



ITT Report 2018

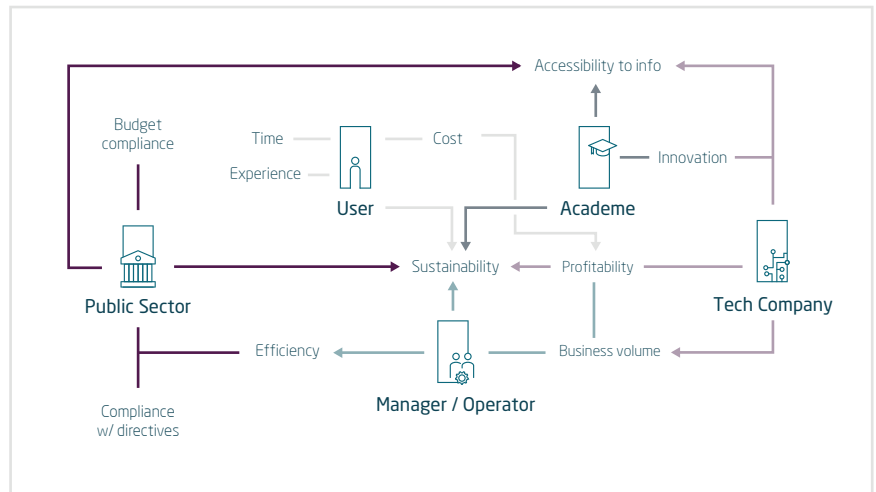
Indra Transportation Trends Report

Executive Summary

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Stakeholders

The main protagonists and promoters of the transformation, their objectives and common and particular interests that generate the trends and mobility scenarios of the future. These objectives allow the formation of trends, and these feed back the own objectives of the stakeholders as new mobility scenarios are reached.



Environment

Main contour conditions responsible of the arousal of trends, and which accelerate or facilitate their development. In the future, the disruptive technologies of today and the sectoral movements that are now developing will form a new environment, which in turn will give rise to new trends and mobility scenarios.



Trends

Development of the four major trends that are transforming the sector, and that are driving new mobility solutions for the future.

Virtual Me (User - Focused)



The passenger today, more and more, wants to decide. She wants to have total control of her trip, to know the most relevant information in real time, without technological barriers that mean unnecessary discomfort. And, above all, she wants a total personalization of her travel experience, which is adapted to her preferences and needs of the moment (time, experience, cost and sustainability).

Integrate, Share & Collaborate



Accessibility and Big Data, together with many adjacent technologies, have triggered the rise of the so-called sharing economy. The transport users want to be more interconnected, sharing information and assets that would otherwise be wasted.

Security & Sustainability

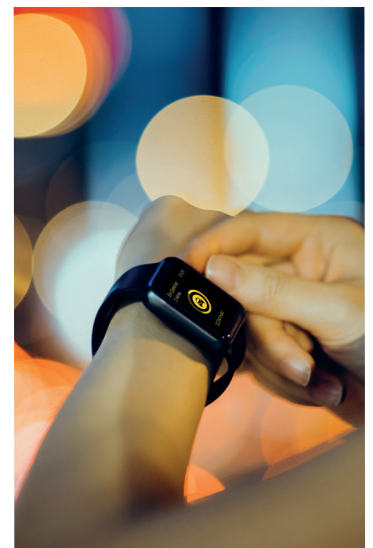


Security occupies a preferential and growing place among the concerns of all the stakeholders. Not only because the danger has become global (terrorism), because the threats are increasingly unpredictable (cybersecurity). More and more people are sensitive to environmental risks derived. A more sustainable, efficient and cleaner transport is already a fundamental element of the agendas of many agencies, governments and institutions.

Person/Machine Collaboration



The ability to learn from the environment and the effects of the decisions of millions of users, favours on the one hand a better scope for the decision making of each person. And, on the other, the possibility that certain critical decisions are taken instantaneously by the systems themselves, providing a new scenario of collaboration between persons and algorithms.



Smart Mobility

Interviews

The sector speaks through interviews carried out with different stakeholders, operators, companies and academics.

Technologies



Machine Learning



B.I.M



Blockchain



Augmented reality



Cloud & Fog Computing



Cybersecurity



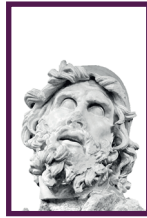
IoT & Big Data



Connectivity 5G



Automated and unmanned vehicles



Mission Ulysses

A solution for urban intermodality

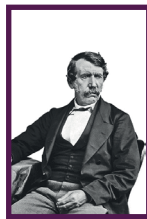
Global and integrated solution for urban mobility. From a single application, the user can configure her profile, choose her different means of transport, access each one indistinctly and pay at the end of the month according to the use, in addition to accessing "prizes" for a more sustainable use of the different media.



Mission Amelia

Intelligent urban traffic management system

From the perspective of an urban transport operator, integrated route management system, centralised and connected with user and traffic information, with machine learning for resizing routes in real time and the possibility of generating new ad hoc routes for users of other means of transport.



Mission Livingstone

Mobility solution based on the connected car

MaaS application scenario for car users, including modular pricing solutions, payment, real-time feedback on road conditions, etc. Through the connected car, the user experience changes radically in his travels by highway.



Mission Marco Polo

Intelligent freight transport management platform

Goods management integrated platform, with total traceability based on Smart Contracts, load optimisation in trains and trucks, connected with traffic data in real time, and distribution that minimizes the environmental impact.



Mission Shackleton

Predictive maintenance of infrastructures

Predictive maintenance scenario of an infrastructure, from the design in BIM to the collection of relevant data to establish maintenance KPIs, through a systematic review with UAVs and Augmented Reality for the training of operators and remote assistance in delicate repairs.

Missions

User stories that describe scenarios of mobility of the future, illustrated with a name that takes root in the great travellers of the past, and that would respond to the trends of the sector supported by new technologies.

Request the full report here:



Conclusions

A look at the future of sustainability to continue building the new mobility scenarios.

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