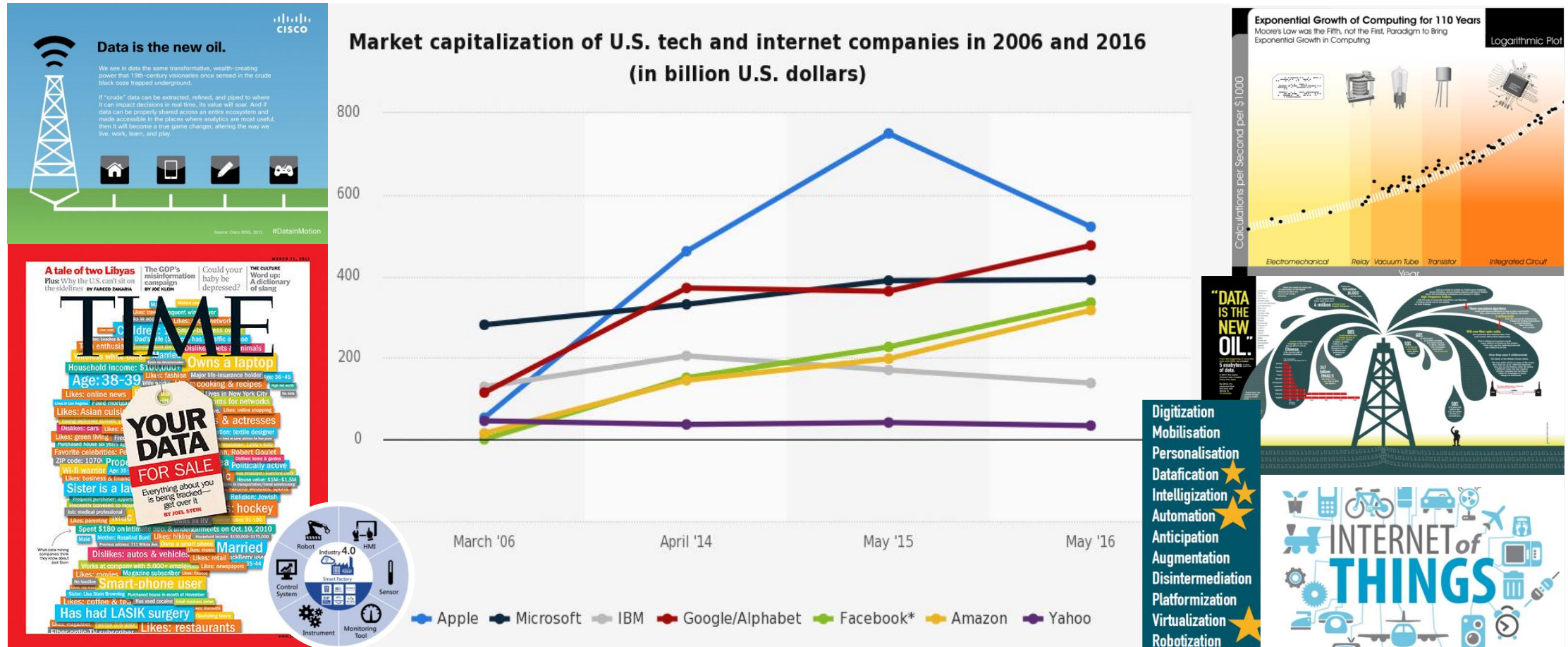


The digital business challenge

From thinking digital to being digital:
Transformation of business models

The digital (r)evolution

Data is the new oil and „thinking“ systems the new fuel



Science-fiction is becoming science-fact



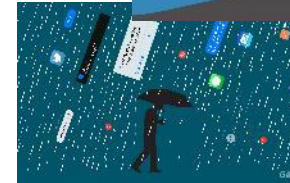
Star Trek Tricorder

Every business can take advantage of or be threatened by virtual reality layers



Virtual Reality

Waves of disruption

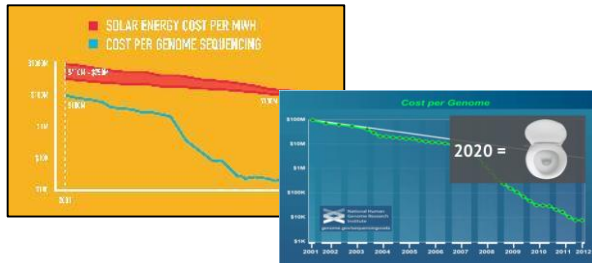


Never un-interrupted!

Autonomous driving
Need a licence?

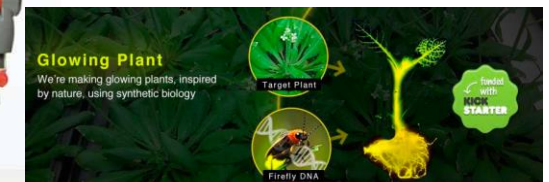


Human genome sequencing



Digital Manufacturing Disruption

3D Printing, New Robotics, Enhanced Automation Capabilities



How we design, make, test and distribute products is being disrupted

If you can read it, you can rewrite it!

Facts

Science-fiction is becoming science-fact. Disrupt yourself or be disrupted!

- **Exponential Technologies are driving disruptions** in our lives, businesses, total industries, and society as a whole.
- As **technologies are “Digitized”** and accelerate exponentially, they are “Deceptive” and Disruptive”, resulting in the “Dematerialization”, “Demonetization”, and “Democratization” of products, services, and industries.
- **Breakthroughs** ... exemplary in Biotechnology: Cost of human genome sequencing today ~\$1,000 (down from \$2.5 Billion in 2001)
- **“About 47% of total US employment is at risk** ... (due to) expected impacts of future computerization” - Carl Benedikt Frey and Michael A. Osborne, Oxford Sep 7, 2013
- **“The average lifespan of a company** listed in the S&P 500 has decreased from 67 years in the 1920’s to 15 years today.” - Richard Foster, Yale University

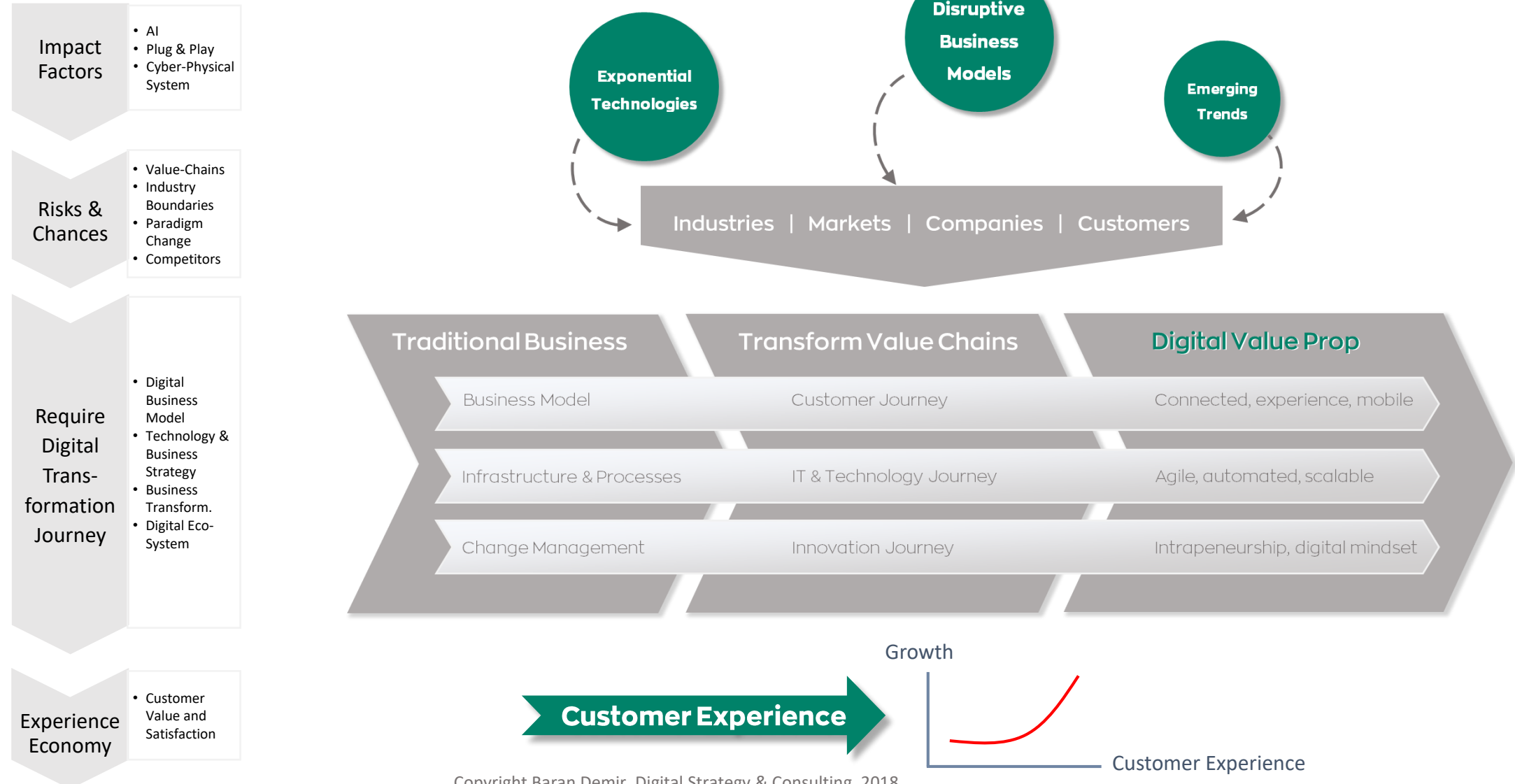
Defining digitalization

Meaning and relevance

- **Transformation / execution of analog into digital**
 - Media, data, communication, production, processes ...
- **Introduction and usage of exponential technologies**
 - Cognitive systems, cloud computing, predictive algorithms, robotics ...
- **Interconnection and linkage of “everything”**
 - Data, devices, machines, facilities,...with sensors, chips, tags ...
- **Automation, analytics, virtualization, intelligence**
 - Products, services, data, processes ...



Digital transformation process



Consequences

1

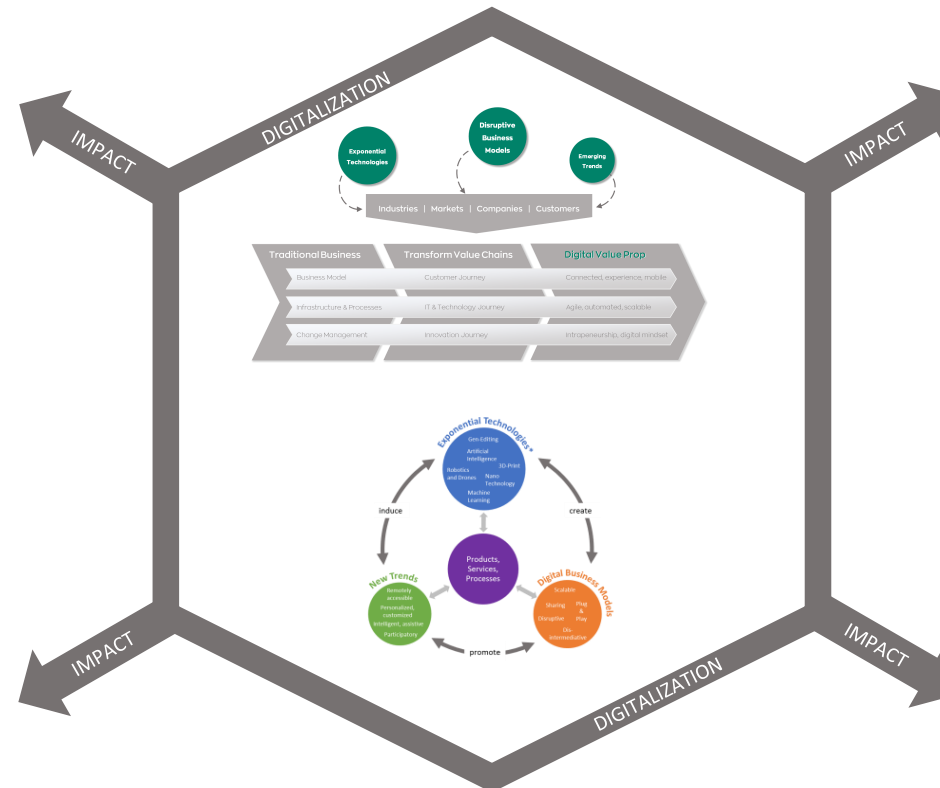
Competition

New and **unexpected**, **fast-moving**, **agile** competitors, players and impact factors

3

Markets

Disaggregating value chains and vanishing boundaries between industries



Technology

Exponential developing technologies offering complete **new opportunities in creation, design, production, processing, communication...**

2

4

Business Models

Sudden introduction of new, **disruptive**, **plug&play**, cloud based and **disintermediative** business models

The digital business challenge

Choosing the right technology- and business strategies

- **Keep up with key trends** and developments in markets
- **Understand chances and risks** of „mega-shifts“ and its related technologies
- **Apply digital business model** and transform organization to gain strategic advantage:
 - Introduce renewed or adapted digital business models and value chains
 - New ways in production of goods and services by applying exponential technologies
- **Maximize customer value and experience** to generate growth

