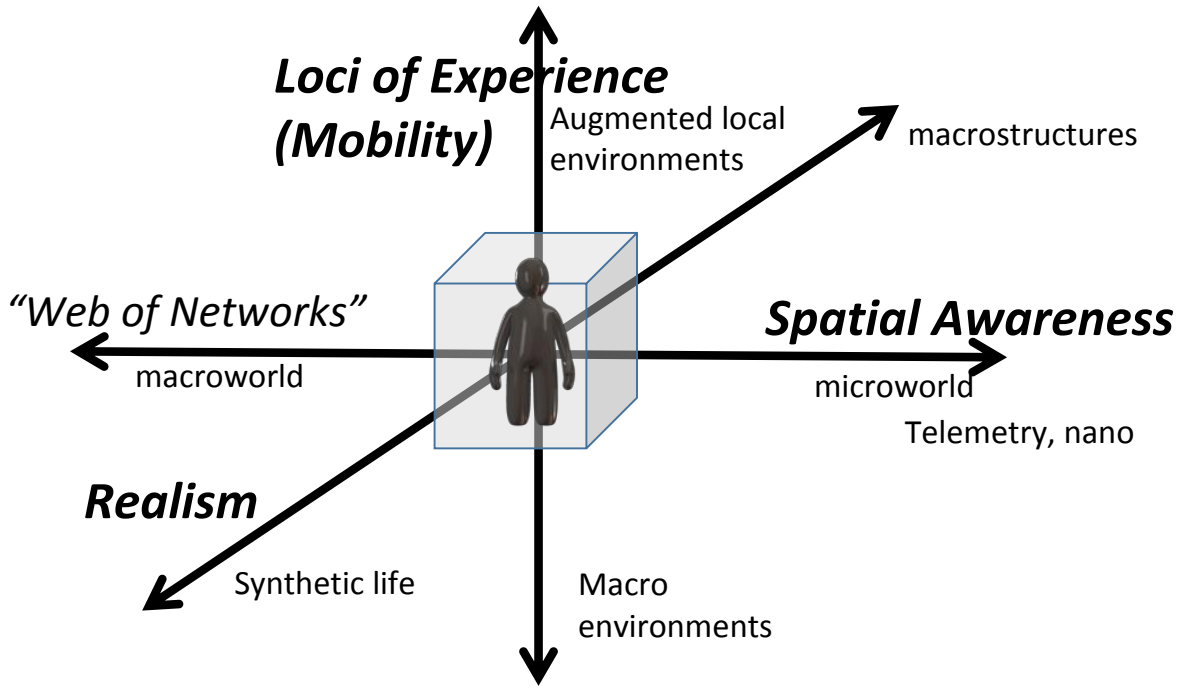
What is Experienced and understood

Digital Workspace

The type and location of data and its relationships

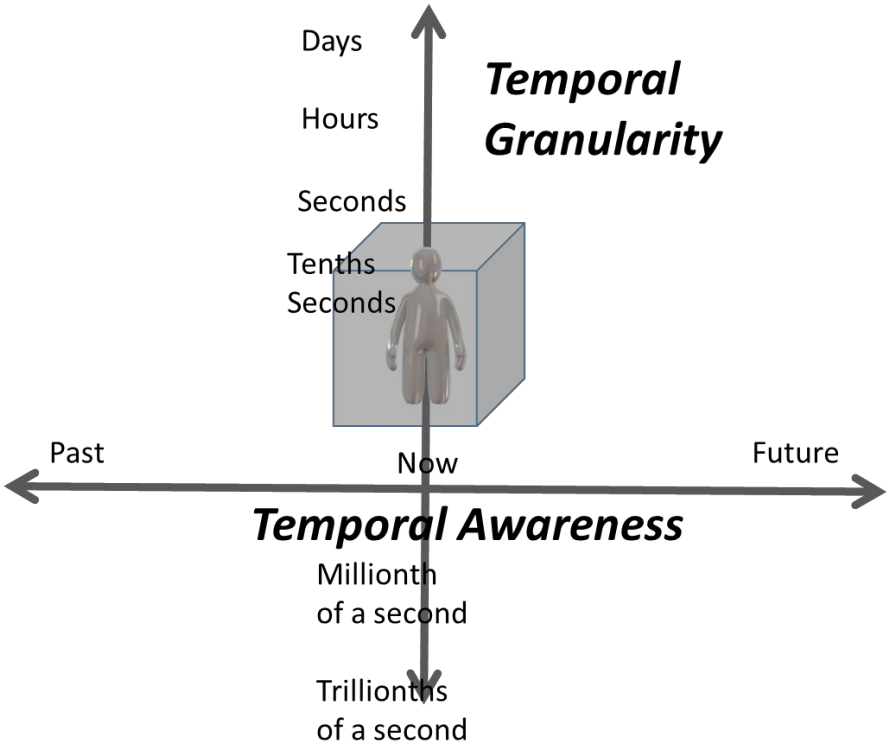
© PA Knowledge Limited 2015

From 2D to multi-dimensional Modeling – ecosystems (evolution of computing sciences)



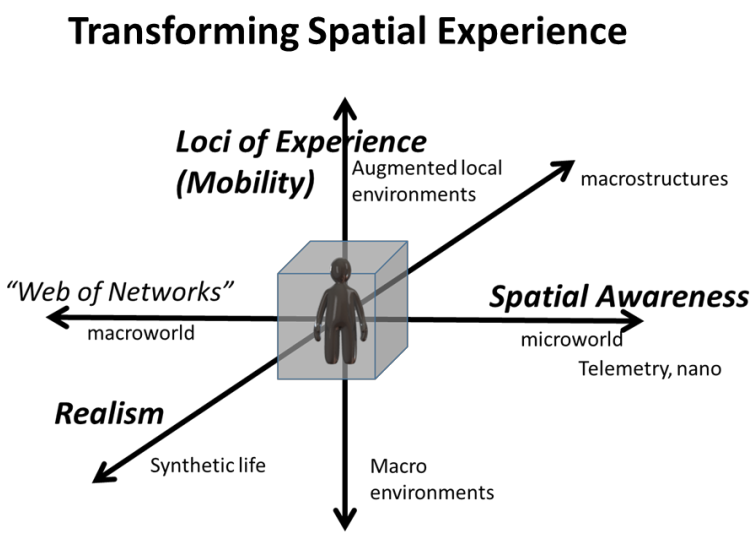
© PA Knowledge Limited 2015

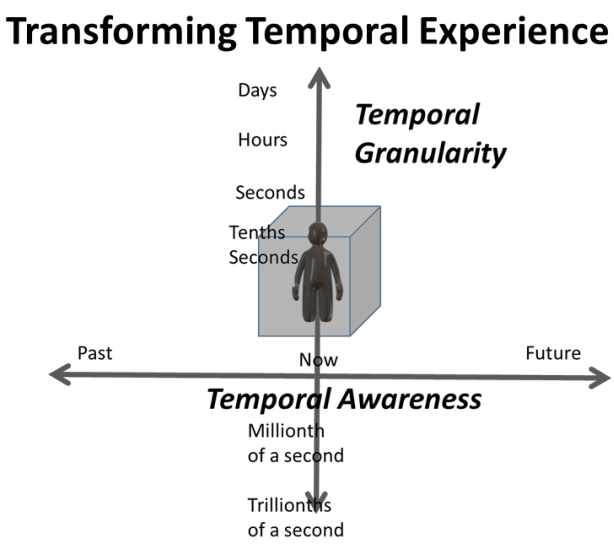
From 2D to multi-dimensional Modeling – ecosystems (evolution of computing sciences)



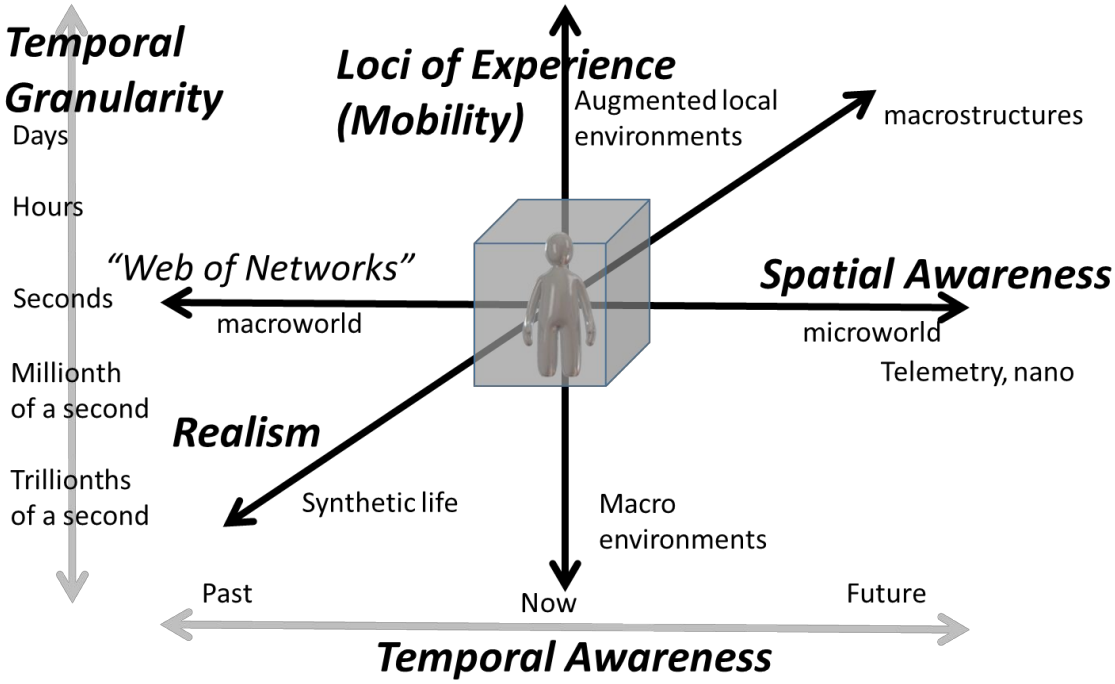
© PA Knowledge Limited 2015

From 2D to multi-dimensional Modeling – ecosystems (evolution of computing sciences)



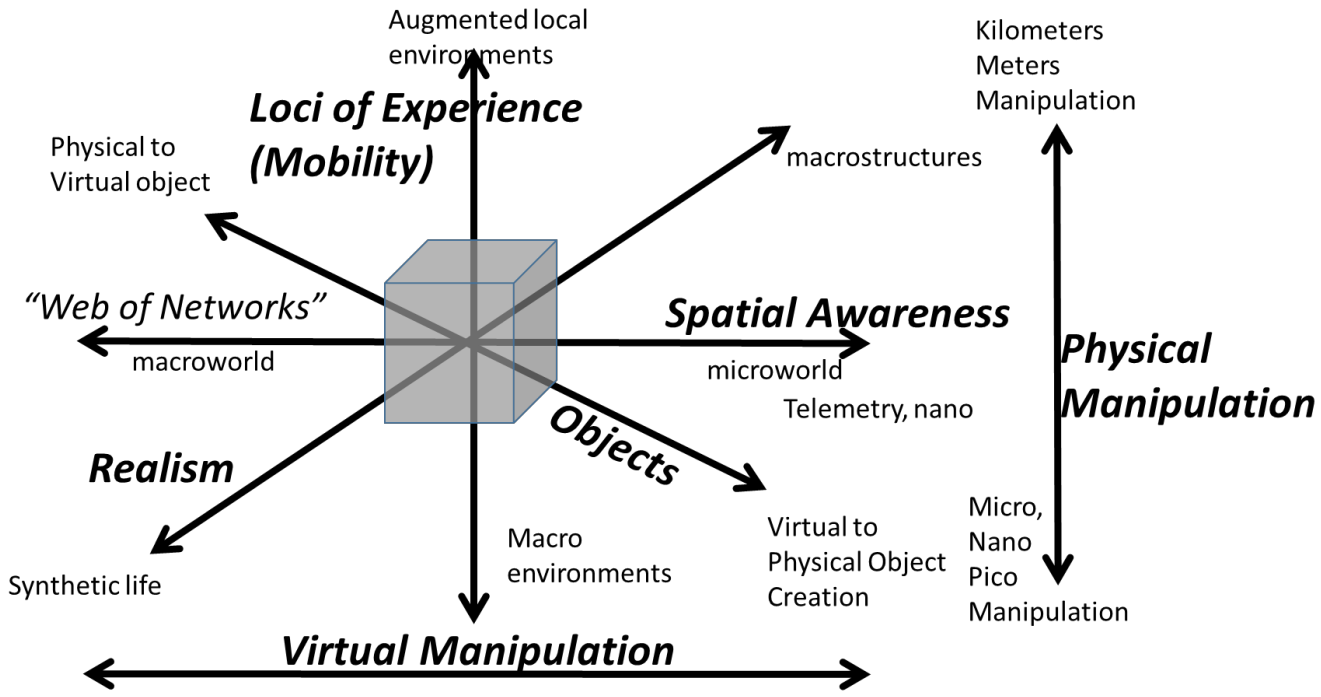


© PA Knowledge Limited 2015



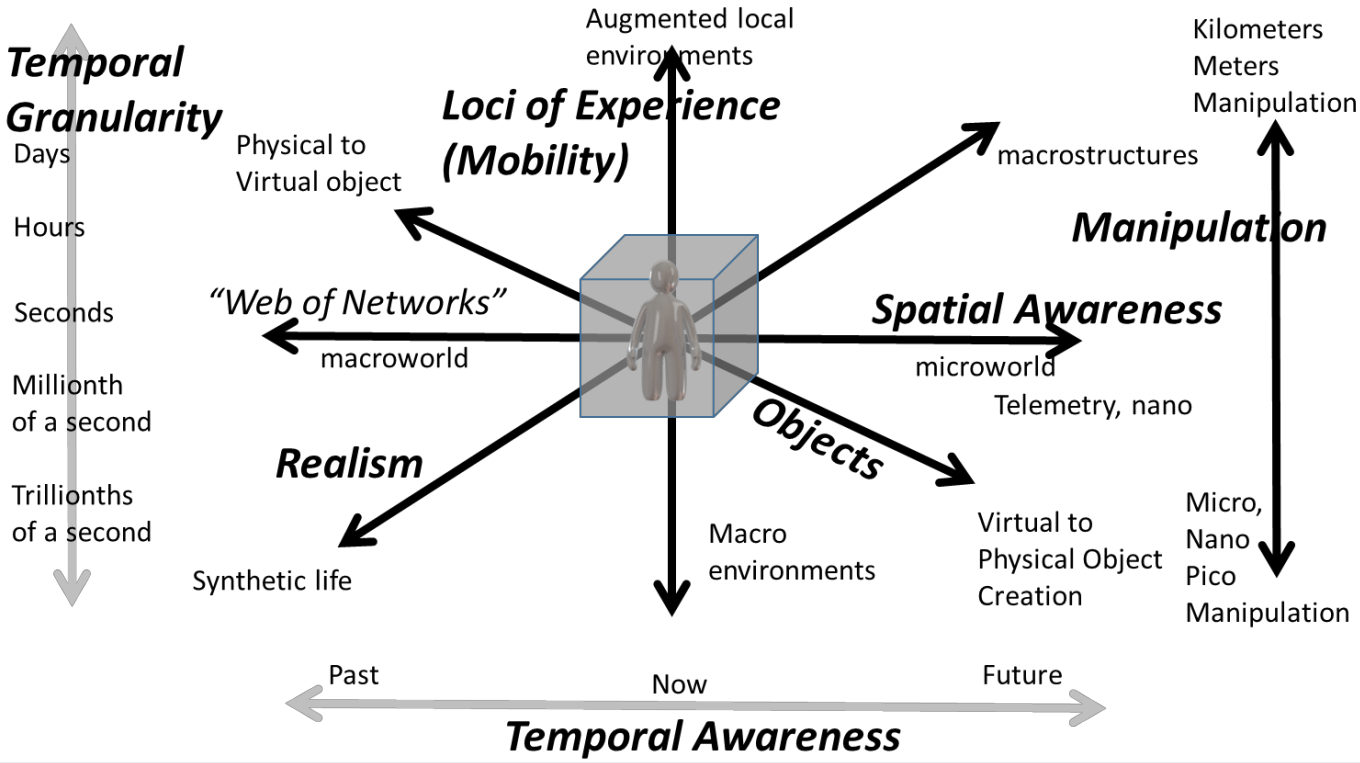
© PA Knowledge Limited 2015

From 2D to multi-dimensional Modeling – ecosystems (evolution of computing sciences)



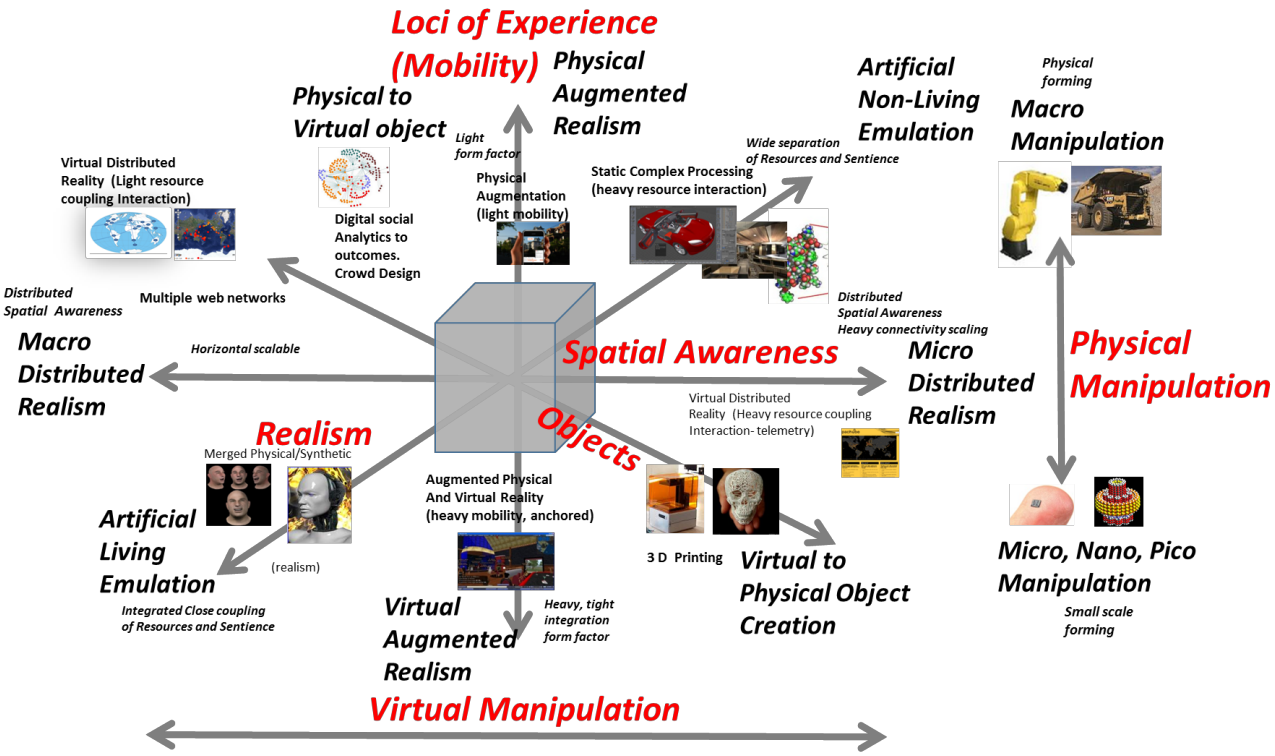
© PA Knowledge Limited 2015

From 2D to multi-dimensional Modeling – ecosystems (evolution of computing sciences)



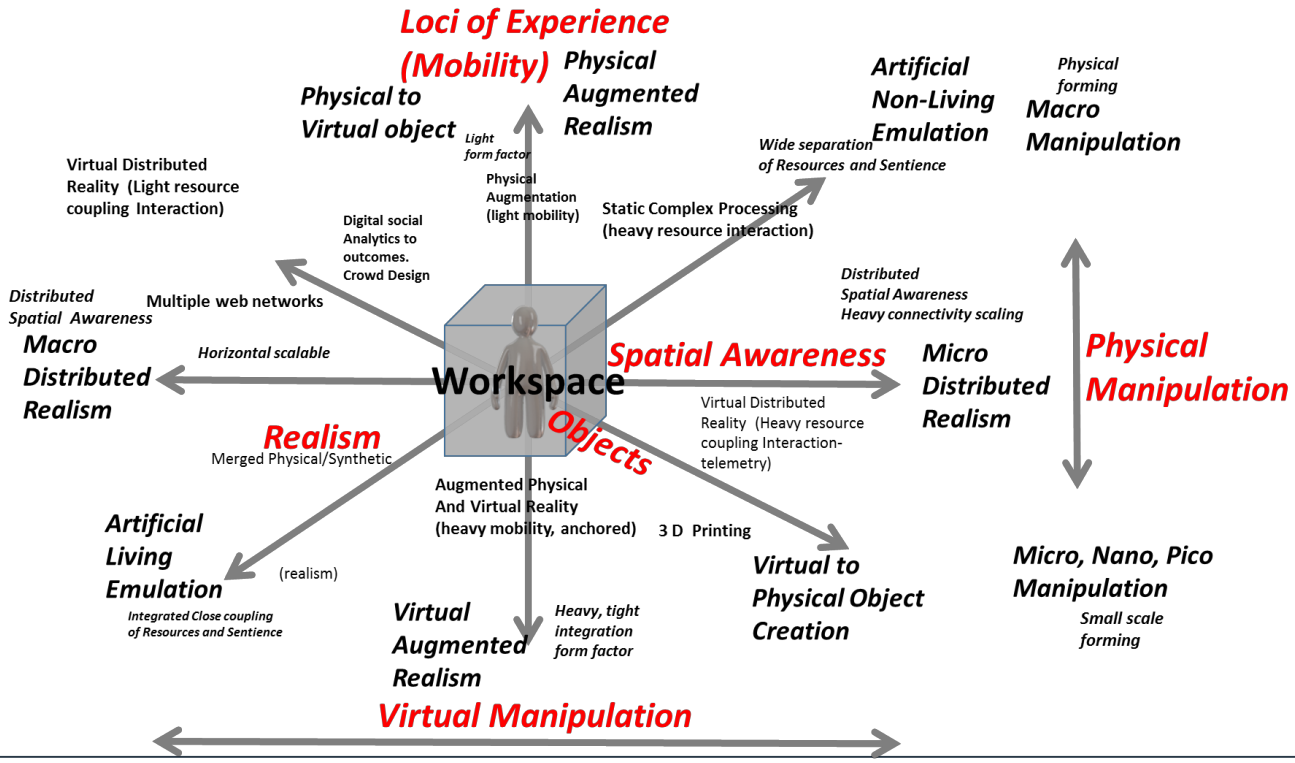
© PA Knowledge Limited 2015

Advanced technology Engineering Transformation



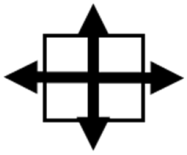
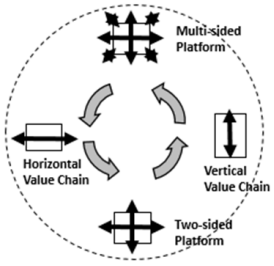
© PA Knowledge Limited 2015

Advanced technology Engineering Transformation



© PA Knowledge Limited 2015

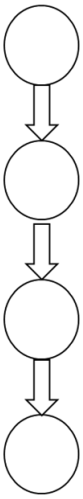
Towards building digital spaces

Web apps	Mobile apps	2-sided Market Platforms TSPs	Multi-sided Market Platforms MSPs	Value Network Ecosystems VNEs
				
Web catalogs	(Converged multi-channel) Mobile gaming	Financial Services – On-line payments	Healthcare – Translation to Bench mHealth monitoring	Smart City
Social Networks	Mobile geo-presence	Citizen services – identity management	News- Media – Entertainment	Connected Car
Content mashups	Mobile adverts		Education - MOOC	Smart Hotel
			Retail - eMarketplace	

© PA Knowledge Limited 2015

Evolution of technologically enabled (digital) spaces

Customer Touch Point Journey



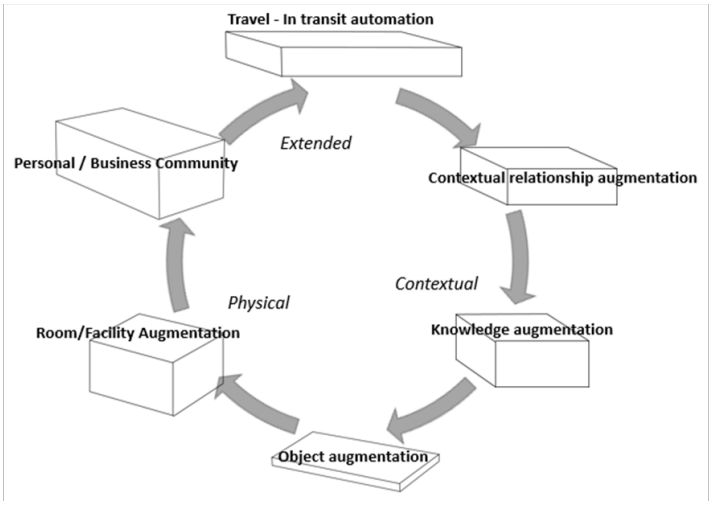
Enter Restaurant

Select and order Meal
Mobile app generates Payment CODE
for use with meal

Meal prepared and delivered
to Table

Consume meal
Mobile app pays for meal

Digital Enterprise – Digital workspaces

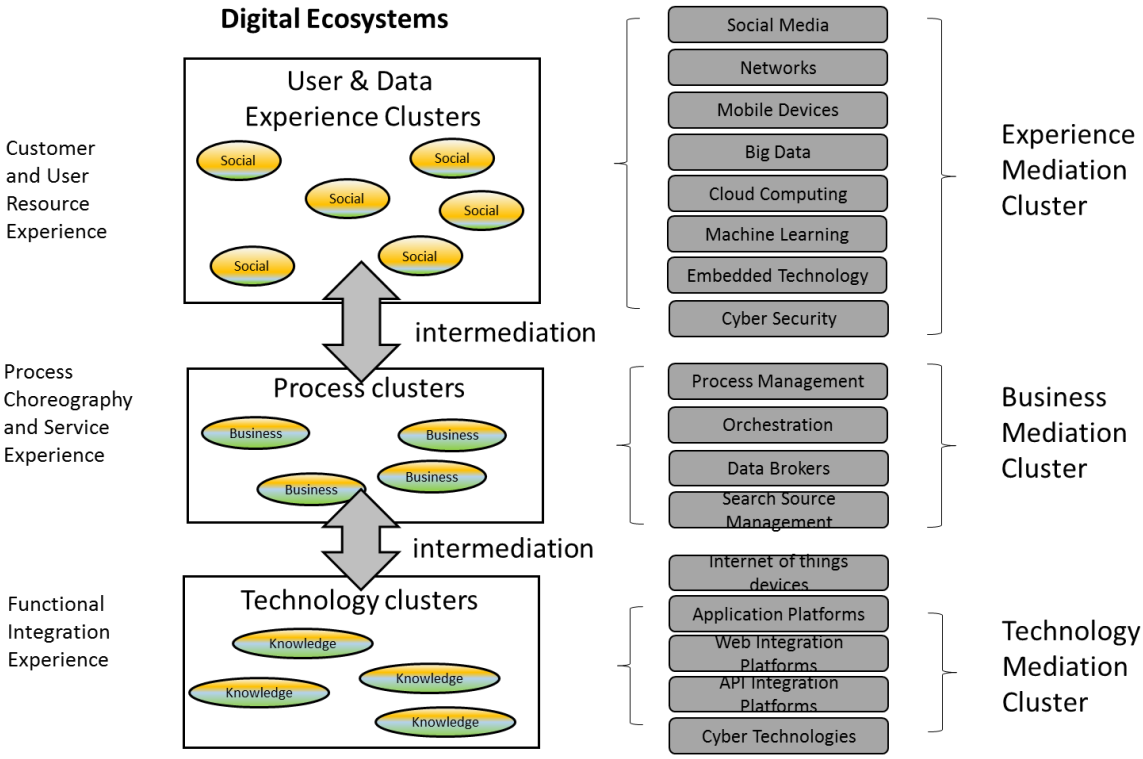


© PA Knowledge Limited 2015

HAT is a cluster mediation

Towards ecosystem mediations

Source: adapted from Youngjin Yoo 2010, 2012, 2014, Henfridsson 2014

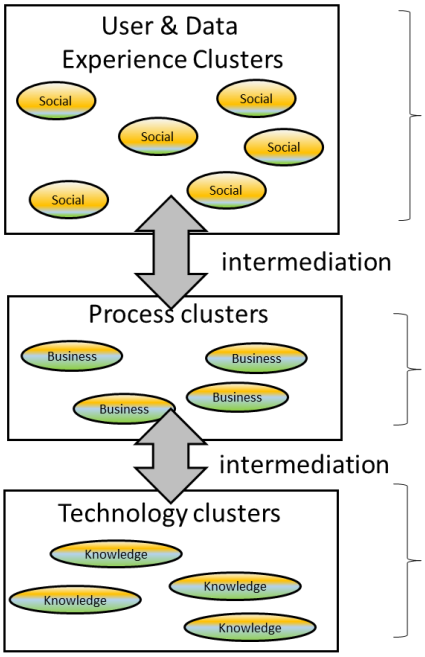


© PA Knowledge Limited 2015

Digital ecosystem clustering

How human and Information are exchange collected And enabled

Customer and User Resource Experience



Experience Mediation Cluster

Contextual Technology Infrastructure clusters

How action and Resources are enacted To achieve results

Process Choreography and Service Experience

Business Mediation Cluster

Process clusters

How information Insight and action is technical enabled By agents and infrastructure

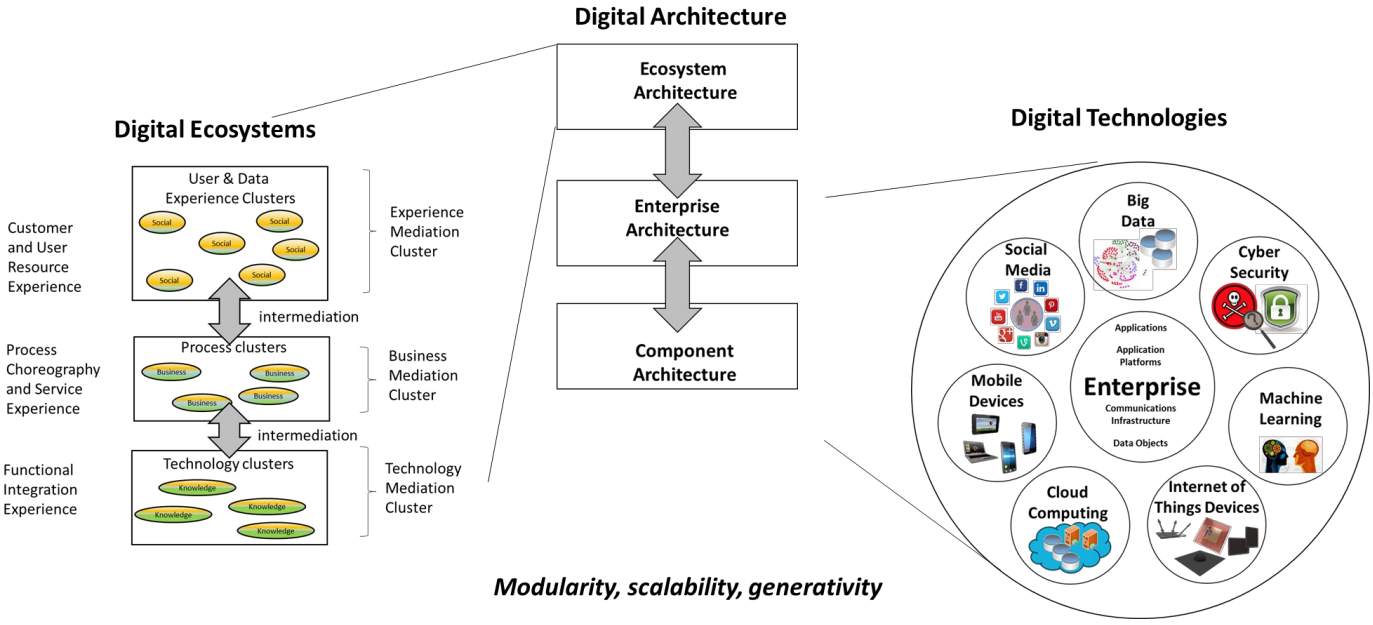
Functional Integration Experience

Technology Mediation Cluster

Platform clusters

© PA Knowledge Limited 2015

Need for new ontology



© PA Knowledge Limited 2015

Connected Automobile Ecosystem

Car security
Route Planning

Passenger services

In car Brands
Retail services

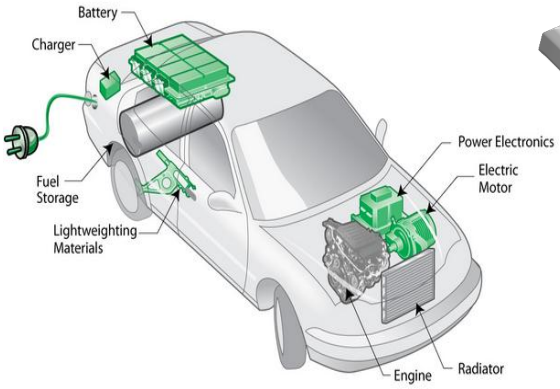
Entertainment

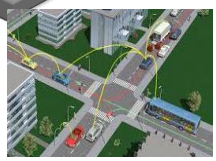
Satellite

&

Telecoms Operators

Location Parking Assist, Refuel, Charging





Smart Traffic planning

Virtual Showrooms

Accessory Manufacturers

Driver assist,

Vehicle to Vehicle communication

© PA Knowledge Limited 2015

Smart Hotel Ecosystem

Room facilities

Loyalty cards, services

Connections and Transport

In room services

Reordering and Brands

Travel and Booking services

Rooms & Facilities

Reception services

Maintenance services

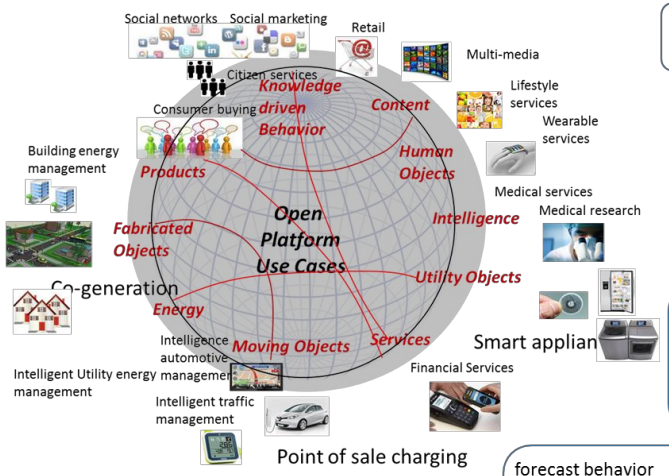
Room Cleaning Services

© PA Knowledge Limited 2015

eRetail

© PA Knowledge Limited 2015

Data is a manifestation of markets..



Social behavior analytics
Lifestyle behavior analytics

Customer preferences and behavior analytics
Usage and viewing preferences and behavior data aggregation and analytics

Buyer and seller history analytics
Apparel sales

Customer buying behavior analytics
Business supply chain

Data feeds collection and data aggregators (Data Fabric).
Visualization Analytics

Performance analytics
Marketing Analytics

Citizen activity and preferences analytics
Event and crowd behavior analytics
Real-time event analysis

Patient and Medical Data aggregation and analytics

Multi-channel (Closed loop) data collection and processing
Real-time analytics response
Energy usage pattern analytics

Medical data analytics
Medical History-Patient
Statistical analysis
Medical Research
Analytics

Semantic Linked Open Data (W3C)
Master Data Management (MDM)

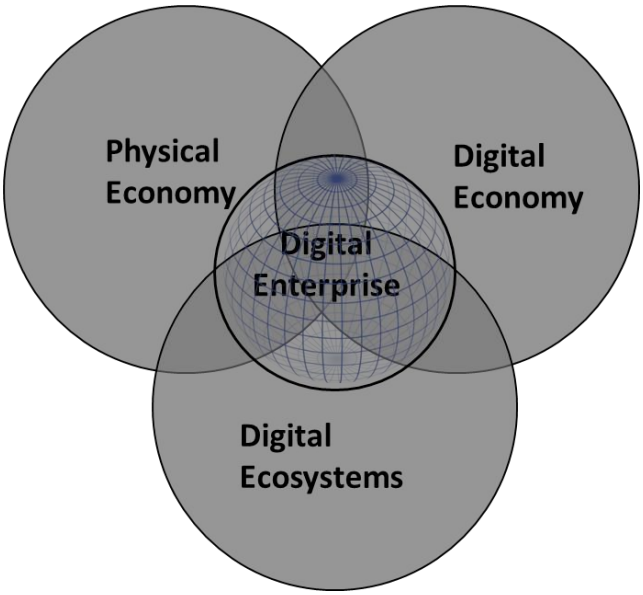
Vehicle driver usage analytics

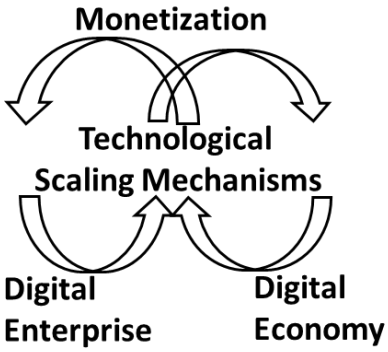
Citizen, crowd, corporate activity and behavior analytics

forecast behavior analytics
Financial stock trading Analytics
Financial Market social behavior analytics

© PA Knowledge Limited 2015

A manifestation of the Digital Economy





© PA Knowledge Limited 2015