

# IoT Market Trends & Business Model Innovation



Panel Session

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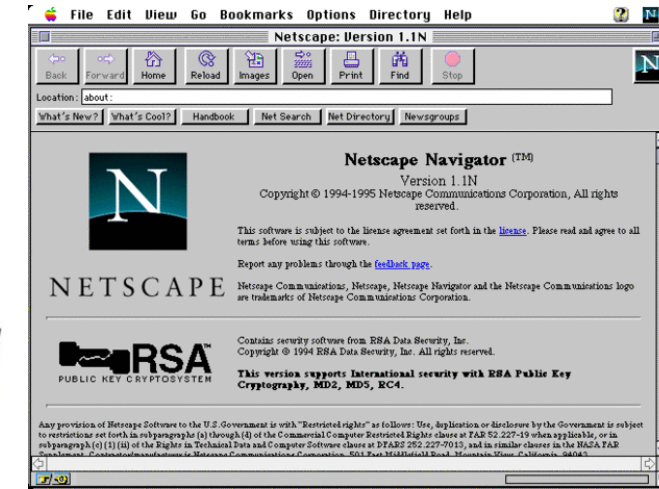
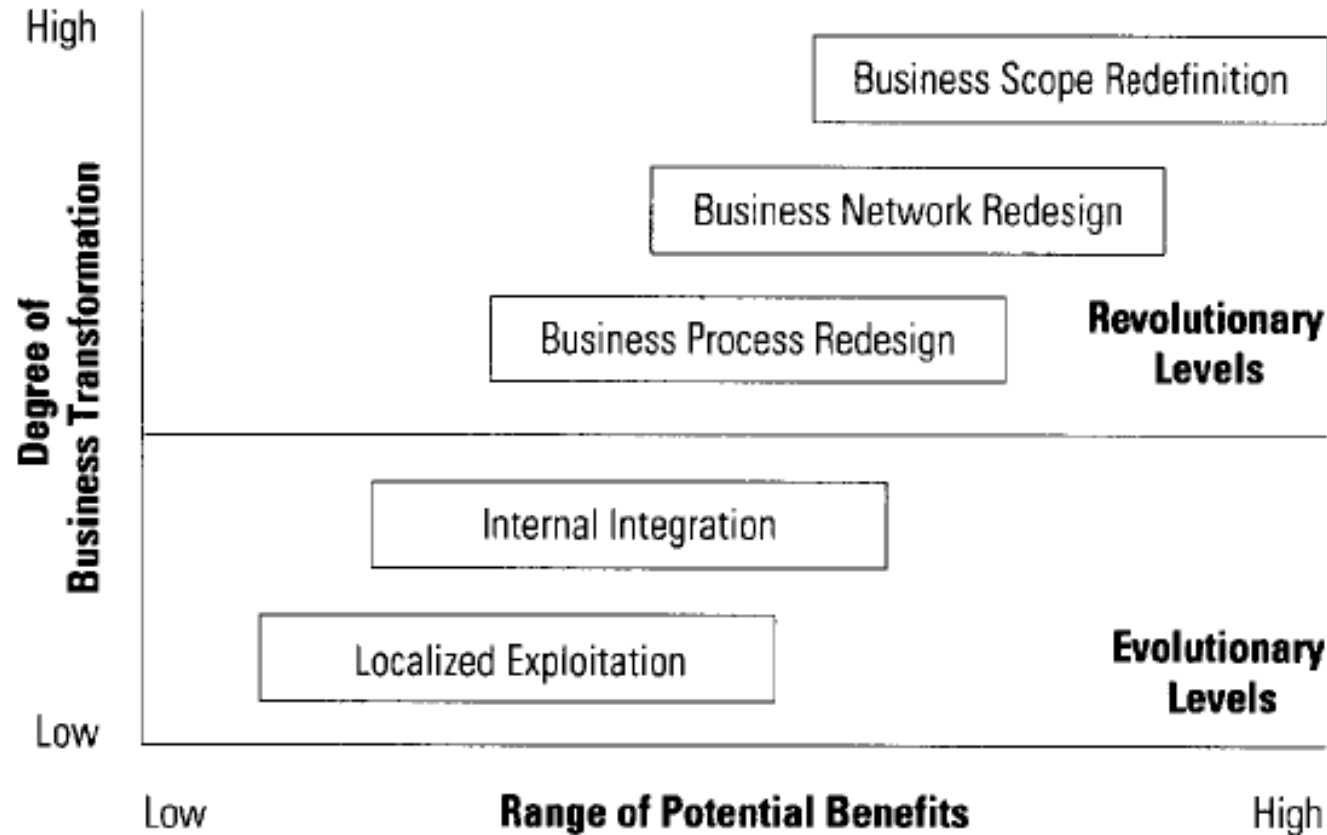
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# Digital Transformation, 1994

**Figure 1 Five Levels of IT-Enabled Business Transformation**



**IT-Enabled Business Transformation: From Automation to Business Scope Redefin...**

Venkatraman, N

*Sloan Management Review*; Winter 1994; 35, 2; ABI/INFORM Global

pg. 73

# Digital Transformation, 2019 – “Digital First”

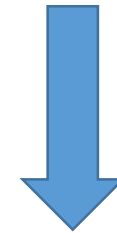


Prof.  
Michael D.  
Myers –  
UoA, NZ  
(keynote at  
Conf-IRM  
2019)

A presentation slide with a red header bar containing the text "Our new digital world – Digital first". Below the header, on a light blue background, are five bullet points:

- Information systems are now creating our world e.g. satellites, aircraft bridges designed using CAD software first – digital first, physical second
- Products are designed on the computer first, then manufactured (printed)
- The physical version is a reflection of the digital version, not the other way around e.g. airline tickets, boarding passes
- Algorithms/robots etc make decisions e.g. self-driving car
- We call this an “ontological reversal” where digital is first

“Digital First” → Information systems used to reflect the real world, now it is the opposite!



Does the Internet of Things only turns “the world into data” (Ashton, 2005) or does it also allows turning “data into its physical image in the world”?

# “Internet in the car” vs “Car in the Internet” (Mikusz et al., 2017)

- cars are becoming increasingly augmented with digital technology and connected with their environment, which enables innovative services besides the traditional functionality of cars



# Digital Transformation and Business Model Innovation (BMI)

- Digital Transformation is “the ability to reimagine the business digitally” (Kane et al., 2014)
- Since IT, or DTs (Digital Technologies) are never the core product or service of companies (except, of course, for tech companies), Digital Transformation is essentially about Business Model Innovations
- BM and BMI constructs are fundamentally about the architecture of the firm's value creation, delivery and capture mechanisms
- BMI relates to “designed, novel, and non-trivial changes to the key elements of a firm's business model and/or the architecture linking these elements” (Foss & Saebi, 2018)

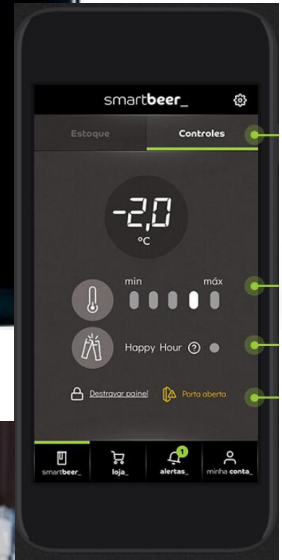
# Consumer IoT and BMI

- In manufacturing context (e.g. “manufacturing 4.0”) this idea of physical and virtual mixing is already understood (e.g. CAD/CAM, MES, smart robots, 3D printing) although not necessarily easy
- In consumer IoT context this is harder to achieve because adoption depends on creating additional value to users, motivating them to engage and building new relationships/partnerships/ecosystems to allow product/service delivery
- Consumer IoT and BMI are intrinsically interconnected → looking into the Business Value of IoT means looking into different ways of delivering products and services (for example new forms of servitization and monetization)



# The “killer app” for consumer IoT?

- Design (Product/Service Innovation)
- Business Model Innovation
  - Network Effects / Critical Mass
  - Information Systems Impacts (e.g. Analytics)
  - Innovation in Revenue Source/Model
  - (Real) Additional Value (The “Fridge Dilemma”)





# THANK YOU

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