

Observatoire des futurs
EM Strasbourg

Key Players in Digital Transformation

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Internet Giants, Startups, and Digital Platforms

1. Definition and Relationships with Other Factors

General Definition

- **Internet giants:** major players in the internet and digital sectors
- **Startups:** Young, innovative companies in the new technologies sector, operating online. Temporary in nature, seeking a business model that is industrializable and scalable
- **Digital platforms:** Shared infrastructures offering multiple applications (social networks, marketplaces, and collaborative sites) that benefit from network externalities.
    - **Advantage: low** operating costs (Airbnb: 3,000 employees vs. Accor: 280,000; market cap.: $38 billion vs. $11 billion) and exclusive data on producers and consumers.

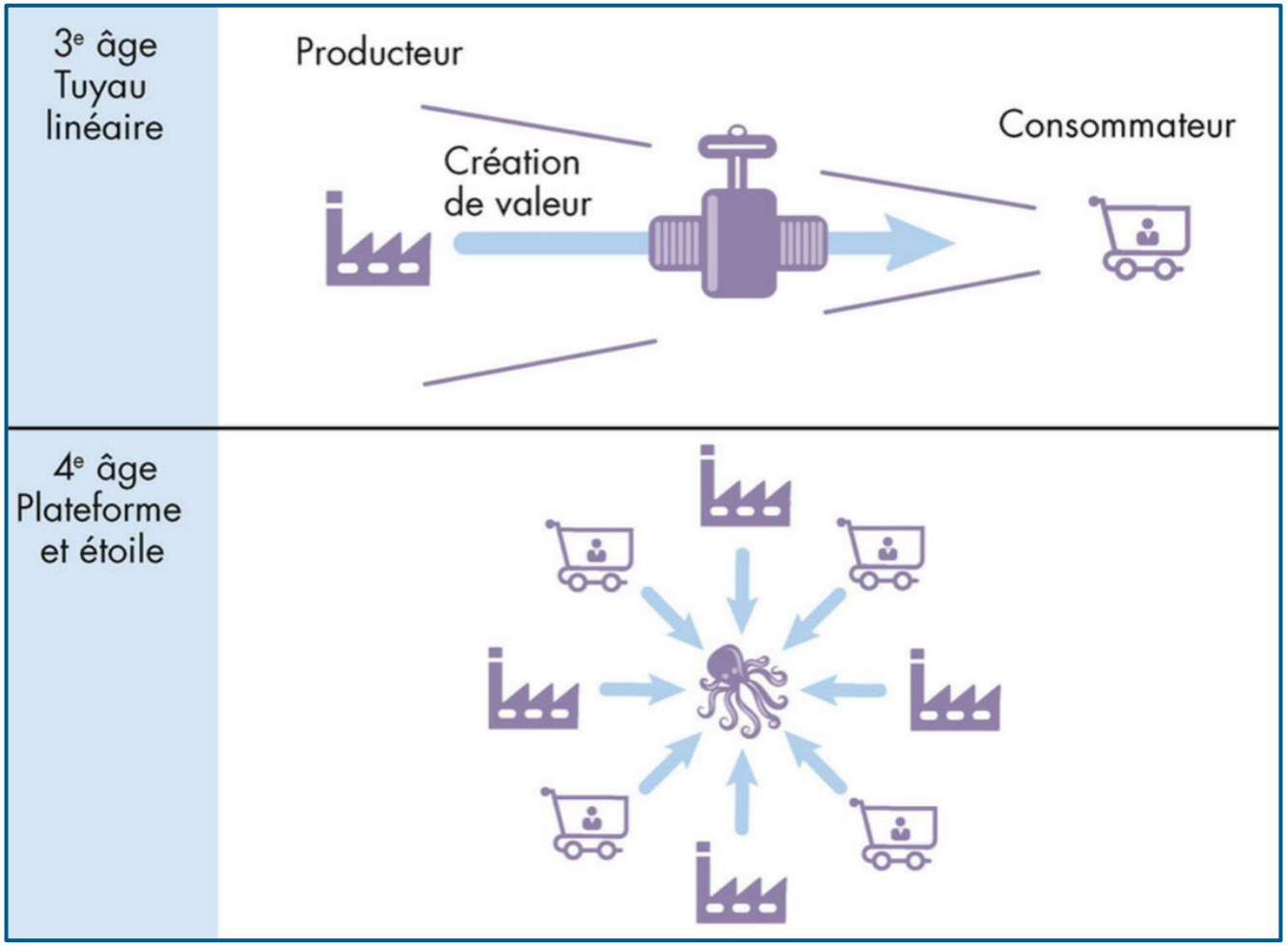
Connection to Uberization and Industry 2030/Key Questions for the Future

- Internet giants as technology providers and start-up investors
- The platform model as it applies to industry (e.g., “Teslism”)
- Impact of the platform model on industry: complement or replacement?

The Financial Power of Internet Players

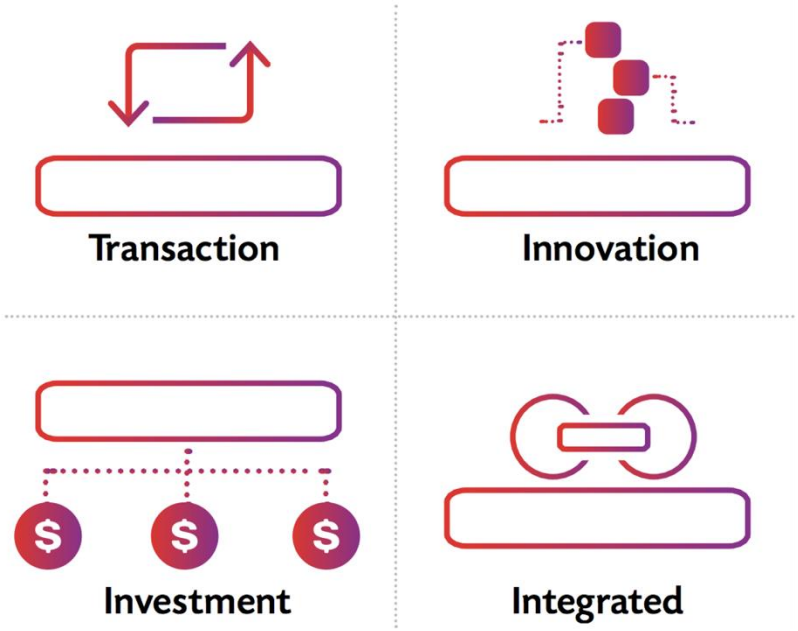
Rank 2018	Company Name	Country	Revenues ($millions)	Profits ($millions)	Assets ($millions)	Market Value As of 3/29/18 ($m)	Activité
1	**Apple**	United States	247500	53300	367500	926900	Matériel informatique
2	**Amazon.com**	United States	193200	3900	126400	777800	Services internet
3	**Alphabet**	United States	117900	16600	206900	766400	Services internet
4	**Microsoft**	United States	103300	14200	245500	750600	Logiciels et services
5	**Facebook**	United States	44600	17800	88900	541500	Services internet
6	**Alibaba**	China	37900	9600	114000	499400	Services internet
7	Berkshire Hathaway	United States	235200	39700	702700	491900	Conglomérat (Buffet)
8	**Tencent Holdings**	China	35300	10600	85200	491300	Services internet
9	JPMorgan Chase	United States	118200	26500	2609800	387700	Banque
10	ExxonMobil	United States	230100	20400	348800	344100	Pétrole

Rank 2013	Company Name	Country	Revenues ($millions)	Profits ($millions)	Assets ($millions)	Market Value As of 3/29/13 ($m)	Activité
1	**Apple**	United States	164700	41700	196100	416600	Matériel informatique
2	Exxon Mobil	United States	420700	44900	333800	400400	Pétrole
3	**Google**	United States	50200	10700	93800	268400	Numérique
4	PetroChina	China	308900	18300	347800	261200	Pétrole
5	Berkshire Hathaway	United States	162500	14800	427500	252800	Conglomérat (Buffet)
6	General Electric	United States	147400	13600	685300	243700	Services
7	Wal-Mart Stores	United States	469200	17000	203100	242500	Distribution
8	IBM	United States	104500	16600	119200	239500	Services informatiques
9	ICBC	China	134800	37800	2813500	237300	Banque
10	**Microsoft**	United States	72900	15500	128700	234800	Logiciels et services



According to Parker Geoffrey G., Van Alstyne Marshall W., and Sangeet Paul Choudary, Platform Revolution (2016).

PLATFORM TYPES



Transaction platform: technology or service that facilitates exchanges and transactions between users, buyers, and suppliers (e.g., Airbnb, Booking, etc.)

Innovation platform: technology, product, or service that serves as a technological foundation for companies to develop complementary technologies (e.g., Microsoft, SAP, Oracle, etc.)

Integrated platform: a combination of a transaction platform and an innovation platform (e.g., Apple, Google, Amazon, Facebook, Alibaba, etc.)

Investment platforms: portfolios of platforms that act as investors (e.g., SoftBank, Naspers, etc.)

According to Parker Geoffrey G., Van Alstyne Marshall W., and Sangeet Paul Choudary, Platform Revolution (2016).

2. Summary of the Retrospective Analysis

Retrospective

In General and for Uberization and Industry 2030

Platforms

- A recent business model (e.g., Airbnb, founded in 2008; Uber, founded in 2009) that generates significant value (no assets to manage and few fixed costs)
- Concentration in countries with large markets (e.g., the U.S.), local regulations preventing the deployment of foreign platforms (e.g., China), and a strong digital culture (e.g., Israel)
- Platforms for all functions

HR: 365 Talents (assessment and internal mobility), Pipler, the startup Mobility Work—a social network for maintenance—Marketing (Kantar Marketplaces); Asset Management (Swissborg); IT (Skaffolder); Sales, Research (open innovation),

. . . and needs
Aihuishou (secondhand electronics), Alibaba and its B2B platform, which aims to help European companies import into China (€200 billion pledged)

But there are still few platforms in the industrial sector
Limited to the purchase of parts or raw materials.

Current Trends

In General and for Uberization and Industry 2030

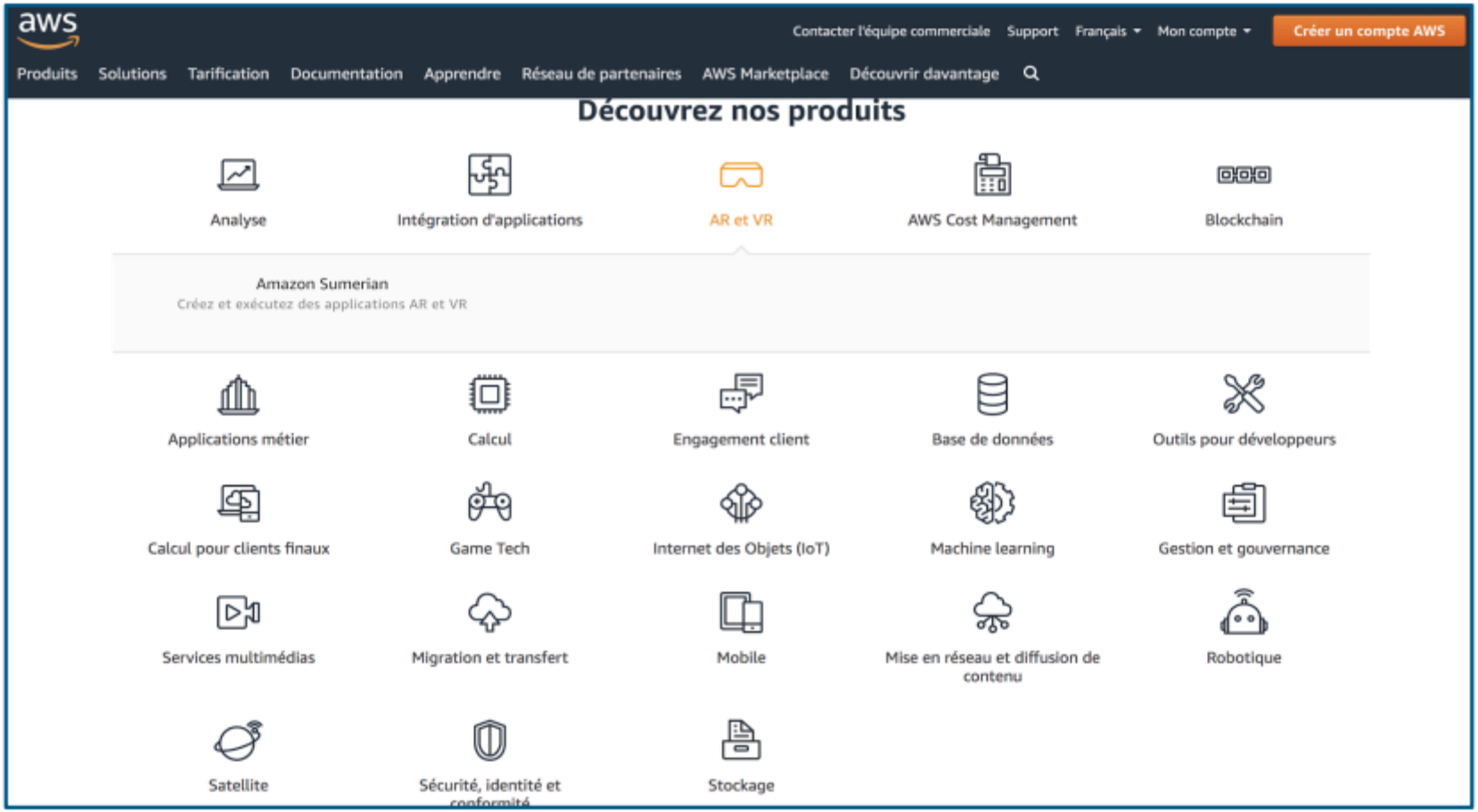
1) The provision by internet giants of technology that facilitates "uberization" (AI, cloud computing, Software as a Service (SaaS), etc.)

2) The consolidation of various markets and networks
(e.g., Alibaba becoming a financial services provider to boost consumption)

3) Platforms offering new models of uberizationfor the industry by leveraging and focusing on new technologies (IoT, AI, etc.) development of Human Cloud(M-Turk, TaskRabbit, etc.), robotization (Automation Anywhere: a startup offering widespread robotization), etc.

4) An innovation dynamic fueled by a mix of large companies with substantial financial resources and the startup ecosystem

5) Industry players (Bosch, Dassault Systèmes, and GE with Predix) are trying to establish their own (M2M) platform


aws
Contacter l'équipe commerciale
Support
Français
Mon compte
Créer un compte AWS
Produits
Solutions
Tarification
Documentation
Apprendre
Réseau de partenaires
AWS Marketplace
Découvrir davantage
Découvrez nos produits
Analyse
Intégration d'applications
AR et VR
AWS Cost Management
Blockchain
Amazon Sumerian
Créez et exécutez des applications AR et VR
Applications métier
Calcul
Engagement client
Base de données
Outils pour développeurs
Calcul pour clients finaux
Game Tech
Internet des Objets (IoT)
Machine learning
Gestion et gouvernance
Services multimédias
Migration et transfert
Mobile
Mise en réseau et diffusion de contenu
Robotique
Satellite
Sécurité, identité et
Stockage


AUTOMATION ANYWHERE
Go be great.
CONNEXION | CONTACTEZ-NOUS
PRODUITS SOLUTIONS CLIENTS ET PARTENAIRES ÉVÉNEMENTS RESSOURCES QU'EST-CE QUE... QUI SOMMES-NOU
QU'EST-CE QUI FAIT DE NOUS LA MEILLEURE PLATEFORME DE FORCE DE TRAVAIL NUMÉRIQUE
AUTOMATISATION ROBOTIQUE DES PROCESSUS (RPA)
Des robots qui appliquent automatiquement les processus métier répétitifs, à l'échelle souhaitée, sur site ou dans le cloud
AUTOMATISATION COGNITIVE
Des robots qui s'appuient sur l'IA et l'apprentissage machine pour apprendre les comportements humains et structurer les données non structurées
OUTILS D'ANALYSE INTÉGRÉS
Des outils d'analyse intégrés qui mesurent et prédisent les performances des robots et de l'entreprise

3. Summary of Prospective Exploration

Major Trends / Constants

- **A potential shift toward uberization across** all roles and industries (a "human cloud" for simple tasks and AI, co-design for experts), driven by technologies made available by internet giants
- **The economic benefits provided by platforms** (revenue, productivity gains, and value creation)
- **The ease of launching startups** (institutions, start-up studio; e.g., Waoup/Axandus)—that enables competition with any business

Uncertainties

- **The success of "Teslism" in industry, whose philosophy aligns closely with that of platforms** ("open" innovation, rapid learning, digitalization at every level, continuous adaptation to consumer needs, etc.)
- **Management challenge:** the industrial world □ the world of platforms (awareness-raising, training, etc.)
- **Disintermediation through open source** (e.g., BTU) and consumer demand?
- **Increased competition:** between platforms (Google vs. Amazon, Facebook vs. Escapex, etc.) and between industrial companies and platforms (Samsung vs. Google, etc.) + multihoming (e.g., a taxi driver working simultaneously with Uber and Lyft) + the emergence of platforms within platforms

Seed of Change

- **The convergence of disruptive technologies** (AI, distributed computing, IoT, etc.) driven by internet leaders and industrial giants like GE will foster the creation of new business models
- **The end customer at the center** (real-time, sharing, long tail)
- **Machine-to-Machine** (augmented products, supply chain, etc.)

Controversies

Interoperability (M2M) and standardization issues for systems and components:

- **Data security**
- **Restrictions imposed by platforms** (choice of producers and users)
- **Social and policy concerns** (labor, competition, platform regulation)
- **The need to accept information sharing** with competitors, customers, and suppliers
- **Taxation/monopoly of the GAFA companies** (fines that can be easily funded by their profits)

Disruption

- **The widespread adoption of platforms in the industry** (including those that consume a lot of resources (e.g., energy)
- **Acceptance of resource sharing** (e.g., Factoryz, co-development, etc.)

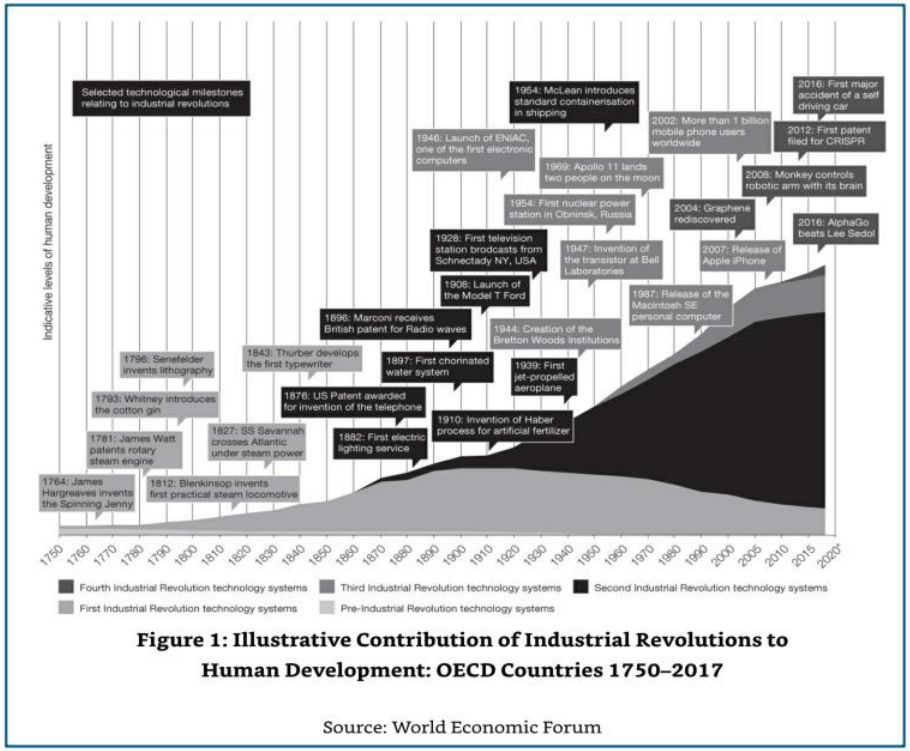


Figure 1: Illustrative Contribution of Industrial Revolutions to Human Development: OECD Countries 1750–2017

Source: World Economic Forum



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