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CHEP backs Modulusha project in the Physical Internet



Logistics sustains our lifestyle and businesses activities. Physical objects are moved in containers, stored, realised, supplied and used throughout the world, allowing the globalisation of world trade. But there is still a harsh fact to be solved due to the inefficiency and unsustainability of the processes from an economic, environmental and social perspective.

By Victor Leftwick, director Business Solutions & Innovation, Sales, CHEP

Despite all efforts already undertaken to improve transport technologies, CO₂ emissions are still growing. Trucks and containers are often half empty at departure, with a 42,6% of average utilisation, and vehicle and containers often return empty, or travel extra routes to find return shipments (25% of travel). Besides this, multimodal routes are most often time and cost inefficient and risky due to badly designed interfaces.

To overcome this Global Logistics Sustainability Grand Challenge, the 'Physical Internet' is an international initiative that proposes a new efficient and sustainable logistics system. It is defined as an open global logistics system founded on physical, digital and operational interconnectivity through encapsulation, interfaces and protocols. This initiative is based on applying the Digital Internet metaphor to enable such an open network of networks for physical objects like the one employed in the World Wide Web. This new concept drives to high-performance logistics centres, movers and systems, making it seamless, easy, fast, reliable and cheap to interconnect physical objects through modes and routes, with an overarching aim towards universal interconnectivity.

The Physical Internet

Many years ago (say around 1990) we were in the midst of a technology revolution, but perhaps the most exciting of the developments was credited to Tim Berners-Lee, a British scientist best known as the inventor of the World Wide Web. The www phenomenon enabled the transition from a world of unconnected servers and computers to what we now know as 'Information Superhighway' or the 'Internet', an open and interconnected distributed network collaboration that forever transformed industries, economies, culture and society at large.