





Erik Jaspers

Planon Software Product Strategy & Innovation erik.jaspers@planonsoftware.com



2014 – 2018: Board of Trustees IFMA Foundation Member of IFMA European Advisory Board Board Member of IFMA Research & Benchmarking Institute























WHO WE ARE





+35 years













With offices around the world:

Austria, Belgium, Canada, France, Germany, Hong Kong, India, Netherlands, Singapore, United Kingdom and United States.



Gartner: Leader in IWMS



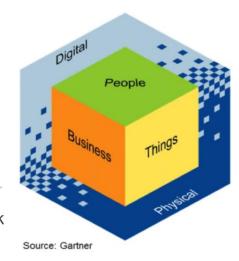


DIGITAL BUSINESS

Digital Business Gives Rise to the New Economics of Connections

Published: 1 October 2015

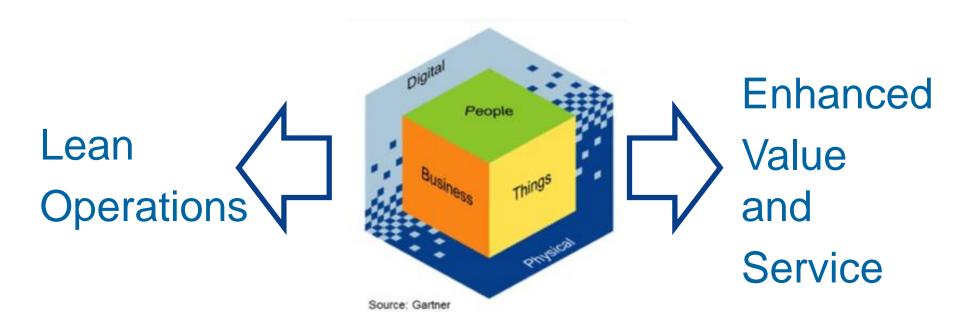
Analyst(s): Betsy Burton, Don Scheibenreif, Hank Barnes, Michael Smith, Frank Buytendijk



Digital business redefines the economic playing field as "things" join people and businesses in the connected world; the value of these connected assets expands tremendously. CIOs and IT leaders must apply new approaches to capitalize on the value delivered through the new economics of connections.

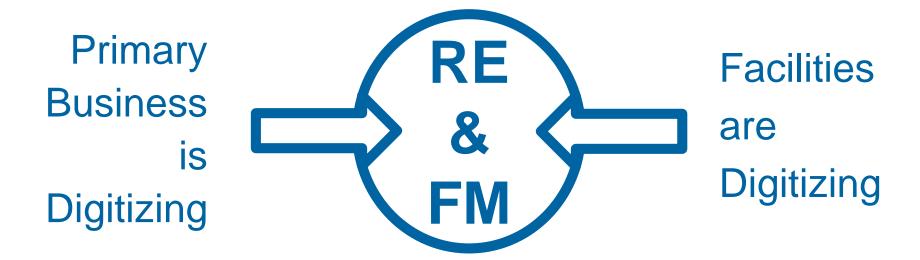


THE PROMISE





2-SIDED IMPACT







IFMA's World Workplace Your Facility Conference & Expo

Oct. 5-7, 2016 San Diego, California



Gartner Digital Workplace Summit 2016



Engage Employees

Strategy, Planning and Governance

Changing nature of Work

Employee Effectiveness

Reimagining Workplace Technology

Technologies and Architectures

Debra Logan, Gartner, Opening Session, September 2016, London

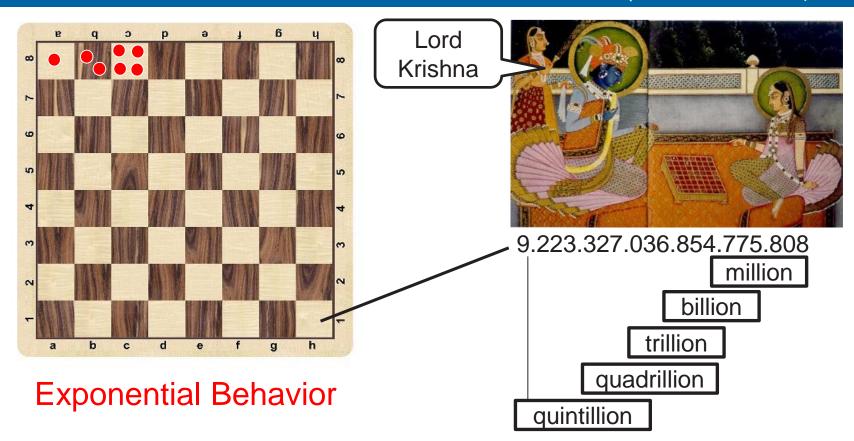
Gartner





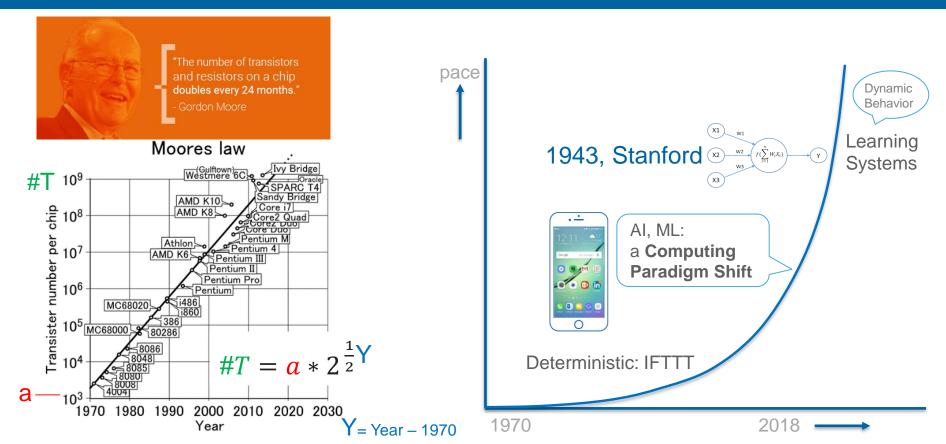


THE LEGEND OF 'SERVING PAAL PAYSAM' (INDIA, 3000 BC)





AGE OF ACCELERATIONS





Ref: Prof. Ruud Veltenaar - MIT / Nyenrode University

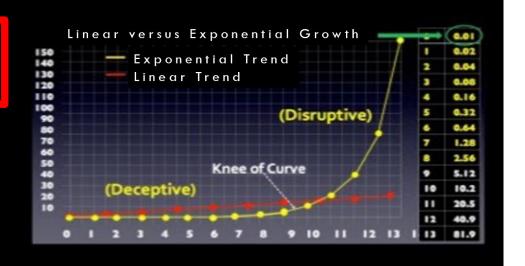
LIVE BETTER | HELP MORE

WONDER OFTEN

EXPONENTIAL TECHNOLOGIES

Digitalization — Deceptive — Disruptive — Dematerialisation — Demonetization - Democratization

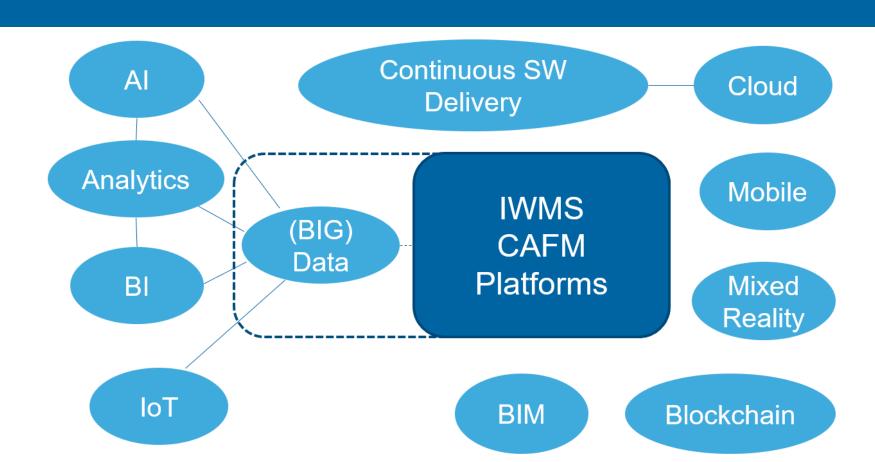
- Artificial intelligence
- Robotics & Machine learning
- Big data & Data Analytics
- Biotech & Nanotech
- Computation & Networks
- Synthetic Biology
- Digital & personalized medicine











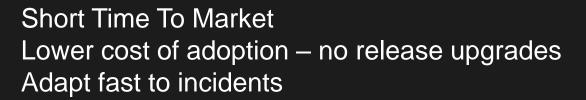


Continuous Updates





Hotfixes in hours if necessary

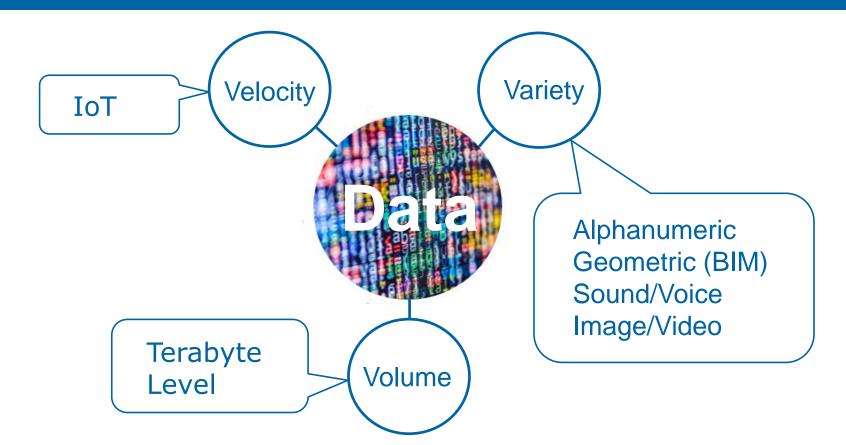








KEY ASSET OF THE FUTURE: DATA

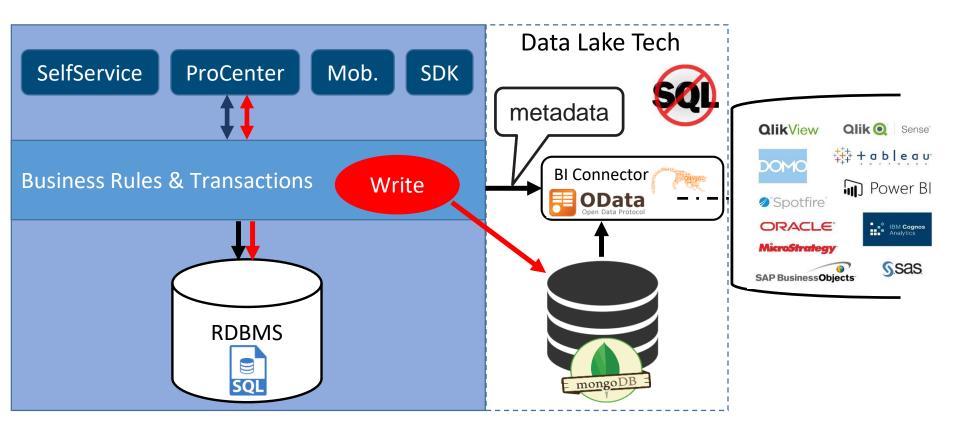








PLATFORM DATA STRATEGY





RE&FM: PART OF BUSINESS DATA LAKE







When Data is the 'new oil' of future Economy

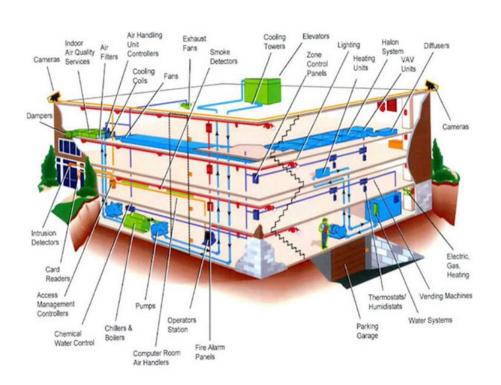
Make sure to create a sound Data Strategy

Based on the principle that sharing your Data

Will represent a <u>true Value Proposition</u>.



INTERNET OF THINGS



High Diversity.

- Applications
- Product generations









IOT AROUND BUILDINGS





IOT AROUND BUILDINGS



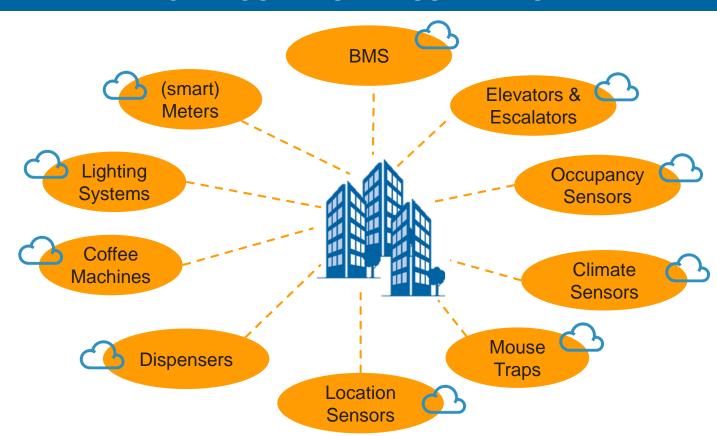
Collecting simple and undisputable Data will allow us to understand actual behavior of People and Things in Buildings.

And act on that.

IoT is not merely about connecting Things;
It is about using Data to create <u>new Interactions</u>

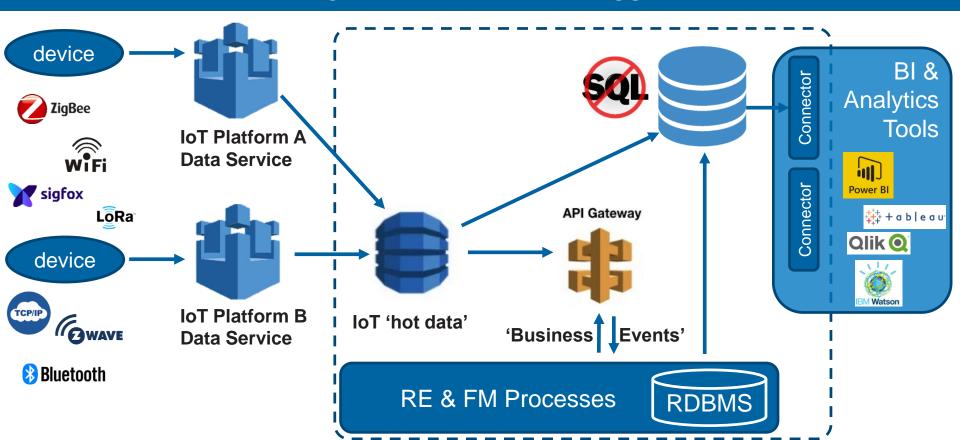


IOT AROUND BUILDINGS: DIVERSITY



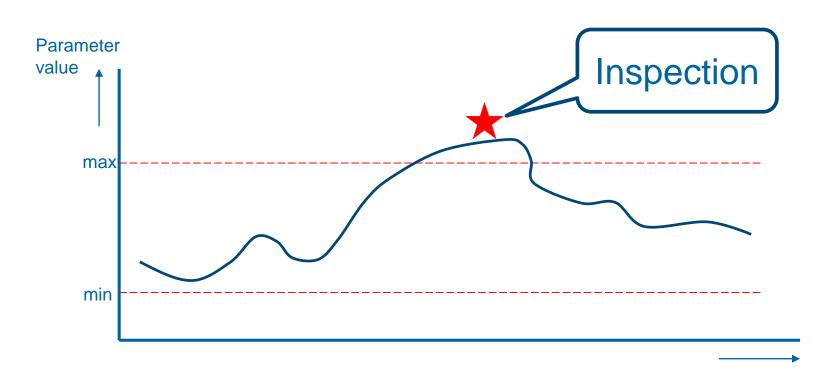


IOT - DATA - BI - ANALYTICS





SIMPLE IOT PROCESSING (IFTTT)





NEW TYPES OF INTERACTIONS







WHAT IS HAPPENING

December 2nd, 2017



available on Amazon Web Services

Press Release

Life Is On Schneider
Schneider Electric Teams with Microsoft to Accelerate
Development of Open IoT Applications





Pepper





Amazon Echo

'Recursive' Al

January 17, 2018

Google Sells A.I. for Building A.I. (Novices Welcome)

By CADE METZ JAN. 17, 2018



The Google booth at the CES electronics trade show in Las Vegas this month. "You don't need a Ph.D. in machine learning," said Diane Greene, who oversees Google's cloud computing group. "But you can still build a highly accurate machine learning model," Jac C Hone/Associated Press

SAN FRANCISCO — Google has been using artificial intelligence to build other artificially intelligent systems for the last several months.

Now the company plan technology to other bus introduced a cloud-con called computer vision have little or no experie





ARTIFICIAL INTELLIGENCE

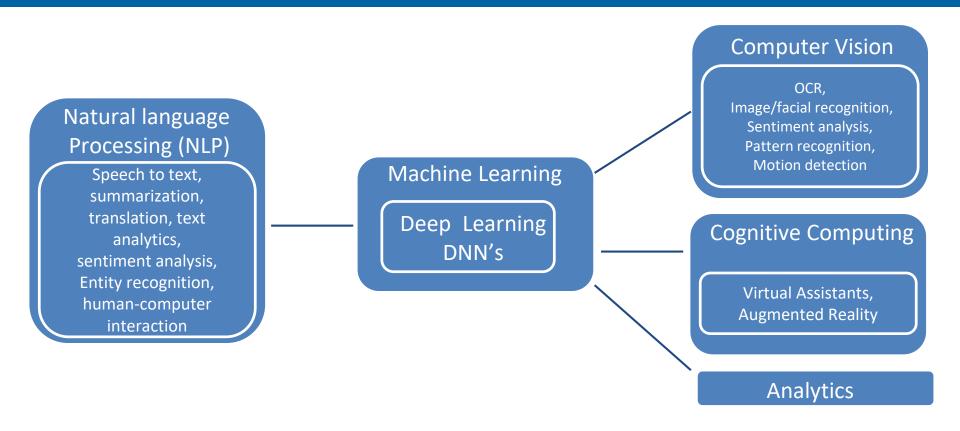
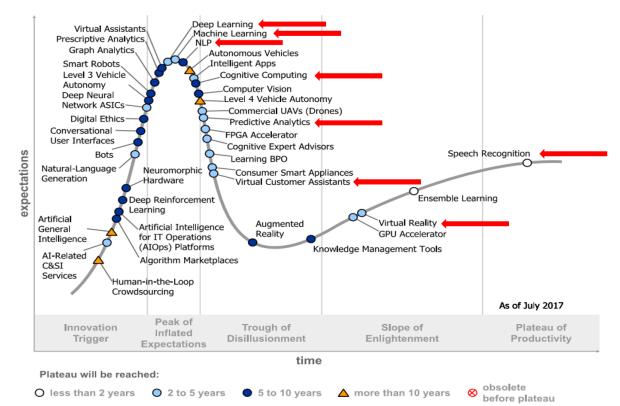




Figure 1. Hype Cycle for Artificial Intelligence, 2017



Gartner



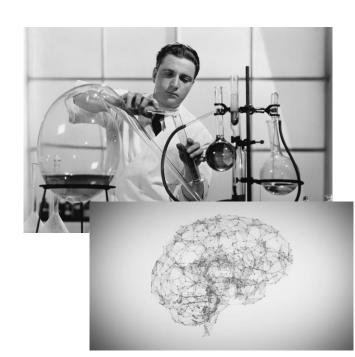
SPEECH RECOGNITION

User Experience Design for new ways of user interaction











COMBINING: AI & MOBILE

Digital Assistants







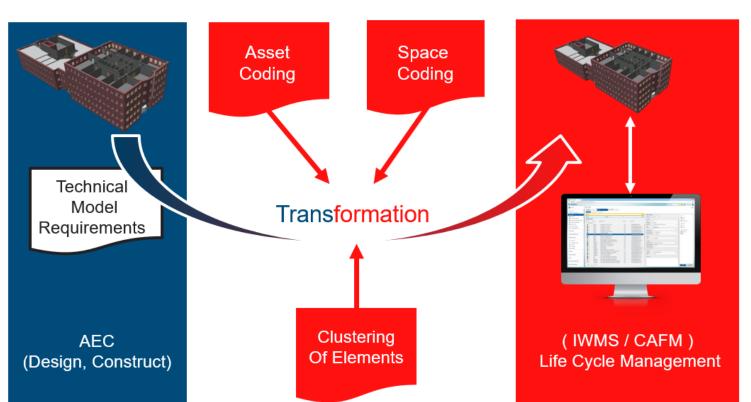








ONBOARDING: KEEP AS SIMPLE AS POSSIBLE



Assets (+ attributes)

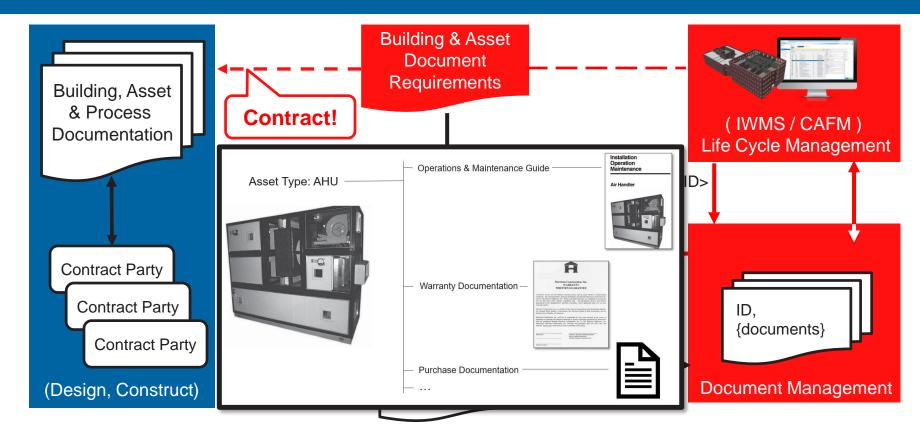
Building-Elements (+ attributes)

Spaces (+ attributes)

3D Model (+ attributes)

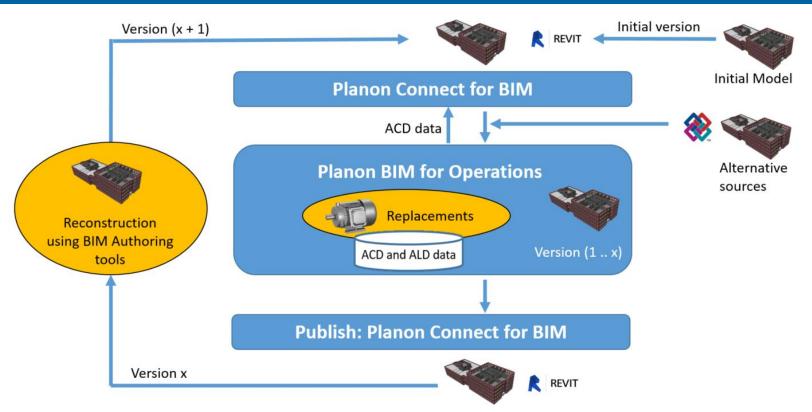


ONBOARDING: KEEP AS SIMPLE AS POSSIBLE





BIM MODEL LIFE-CYCLE





COMBINING: MOBILE & BIM ON HAZARDS



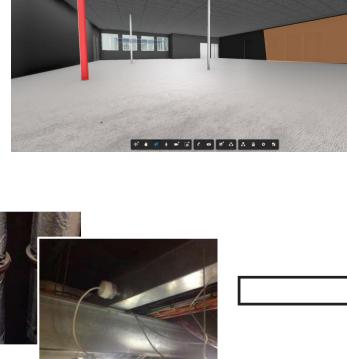
Management Asbestos Surveys

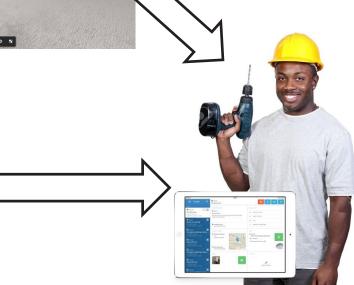
Alan Berry Consolidated Report

RSK Report Number: 276898-01(00) Client Reference: 80025498

08 August 2016



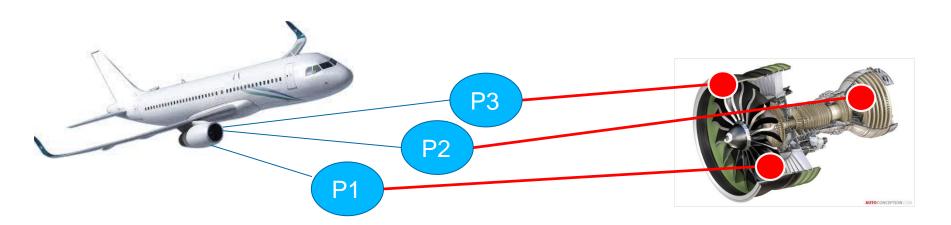






COMBINING IOT & BIM: DIGITAL TWINS

A virtual representation of an Object that represents its current (and past) behavior.

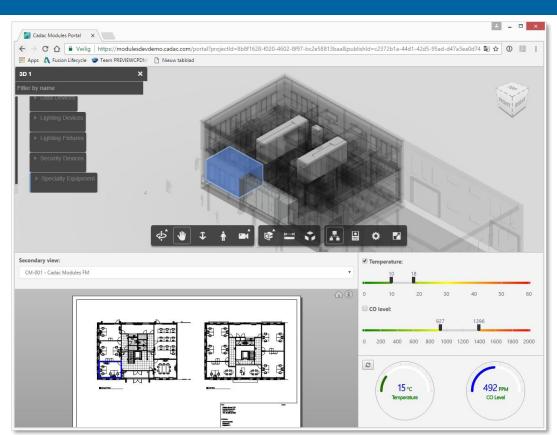


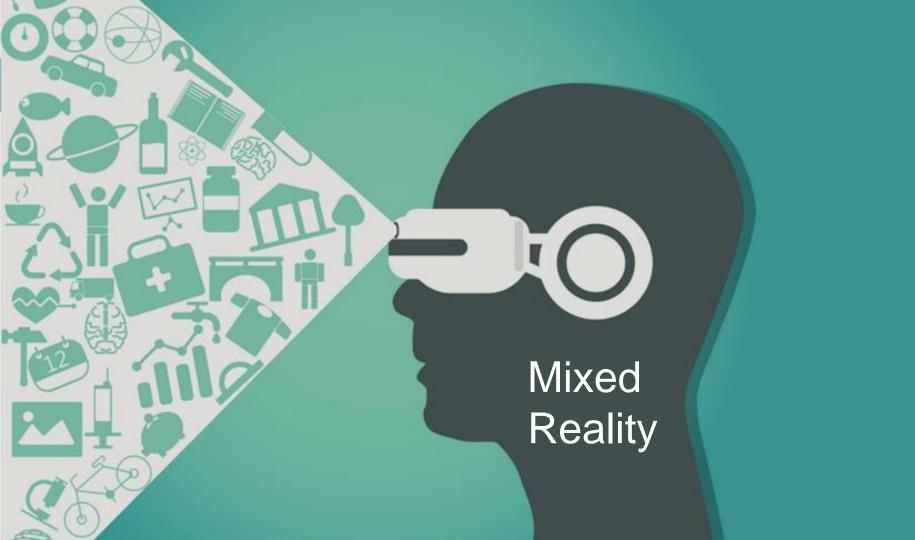


COMBINING BIM & IOT: DIGITAL TWINS



Future Lab, 2017







MIXED REALITY





'HYBRID' SPACES









EARLY ADOPTION STAGES





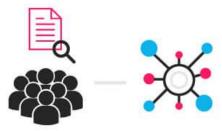












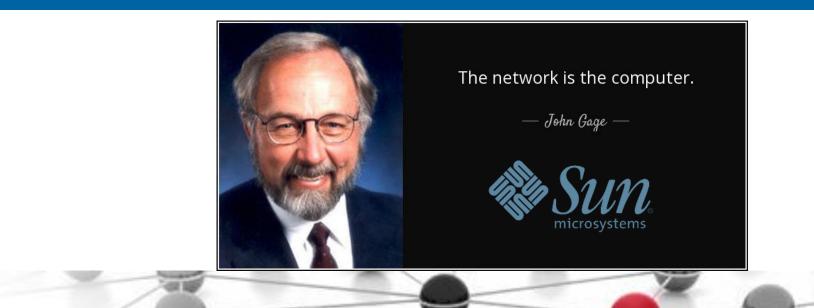
An option contact between parties is written as code into the blockchain. The individuals involved are anonymous, but the contact is the public ledger.

A triggering event like an expiration date and strike price is hit and the contract executes itself according to the coded terms. Regulators can use the blockchain to understand the activity in the market while maintaining the privacy of individual actors' positions Why: Digital Trust



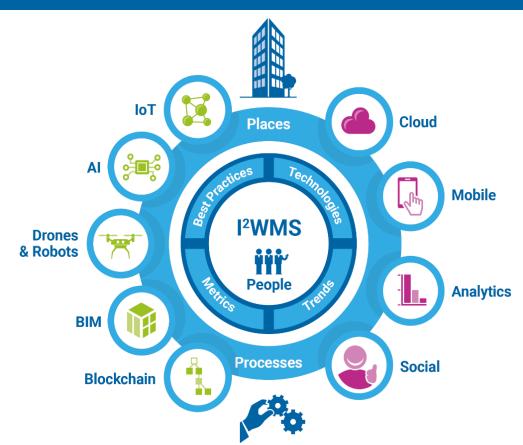


THE INTERNET OF APPLICATIONS



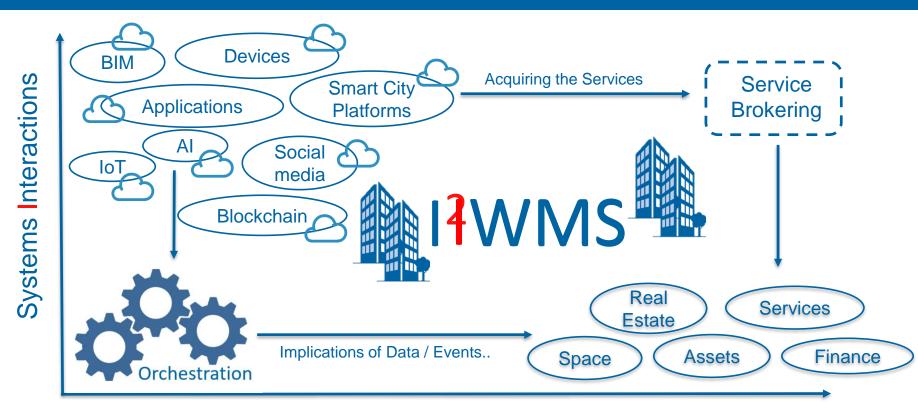


PLATFORMS – BUSINESS & TECHNOLOGY INTEGRATORS





DIVERSITY



RE & FM Business Integration

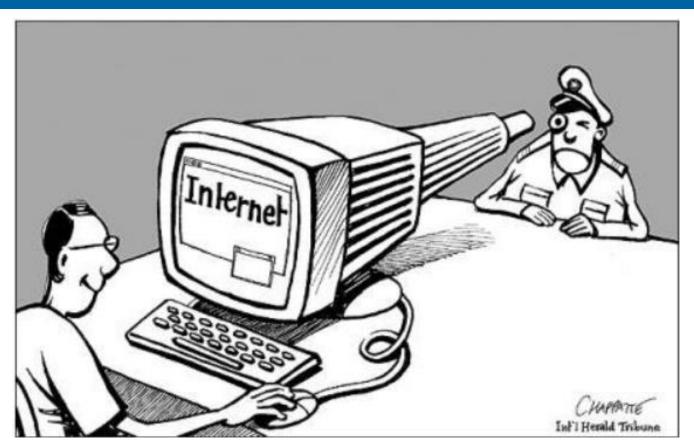


The Challenge will be about Enabling & Managing Diversity.

Enabling professionals to select and use the best technologies. Help them to effectively manage the diversity that emerges.



DIGITAL ETHICS



No.17/2507

202

Uit het BEVOLKINGSREGISTER der gemeente AMSTERDAM blijkt, das Rebecca Kinsbergen, geboren 30 September 1836 te Amsterdam, kerkgenootschap: Nederlandsch Israelietisch, de dochter is 111------

Vader: Manus Kinsbergen, geboren 22 "ecember 1805 te Amsterdam, kerkgenootschap: Nederlandsch Israelietisch, - en van:-----

Moeder: Dastje de Valk,geboren 11 Mei 1807 te Amsterdam, kerkgenootschap: ederlandsch sraëlietisch.

Wehuwd te Amsterlam 2 Augustus 1826.----

Leges betauld.



MSTERDAM,

5 Juni Voor den Burgemeester,

1943.

Het Hoofd Dx x delender x x x x X x X x Affeeling

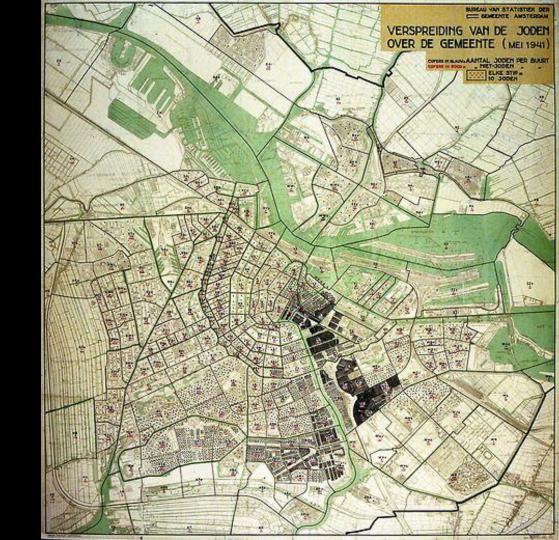
Bevolkingsregister en Verklezingen,

Candwill

Ballet Fig. - Management Assessment \$10-10-10-10-10-10

Amsterdam

World War II





DIGITAL ETHICS - THREE LAW'S OF ROBOTICS

A **robot** may not injure a human being or, through inaction, allow a human being to come to harm.

A **robot** must obey orders given it by human beings except where such orders would conflict with the First **Law**.

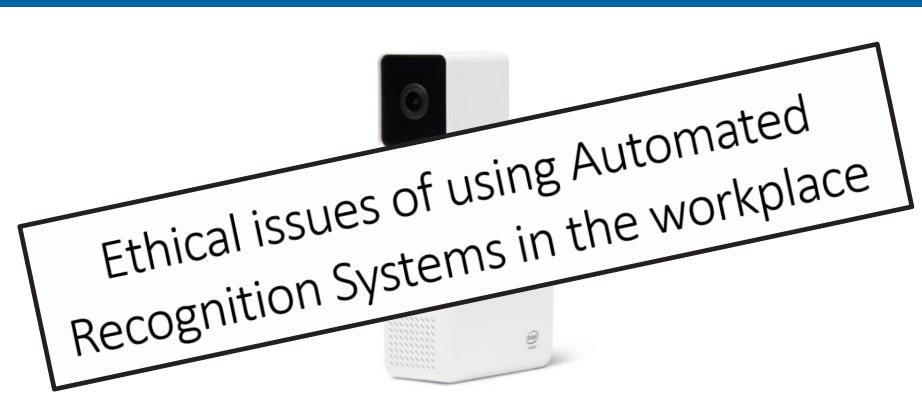


Isaac Asimov (1920 -1992)

A **robot** must protect its own existence as long as such protection does not conflict with the First or Second **Law**.



EXPERIMENTING WITH IMAGING







VALUE

In many ways, we currently seem to lack no objective way of evidencing the value that FM brings to the business other than in the form of savings or cost reductions.

Ref: Tsebo Facility Solutions

Building lifetime cost ratios

capital: operating: staff:

1:1.5:15

value

: 20



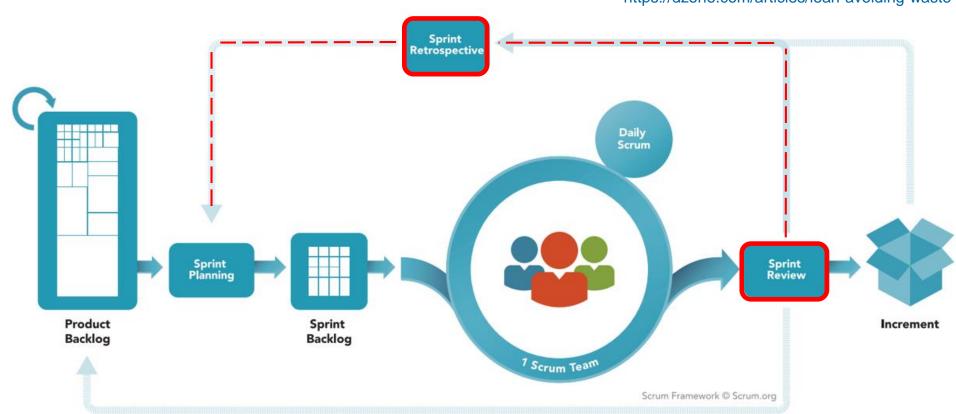
Source: Ive, G (2006) 'Re-examining the costs and value ratios of owning and occupying buildings' *Building Research & Information* Vol 34/3 pp 230-245

Ref: Prof. Alexi Marmot, UCL



LEAN: CONTINUOUS WASTE REDUCTION

https://dzone.com/articles/lean-avoiding-waste





LEAN IS NOT ONLY TECH...







