

European Rail Summit

Dr. Gianluigi Castelli, Director Corporate ICT and Innovation

Brussels, November 7th 2017

#### GRUPPO FERROVIE DELLO STATO ITALIANE

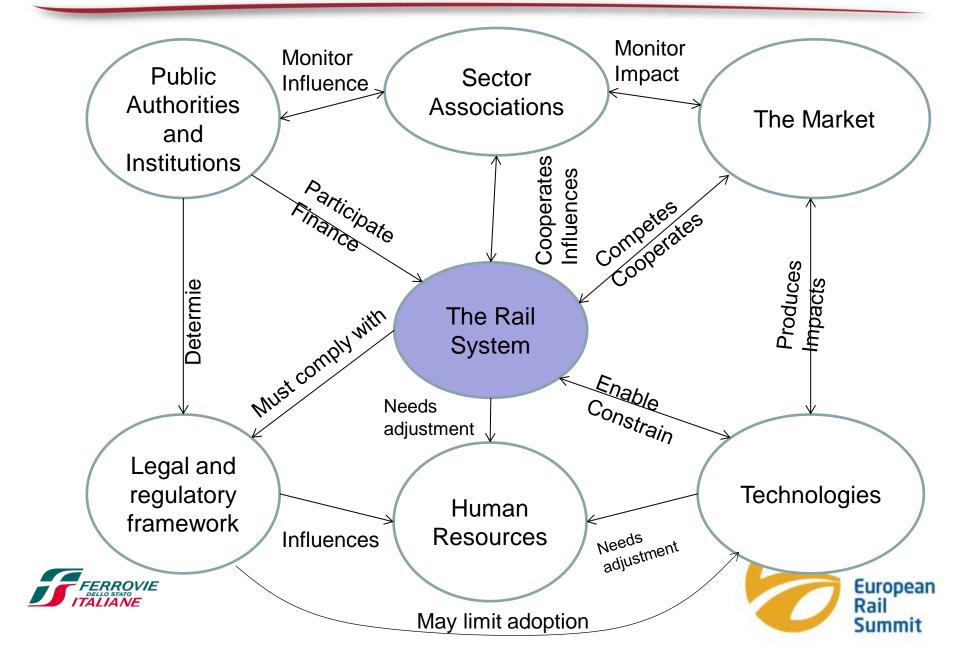
# What exactly is Innovation?



# Handbook per il Piano Innovazione

- New and/or unique concepts of products and services and how to bring them to Market
- New and/or unique concepts in how the Company operates

## Effective innovation happens in a context



#### The «Data Economy»

By 2020, establish the framework for a European multimodal transport information, management and payment system

EC White Paper for Transport 2011

#### **Digitalization**

A pervasive Transformation of the foundation technologies underpinning the economy New products, services, producers consumers, markets, jobs...





#### An outcome of digitalization

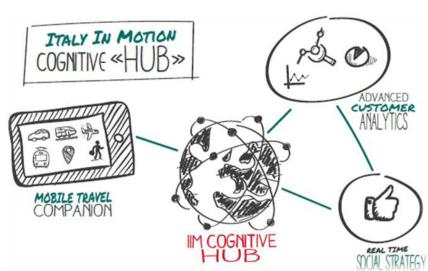
### Customers, most personnel and some suppliers **ALREADY LIVE AND WORK IN A <u>DIGITAL</u> ENVIRONMENT**:

they describe themselves, their needs or their products, procure and exchange goods and services, plan, coordinate and communicate **through digital technology**.

#### A DIGITAL RAILWAY IS AN EXTENSION OF THIS ENVIRONMENT,

acting as a trusted knowledgeable and intelligent provider of solutions to mobility problems that arise in the pursuit of the Customer's daily lives:

- ☐ its main product is mobility problem-solving
- its main production asset is mobility know-how



A DIGITAL RAILWAY IS A
"CONGNITIVE HUB" PROVIDER OF
MOBILITY SOLUTIONS





#### Technology gives us new capabilities



<u>AWARENESS</u>: the ability to detect and understand events, objects and context instances and patterns, including specific Customer requirements



<u>ADAPTIVE RESPONSIVENESS</u>: the ability to create and deliver a response appropriate to specific situations by leveraging all available resources, including from external sources



<u>LEARNING</u>: the ability to recognize successful responses to recurring problems and to reuse them





## Research is essential

 Innovation is about the extension of what we know, not just of what we can















