

# "Innovation and training, tools for optimal intermodality"



# What is the Escola?



## Reference training center in intermodal transport and sustainable logistics

*Objective:* To provide experiential learning on intermodal transport and be the “test lab” of the students of Transport and Logistics, International Trade, Supply Chain Management, among other related studies. To change the point of view in the way they are learning.



### WHERE?

Vessels, terminals and trains become the facilities where courses take place.



### WHY?

Successful training methodology allows students to retain at least 90% of the content.

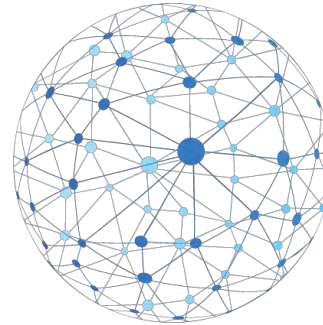


### FIGURES

More than 1.300 students per year with an average qualification of 4,2/5.

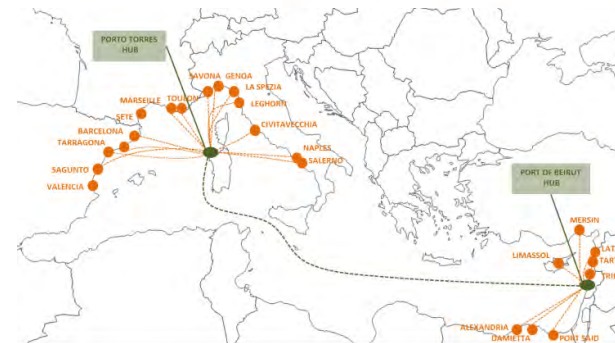
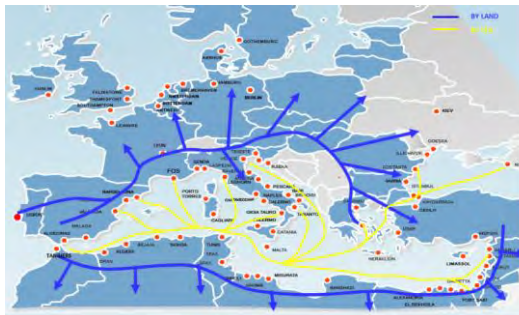
# What Is Going On?

## The Network Effect

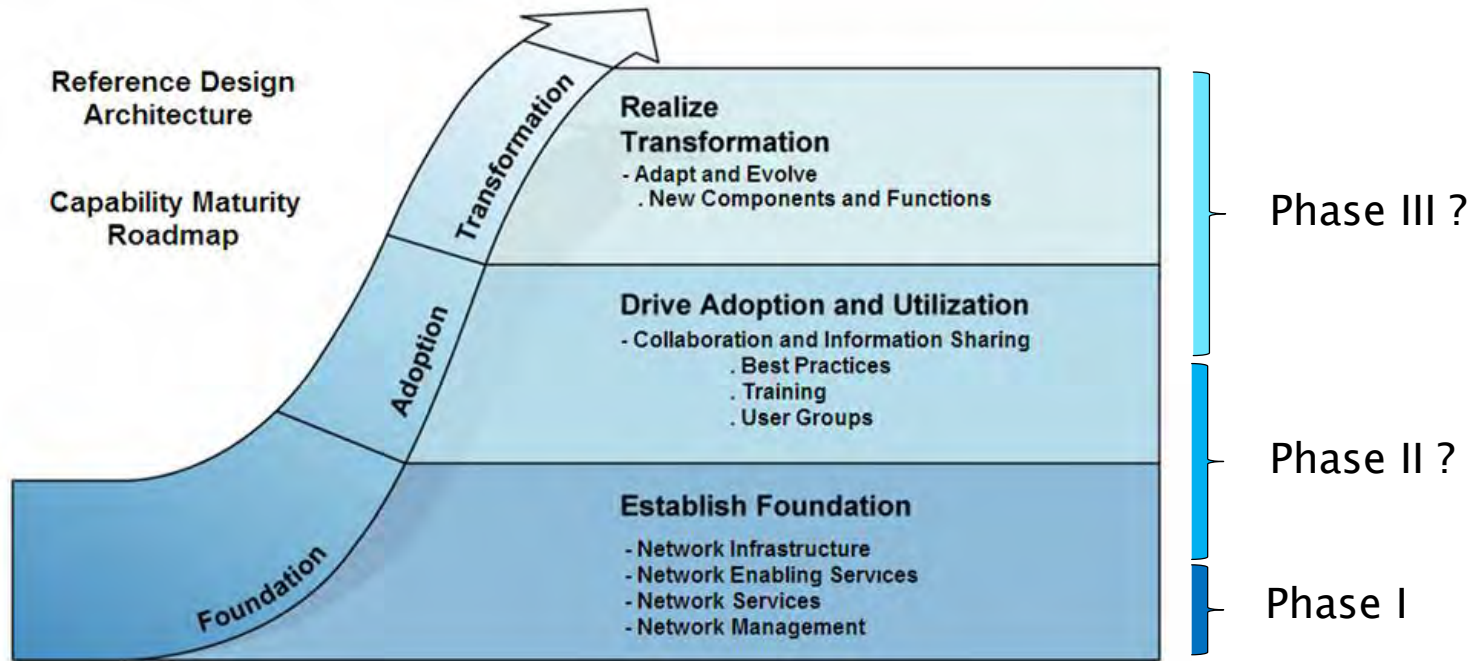


### The Network Effect

Originally conceived as a way to sell more Ethernet cards, Metcalfe's Law postulates that the value of a network is proportional to the square of the number of users. In this essay the author wonders whether his law applies to other networks—namely, neurons in the human brain and transistors in supercomputers.



# What We Need To Build A Network?



"THE SECRET OF CHANGE IS TO FOCUS ALL OF YOUR ENERGY, NOT ON FIGHTING THE OLD, BUT ON BUILDING THE NEW."

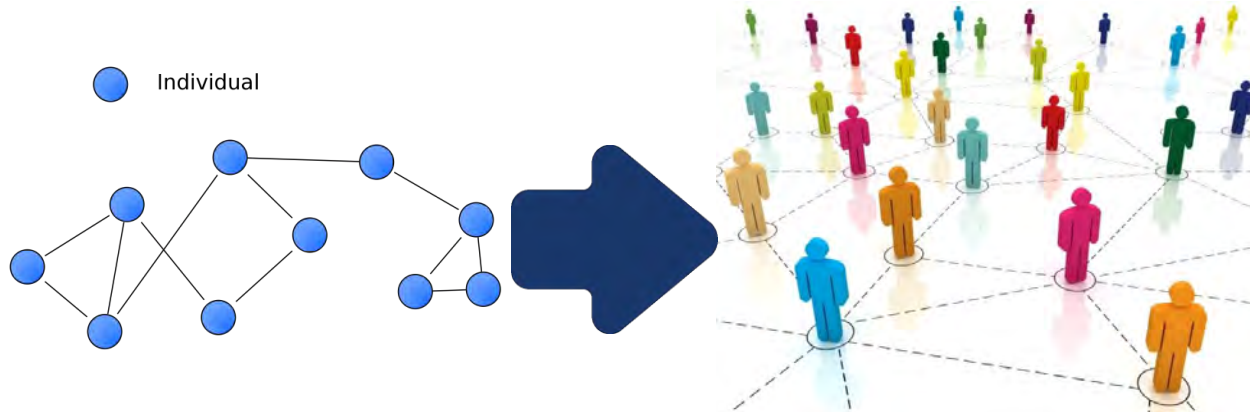
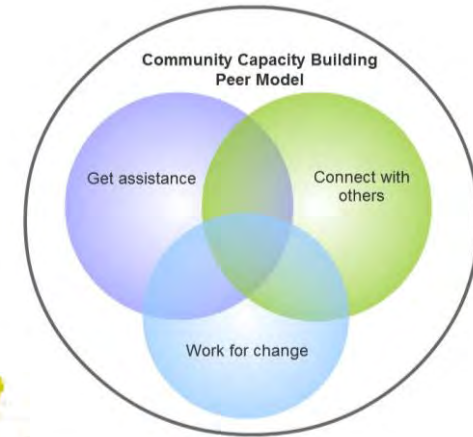
- SOCRATES

# From Line Operators To Network Operators



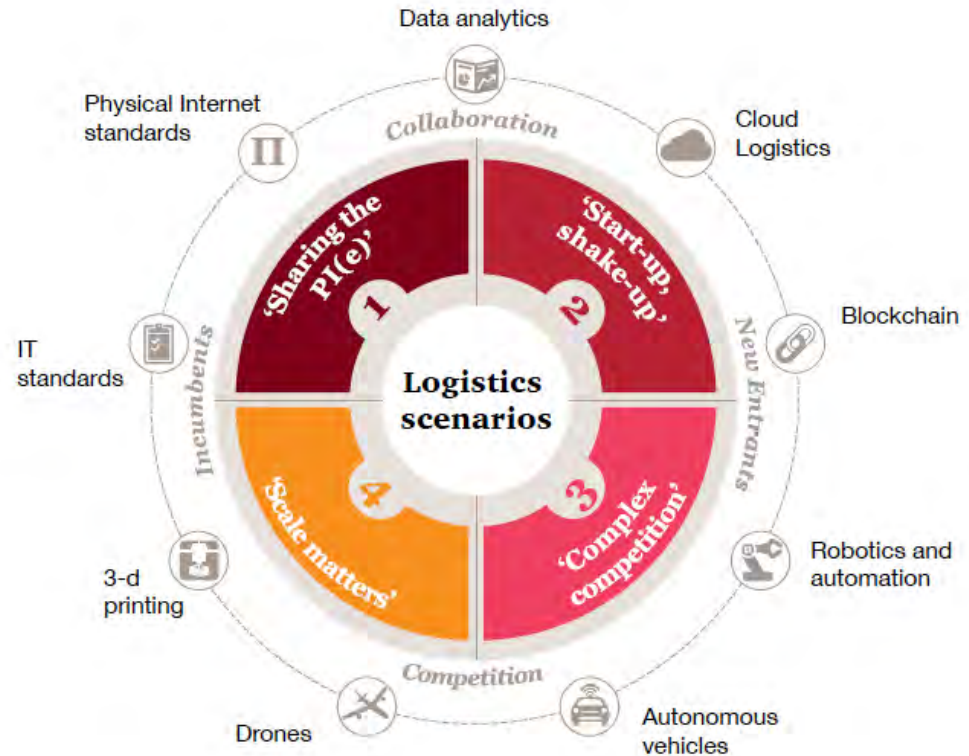
# From Ports Operators To Port Community Members

**Community Capacity Building** is a conceptual approach to development that focuses on understanding the obstacles that inhibit people, companies and public administrations from realizing their development goals while enhancing the abilities that will allow them to achieve measurable and sustainable results.



# New Scenarios, New Skills

- Physical Internet (based on the Io<sup>2</sup>)
- IT standards
- Data analytics
- Cloud
- Blockchain
- Robotics & automation
- Autonomous vehicles
- UAVs / Drones
- 3-d printing



cost efficiency

agile and flexible cultures

dynamic pricing

new technologies

asset productivity innovation

digital fitness

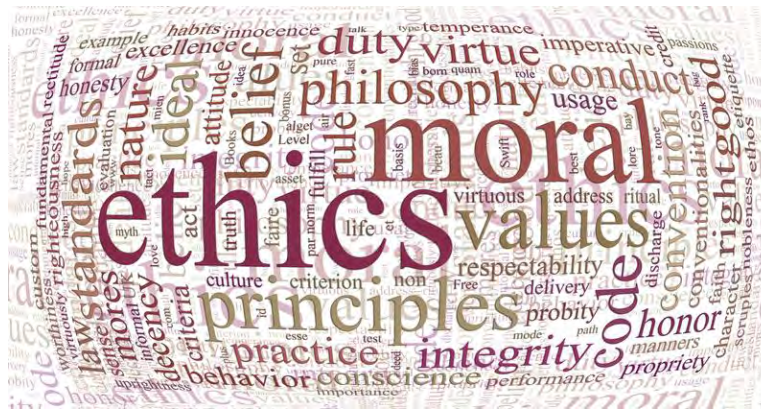
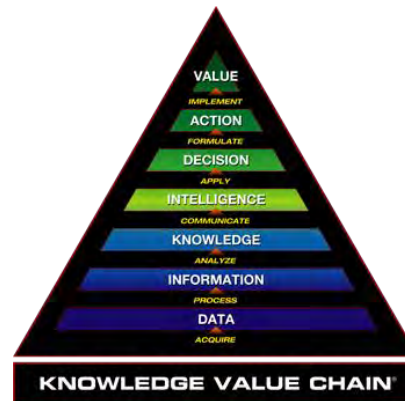
The future of the logistics industry – 2016 PwC

# Train To Know, Train To Change

Environmental Approach

Technical and IT knowledge

Teamwork skills



# Neuro-linguistic Programming- NLP



# New educational models



**Book**



**Lecture**



**Simulator**



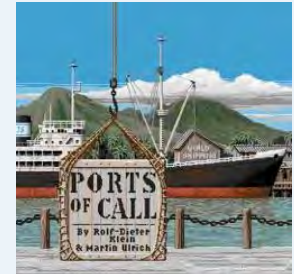
**Virtual reality**



**Reality**

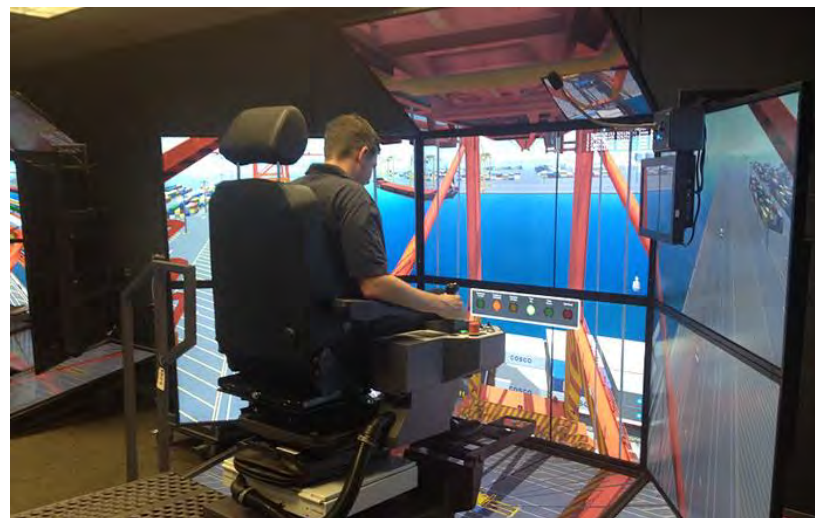


**Narrative transportation**



**Gamification**

# Simulators

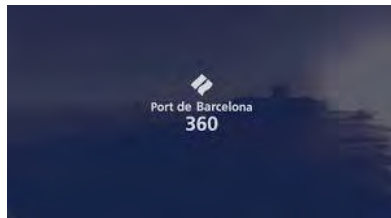


## ★ Virtual reality

- Immersion into virtual reality (VR) is a perception of being physically present in a non-physical world. The perception is created by surrounding the user of the VR system in images, sound or other stimuli that provide an engrossing total environment.

## ★ Perception

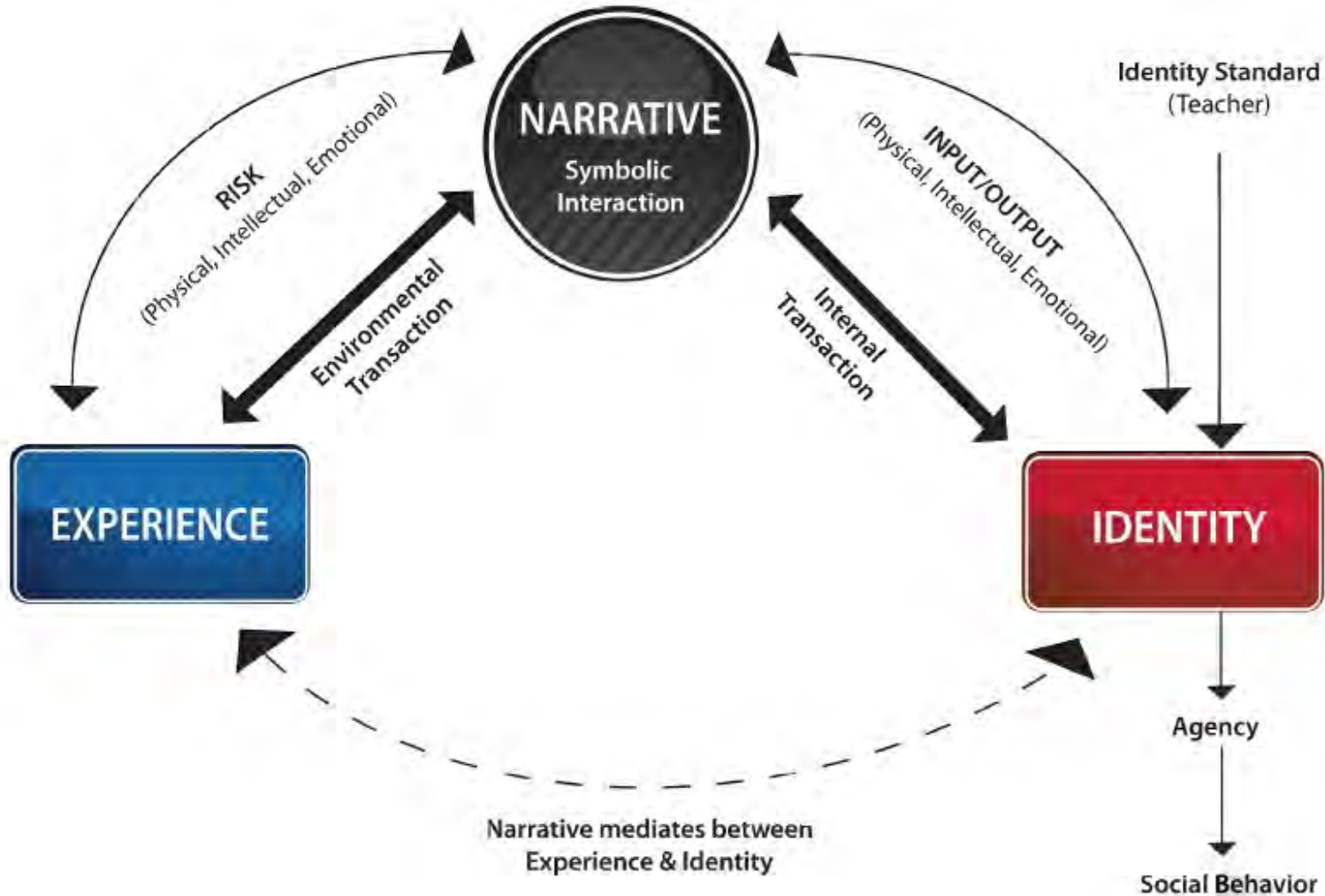
- To create a sense of full immersion, the 5 senses (sight, sound, touch, smell, taste) must perceive the digital environment to be physically real. Immersive technology can perceptually fool the senses through:
  - Panoramic 3D displays (visual)
  - Surround sound acoustics (auditory)
  - Haptics and force feedback (tactile)
  - Smell replication (olfactory)
  - Taste replication (gustation)



- ★ **Narrative transportation theory** proposes that when people lose themselves in a story, their attitudes and intentions change to reflect that story. The mental state of narrative transportation can explain the persuasive effect of stories on people, who may experience narrative transportation when certain contextual and personal preconditions are met.
  - Narrative transportation occurs whenever the story receiver experiences a feeling of entering a world evoked by the narrative because of empathy for the story characters and imagination of the story plot.
  - It's an incredibly powerful experience that can change how we see the world. Since narrative transportation's conceptualization, research has demonstrated that the transported "traveler" can return changed by the journey.
  - Narrative transportation can cause affective and cognitive responses, beliefs, and attitude and intention changes.

<https://juliaparra.com/2015/08/07/an-effective-stemc-model-of-teaching-and-learning-what-is-the-role-of-geography-in-this-model/>

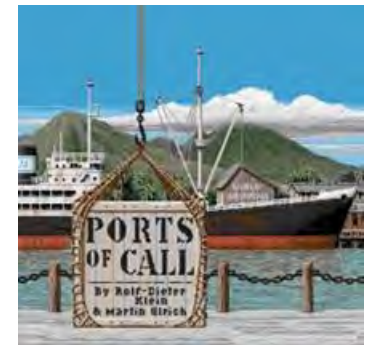
# Transportation theory



Presented August 8, 2015 by: Julia Parra, New Mexico State University, New Mexico Geographic Alliance and Karen Thomas-Brown, University of Michigan-Dearborn, Michigan Geographic Alliance

## ★ Games have some distinctive features which play a key role in gamification:

- users are all participants;
- challenges/tasks that users perform and progress towards defined objectives;
- points that are accumulated as a result of executing tasks;
- levels which users pass depending on the points;
- badges which serve as rewards for completing actions;
- ranking of users according to their achievements.



## ★ Software tools for gamification

- There are many tools for gamification. Some of them are web-based (cloud services) and do not require installation of special software and allow access at any time and from any location. Among the most popular gamification tool are: Socrative, Kahoot!, FlipQuiz, Duolingo, Ribbon Hero, ClassDojo and Goalbook.
- BadgeOS™ and its add-on BadgeStack is a free plugin to WordPress that automatically creates different achievement types and pages needed to set up badging system.
- Mozilla Open Badges Project is a project which goal is to enable the identification and recognition of acquired knowledge and skills of students outside the classroom – results of informal learning. Via Mozilla's Open Badges project anyone can issue wins and display badges through shared technical infrastructure (Mozilla Open Badges).

