The transport industry has adopted many aspects of digitalisation in the past two decades.

Passengers now have access to a huge amount of data which they can use to book travel, track their journey and plan their next one. Electronic documents make the journey much simpler. And the Ubers of this world are very popular with consumers, though perhaps less so with the industry.

It isn’t just data. It’s also the tools we all have, particularly smartphones. Everything is much easier now.

For businesses, digitalisation means huge increases in efficiency, and therefore reducing costs. A good example is digital TIR. It has been facilitating trade across borders and transport modes for many years. Digitising the process provides increased security, as well as transparency between transport operators and customs authorities.

Digitisation simplifies payments and removes the need for manual money handling, which increases transparency and reduces fraud. Transport operators now have full visibility of their fleets, drivers, and operations thanks to live monitoring, which means more efficient planning and better intermodal connectivity.

And there’s more in the pipeline. Vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) data sharing have significant potential, including collision warning, vehicle automation, and vehicle platooning. Blockchain and the Internet of Things also promise more efficiencies.

“Digitalisation is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities.”

Gartner
Digitalisation might have been around for some time, but in some ways we’re only at the beginning and there’s a long way to go.

Transport is to a large extent still based on paper documents including consignment notes, customs declarations, vehicle registration, roadworthiness and authorisation documents.

All of these could easily be digitised, and regulators are mandating that in some places:

• Europe: electronic freight documents and digital tachographs
• Brazil and Mexico: electronic invoices and consignment notes
• US: electronic logging devices
• Russia: digitalisation of all customs declarations by 2020

Digitalisation provides multiple benefits, specifically in increasing efficiency, and it is important to remember digitisation does bring up other considerations:

• cybersecurity
• digital identification and signatures
• data privacy, control and ownership
• competition and unfair competition
• liability tracing

IRU has developed three clear principles for the digitalisation of the industry:

Safety
• technical standards for safety-related digital features must be harmonised and interoperable
• all digital solutions for the driver must not distract the driver from the primary task of operating the vehicle
• highly automated or fully autonomous vehicles must preserve the safety of other road users

Security
• cybersecurity must be ensured by all providers throughout the industry
• data privacy must be in line with relevant national, regional, and international regulations
• data sharing with relevant authorities must be secure

Sustainability
• digital solutions must be used in line with applicable laws and new regulations should be developed to cover new business circumstances
• governments need to establish legal frameworks for the latest digital solutions
• governments and authorities should provide incentives to data owners to share the data between industry stakeholders and with authorities