IoT Market Trends & Business Model Innovation

Panel Session

Cesar Alexandre de Souza

Business School

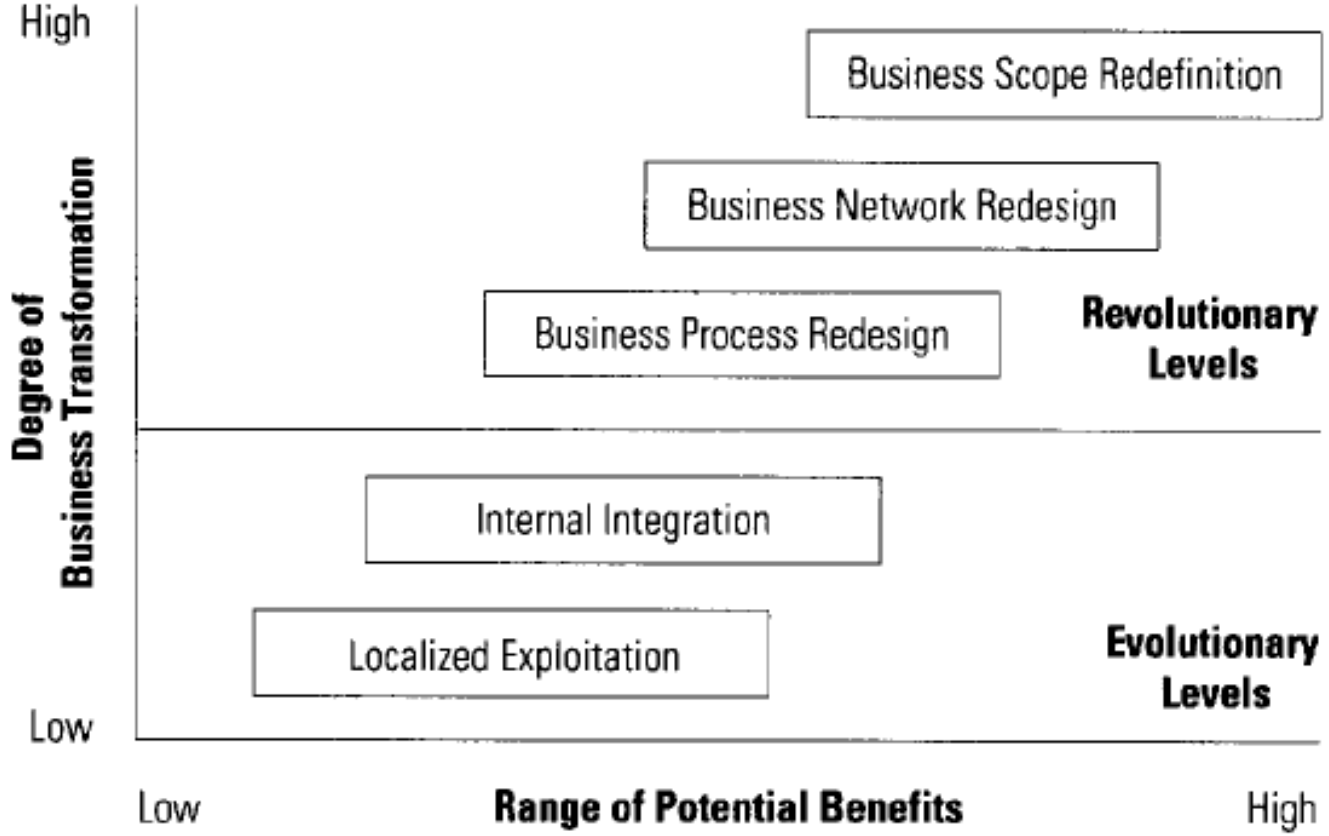
University of São Paulo

Brazil

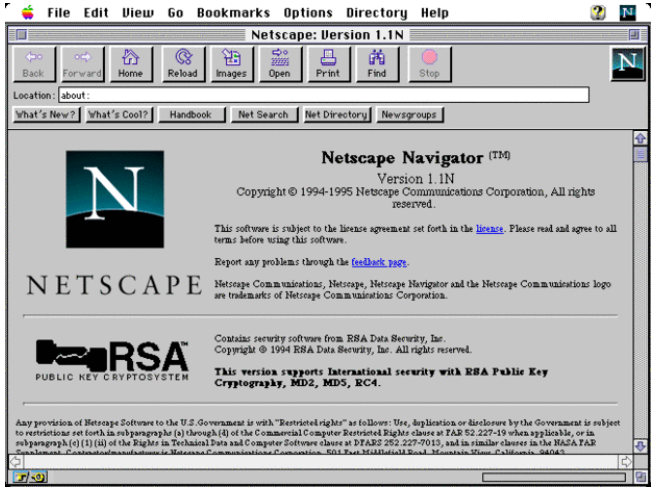
calesou@usp.br

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)

“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

Cesar Alexandre de Souza
FEA/USP
calesou@usp.br