

Logistics 4.0: Outlook of the most promising LPWAN IoT market

<https://marketpublishers.com/r/L2618BC363F9EN.html>

Date: June 2020

Pages: 73

Price: US\$ 2,750.00 (Single User License)

ID: L2618BC363F9EN

Abstracts

This report explores the market opportunities for solutions based on new technologies (IoT, augmented and virtual reality, blockchain, artificial intelligence) in supply chain management and logistics.

It describes the major industry players and their business models as well as the main market trends.

Estimates for the size of the connected logistics market is also provided in the study:

breakdown by connectivity technology

breakdown by use case

breakdown by region

Contents

1. EXECUTIVE SUMMARY

2. DEFINITIONS AND CONCEPTS

3. IOT TECHNOLOGIES FOR LOGISTICS

- 3.1. IoT technologies for connecting every object
- 3.2. Cellular technologies
 - 3.2.1. 2G, 3G, 4G
 - 3.2.2. The development of 5G: Massive IoT and URLLC
- 3.3. LPWAN technologies
- 3.4. Satellite technologies
- 3.5. Identification technologies
- 3.6. Short-range technologies
- 3.7. Automatic Identification System (AIS)
- 3.8. Emerging technologies in logistics
 - 3.8.1. Autonomous trucks
 - 3.8.2. Blockchain for logistics
 - 3.8.3. Augmented reality (AR) and virtual reality (VR)
 - 3.8.4. Robotics in logistics
 - 3.8.5. Drones

4. USE CASES

- 4.1. Use case descriptions
 - 4.1.1. Parcels
 - 4.1.2. Shipping containers
 - 4.1.3. Pallets and carts
 - 4.1.4. Forklift trucks
 - 4.1.5. Ships
 - 4.1.6. Trains
 - 4.1.7. Aeroplanes
 - 4.1.8. Trucks
- 4.2. Summary of key use cases
- 4.3. Outdoor logistics
- 4.4. Indoor logistics

5. ECOSYSTEM

5.1. The connected logistics value chain

5.2. Supply-side players

5.2.1. Equipment manufacturers (Case studies: Michelin Solutions, Traxens)

5.2.2. IT solutions and platform providers (Case study: Siemens)

5.2.3. Vehicle manufacturers

5.2.4. Telecom operators (Case studies: Vodafone, AT&T)

5.3. Demand-side players

5.3.1. Logistics operator and transport company strategies (Case studies: Maersk, DHL, CMA CGM)

5.3.2. Strategies used by industry players and other asset owners (Case studies: Schneider Electric, Groupe PSA – GEFICO, Lufthansa Industry Solutions, Toyota Material Handling)

6. MARKET DYNAMICS

6.1. Major themes in the future of logistics

6.2. Drivers and barriers to development of connected logistics

6.3. Opportunities for logistics players

7. MARKET EVALUATION

7.1. The connected logistics market by technology

7.2. The connected logistics market by use case

7.3. The connected logistics market by region

List Of Tables

LIST OF TABLES AND FIGURES

3. IoT technologies for logistics

Connected lorry tracking system

Cellular connectivity (4G) for trains

5G for IoT calendar

Architecture of a wireless private network

Example of access tracking solution based on LTE-M by NimbLink

An asset tracking solution based on LTE-M by AT&T

Global LoRaWAN coverage, July 2019

Illustration of satellite-based ship tracking solutions

Suitability of satellite solutions for fleet tracking by type of business

Identification technologies used in logistics

Warehouse logistics using RFID tags

Indoor asset tracking (Wi-Fi) using UWINLOC

How AIS works for ship identification and tracking

AIS services and potential customers

Vera autonomous trucks by Volvo

Players in the self-driving truck field

Timeline for adoption phases of autonomous trucks

Truck remote control system from Starsky Robotics

Transition from the traditional ecosystem to supply chains based on blockchain

Eyeseer inventory drone used by L'Oréal

Parcelcopter delivery drone from DHL

Prime Air drone from Amazon

4. Use cases

Connectivity to track parcels outdoors via BICS

Connected tracker for tracking containers developed by Traxens for MSC FLAMINIA

A connected pallet solution

A Wi-Fi compatible autonomous cart by Alog Tech

Connectivity challenges for autonomous ships

A connected train solution by Bosch

Example of a local LoRa network onboard a train

Asset tracking solutions for air transportation (FedEx)

Digital cockpit solution by Thales

Elements of a connected truck solution

Cost savings from using Verizon's fleet management solution

Cost savings from fleet management solutions

Warehouse connected logistics

5. Ecosystem

The connected logistics value chain

Fleet management devices by Webfleet Solutions (previously TomTom Telematics)

Connected tyre by Continental with connectivity by Vodafone

Trailer management solution by Michelin

Michelin's digital services and connected product range

Maritime freight network architecture

Container contents monitoring with proprietary connectivity technology

Device attached to the container door

Traxen's sensor device

Fleet management platform by IBM

Asset tracking equipment and software by Sensolus

Dynafleet – fleet management solution from Volvo Trucks

Fleet Optimise end-to-end solution for fleet management by Telefonica

Container tracking solution for CIMC by Telenor

Complete IoT solutions for asset tracking available on the AT&T Marketplace

Positioning of various telecom operators in the connected logistics market

Asset tracking solution by Vodafone and IBM

Fleet management solution by Vodafone

A device for container connectivity by AT&T

Price of the LTE-M outdoor asset tracking device by AT&T

Asset Management Operations Center asset tracking SaaS software by AT&T

Insurance service for shipped goods by DHL

Electronic service for sharing logistics documentation by CMA CGM

Remote container management service

EDI – electronic data interchange solutions by Maersk

Maersk's container tracking application dashboard: mobile and web versions

RFID tracker by DHL SmartSensor

Tracking solution

Resilience360 real-time incident monitoring platform by DHL SmartSensor

Container management service by CMA CGM

Traxen's Smart Containers that CMA CGM uses for its tracking service

Guarantee service for shipped goods by CMA CGM

Logistics Platform by Lufthansa Industry Solutions

6. Market dynamics

Logistics Platform by Lufthansa Industry Solutions

5. Market evaluation

Installed base of connected objects in logistics, by technology, 2019-2025

Installed base of connected objects in logistics, by use case, 2019-2025

Installed base of connected objects in logistics, by region, 2019 and 2025

I would like to order

Product name: Logistics 4.0: Outlook of the most promising LPWAN IoT market

Product link: <https://marketpublishers.com/r/L2618BC363F9EN.html>

Price: US\$ 2,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/L2618BC363F9EN.html>