

WORKSHOP ON ARTIFICIAL INTELLIGENCE

*ITU-T Study Group 3, Geneva, Switzerland
10 April 2018*



DIGITAL TRANSFORMATION

Digital Transformation

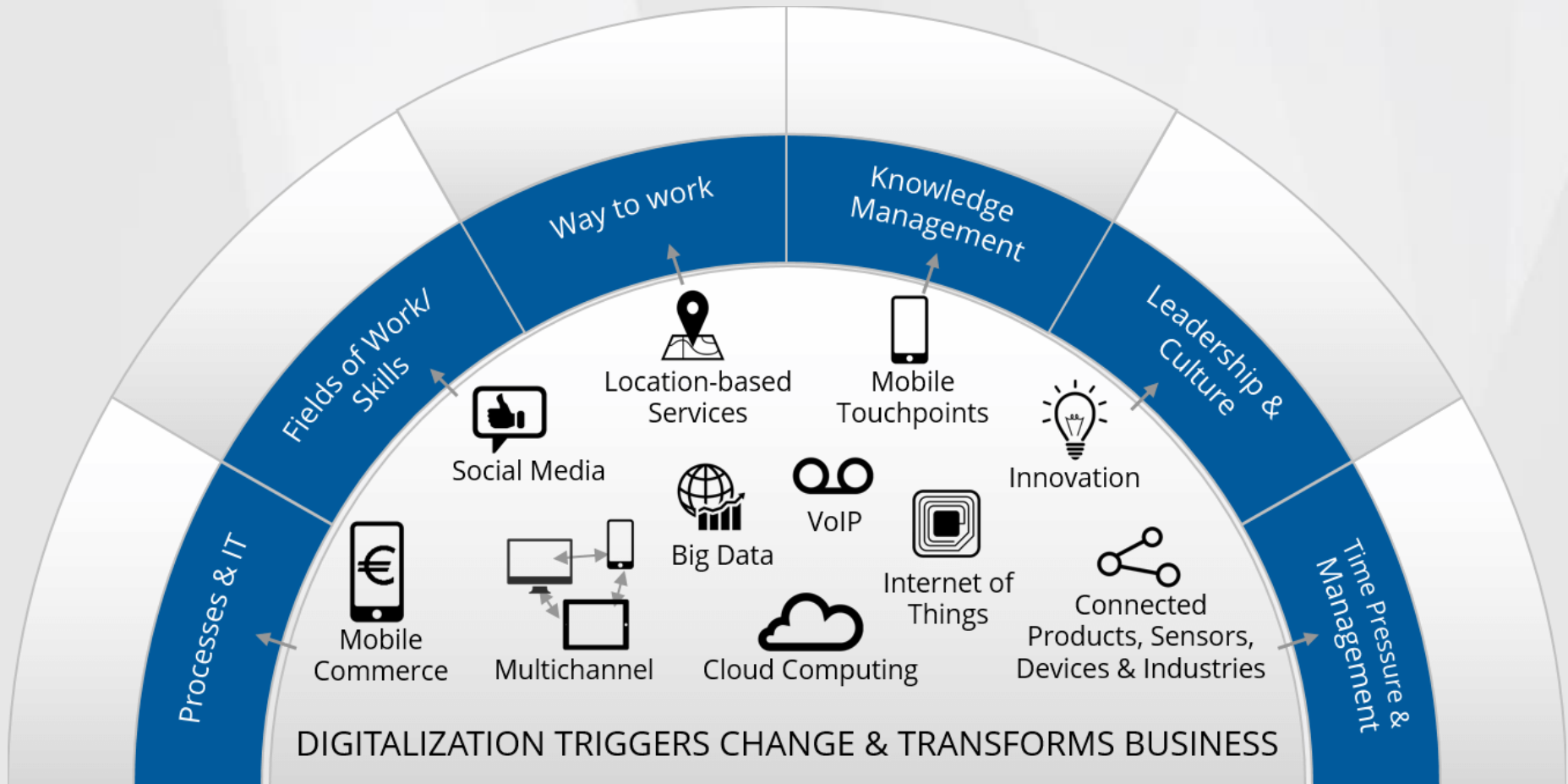
New concept that emerged last years related to the transformation of business process focused in a new reality focused at digital assets

New management paradigms

New business models



Digital Transformation



ORIGINAL LEVEL PLAYING FIELD

High sunk costs.
Network externalities.
Economies of scale and scope.
Termination Monopoly.



Mandatory network opening.
Conditions approved in isonomic terms.
Administrative Arbitration.
Price control



NEW LEVEL PLAYING FIELD

**New
stakeholders**

**New essential
facilities**



Performance

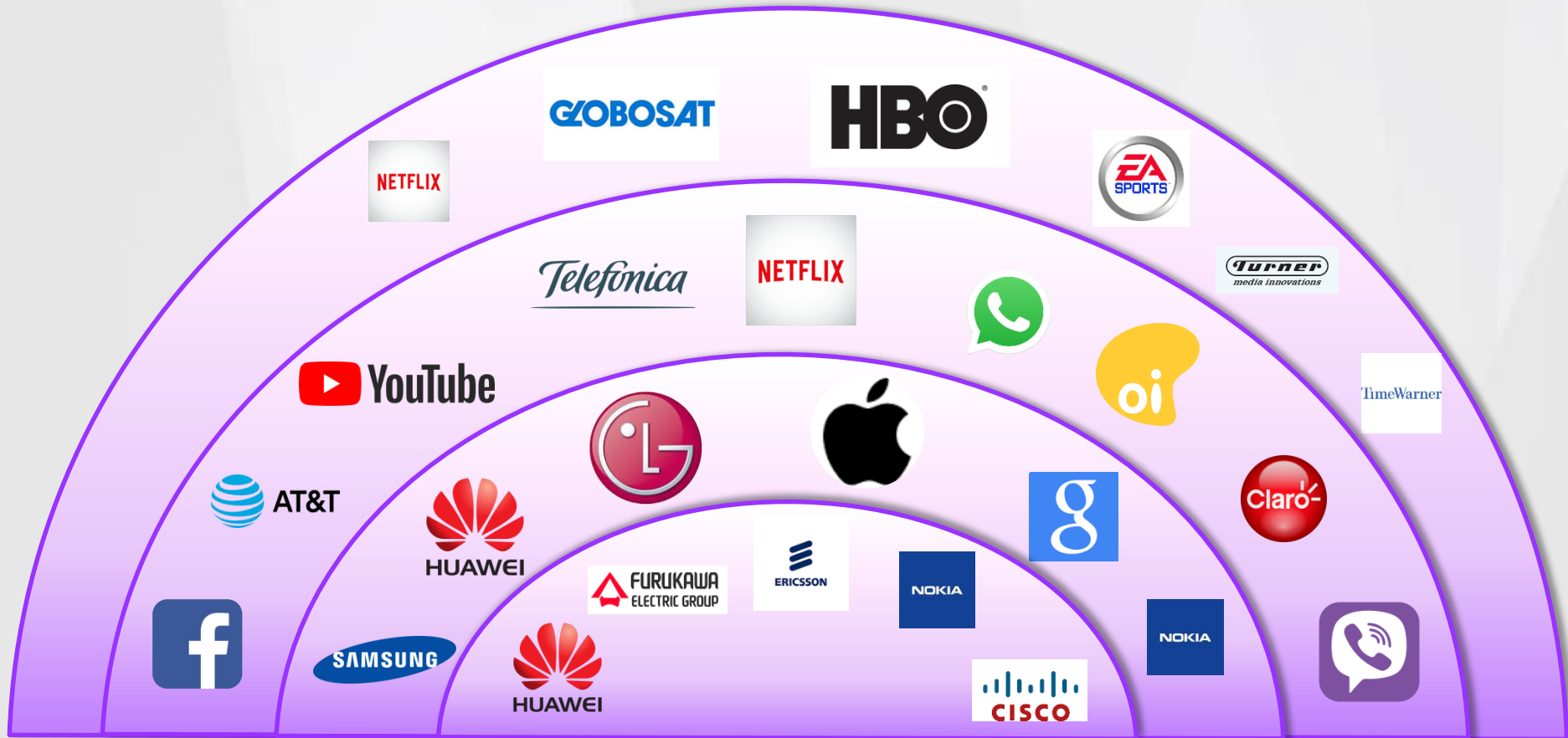
**Digital
Transformation**

**New
Business**



FUTURE BUSINESS MODELS IN ICT

Industry Dynamic



Trends



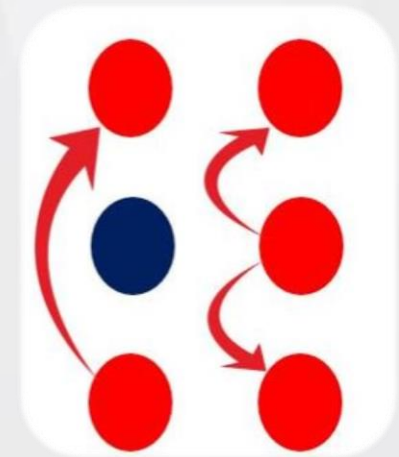
Market consolidation



New Business Models



Vertical Integration



New Business Models...



Big Data



IoT



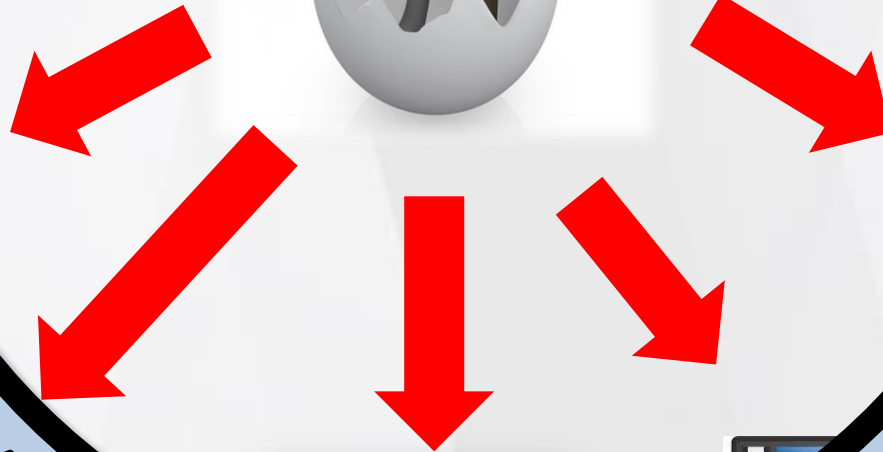
Digital
Financial
Services



Content



New Business Models...



Big



al
ces

OTT



Content

Artificial Intelligence



AI AND ICTS

AI and ICTS



AI is the theory and development of computer systems able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages



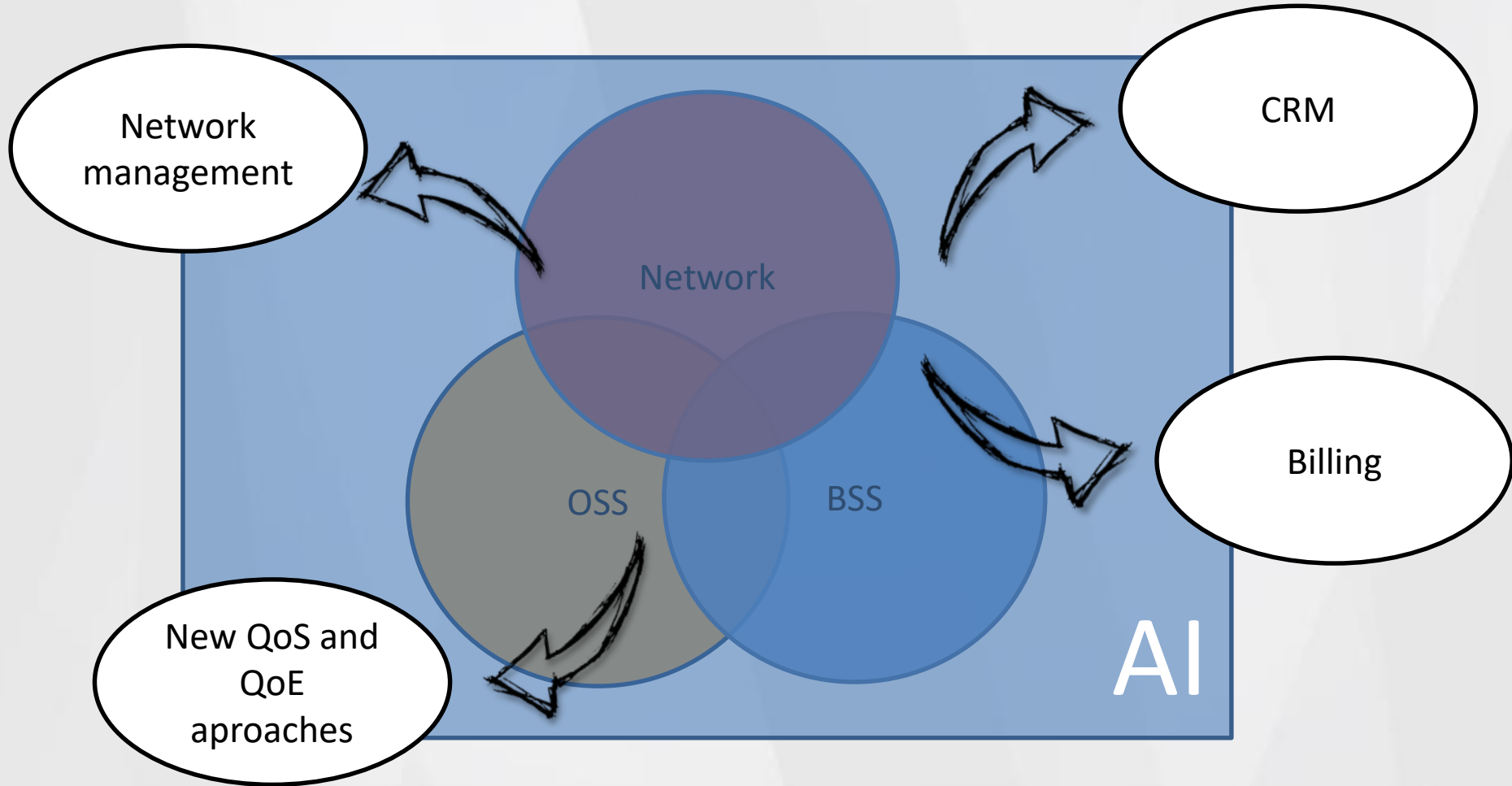
AI and ICTS

AI impacts ICTs in two major topics:

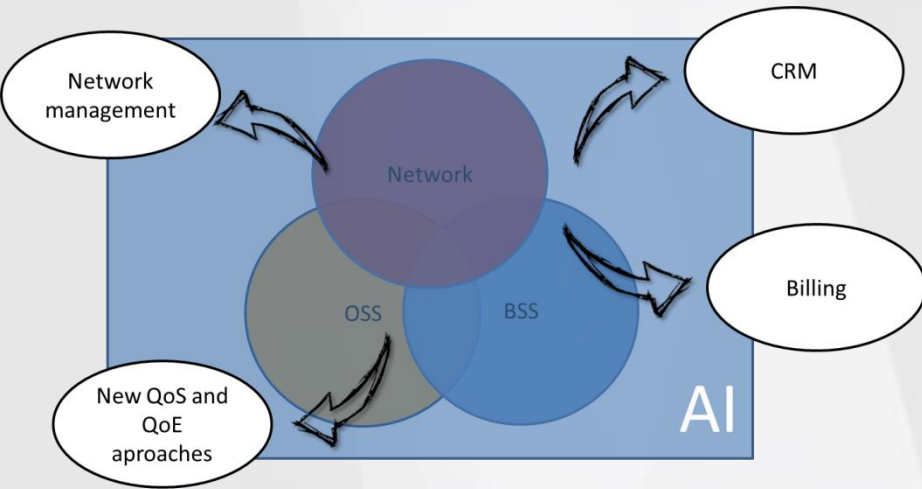
- New processes and new approaches over legacy services and operations
- New applications and features



Legacy Services



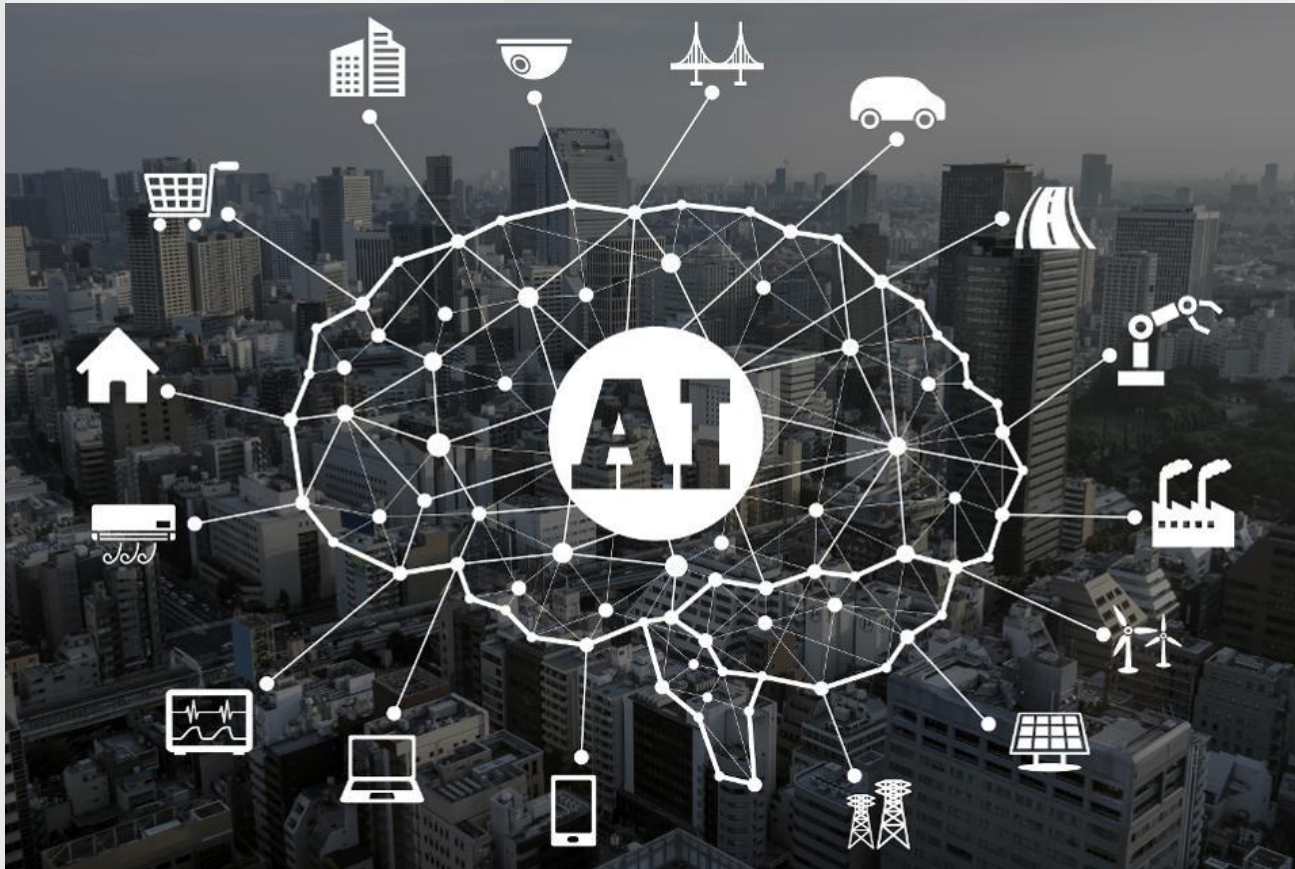
Legacy Services



**Revision of Legacy
Regulation related to
operation aspects of
the provision of the
services**



New Applications and Features



A possible business case....



Company A offers Mobile Services with 5G, allowing the consumer to access traditional Data Services



Company B offers facilities and applications of IoT in connected cars



A possible business case....



Company C integrates the houses with IoT devices, offering many solutions.



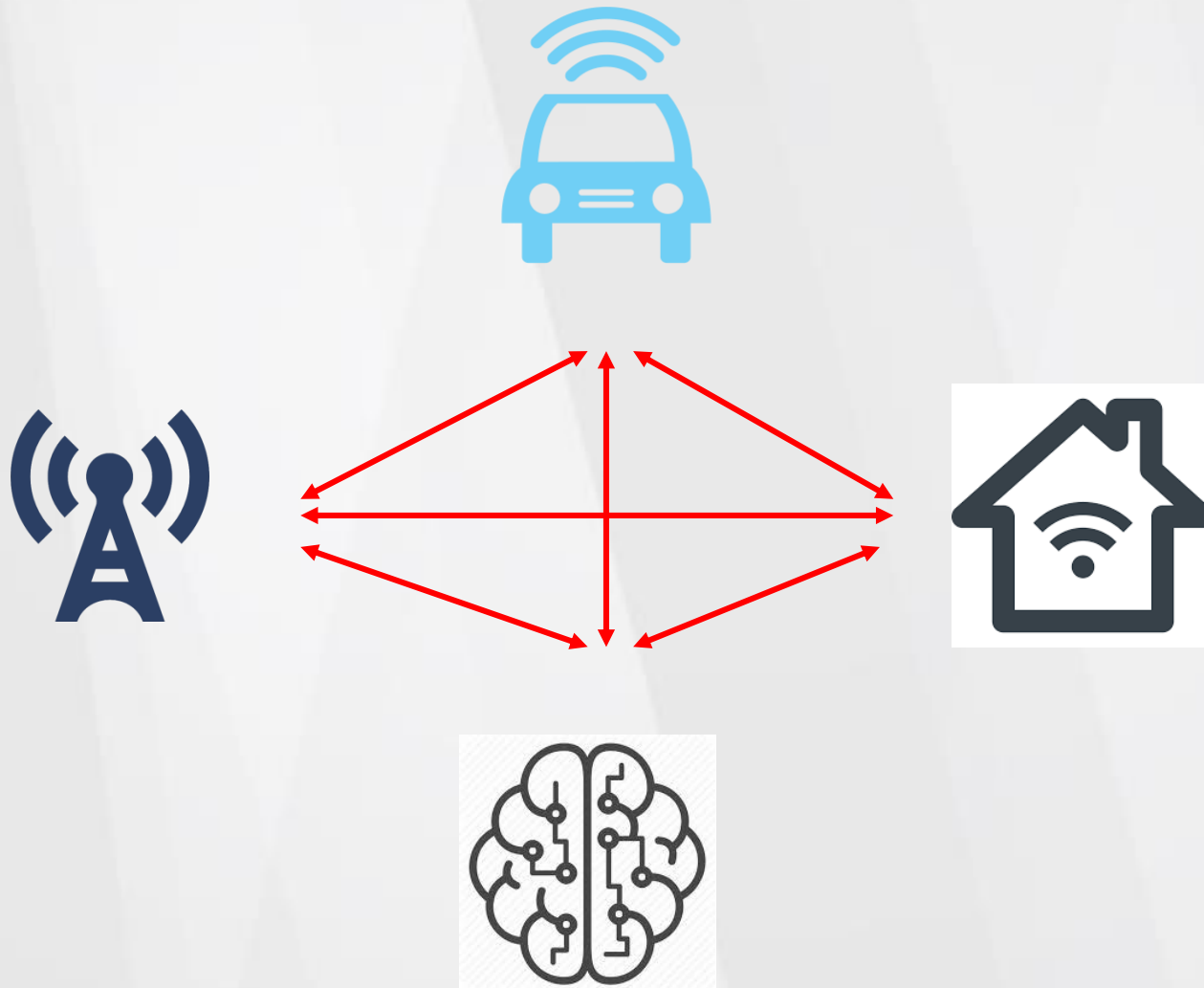
Company D offers a **Personal Assistant**, integrating all ICT services.



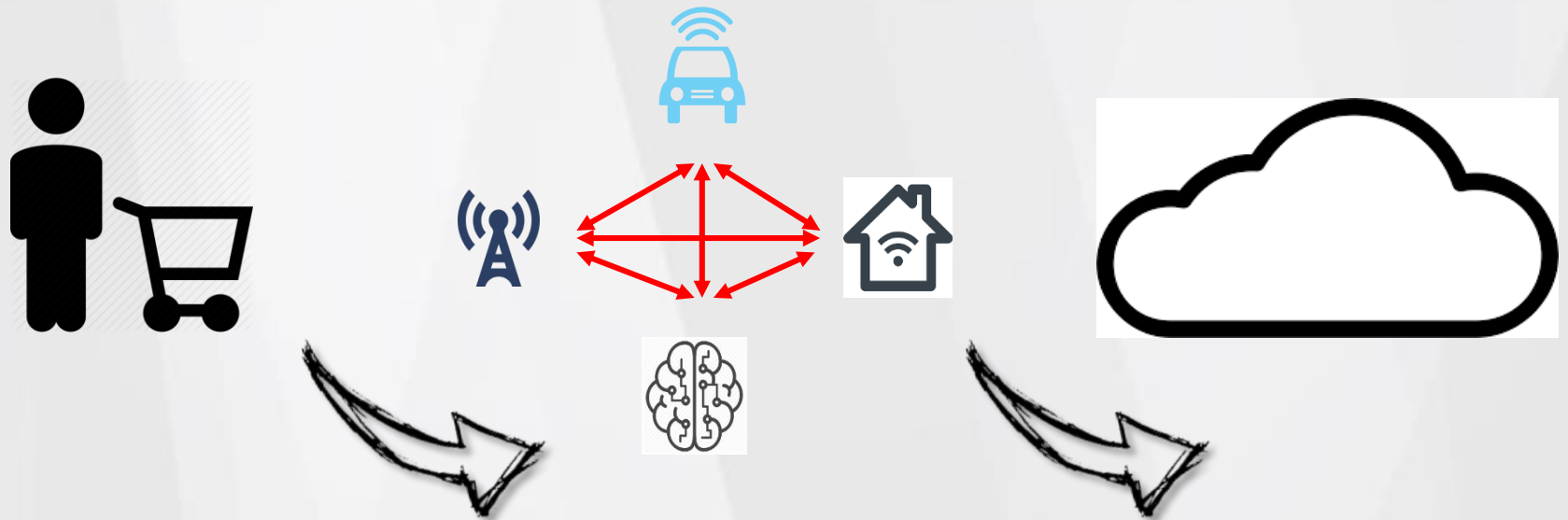
A possible business case....



A possible business case....



A possible business case....



A possible business case....



- This business case is based in high connectivity provided by the networks;
- High Big Data, and AI infrastructure;
- High personal data exchange;
- High level of relationship between the companies, which may be are competidors.
- Diferent ways of monetizaton.



A possible business case....

Data, new
essential
facility?



New market
Failures?

New
boundaries of
Regulation?

New
boundaries of
Services
Provision?



Challenges



- Actions facing new market failures
- Scope and Competence of the regulator
- Intersectoral interfaces
- International challenges



THANK YOU.

Abraão Balbino e Silva
Superintendent of Competition
Anatel / Brazil

