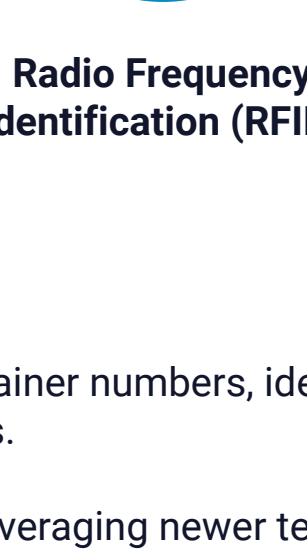


Latest Technologies That Have Hugely Impacted International Trade

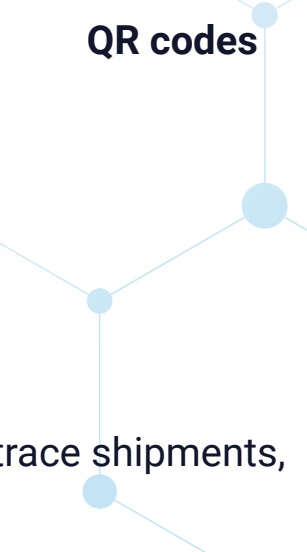
Technological disruption is not new to international trade.



Optical Character Recognition (OCR)



Radio Frequency Identification (RFID)



QR codes

These innovations read container numbers, identify and trace shipments, and digitize trade documents.

But today's companies are leveraging newer technologies to unlock better opportunities for goods and services along the logistics chain.

Critical Digital Trends to Disrupt Global Trade



Artificial Intelligence (AI)

Several businesses have deployed AI in:

- ✓ Autonomous vehicles
- ✓ Intelligent robotics
- ✓ Automated supply chain management

With AI, companies can:

- Enhance trade shipping routes
- Oversee vessel and truck traffic at ports
- Obtain real-time translation in different languages during verification and certification processes

Automation

Autonomous Robots are now being used for order fulfillment in a warehouse management system.



Over **4 million** robots will be installed in more than **50,000** warehouses globally by 2025.

– ABI Research

Automation in ports and shipping continues to drive innovation.

- Port of Rotterdam developed a digital twin of its port based on sensor data with the goal of autonomous ships by 2030
- Dubai's DP World deployed autonomous boats
- Australia and Singapore's ports have fully automated terminals
- China has unmanned intelligent port solutions like driverless port container trucks

Blockchain

Also called Distributed Ledger Technology (DLT), it is used to deploy supply chain solutions.

Blockchain technologies to increase the global economy by **US\$ 1.76 trillion** in 2030.

– PwC

Uses of Blockchain:

- ✓ **Smart Contracts.**
Blockchain establishes an immutable record and trail and streamlines the complex trade processes, including bill of lading, letter of credit, and other customs clearance documents.
- ✓ **Track and Trace**
Blockchain makes it possible to track and trace a product's status and location in real time and provide a history of its origin.

Cloud

Cloud services are today's new normal, with the surge in online services adoption during the pandemic.



Gartner forecasted a 22.1% growth in cloud services spending in 2022.



Internet of Things (IoT)

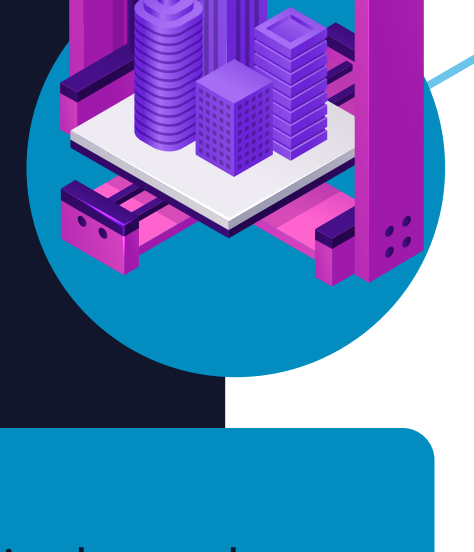
IoT provides accurate visibility across the supply chain using sensors to collect and transmit real-time data concerning a shipment's physical condition.

With IoT and AI, businesses can:

- Identify bottlenecks
- Produce accurate status updates
- Facilitate predictive analysis and contingency planning
- Optimize transit speed, cost, and security

3D Printing

3D printing helps address supply-demand imbalances and delays in well-established supply chains.



There is a **58%** increase in the trade of hearing aids using 3D printing.

– World Bank

3D printing is gaining momentum for

- ✓ Prototypes
- ✓ Replacement parts
- ✓ Toys
- ✓ Shoes
- ✓ Medical devices

With these cutting-edge technologies, global trade can be made more efficient, far-reaching, and cost-effective.



Level Up Using SAP Solutions

It is time to level up your supply chain processes by leveraging a next-gen foreign trade solution engineered by an experienced vendor.

Ropaar uses SAP's proven on-premises and cloud solutions to help businesses keep up with the disruption of new technologies.

- **SAP Global Trade Services (GTS)**
With SAP GTS, you can drive consistency across global operations, elevate global trade in your organization, automate trade compliance, and drive bottom-line savings.
- **SAP Logistics Business Network**
SAP LBN leverages advanced technologies such as Cloud and Blockchain to optimize traceability and freight collaboration.
- **SAP International Trade Management**
With SAP International Trade Management, companies can optimize on-time delivery performance, facilitate compliance and risk management costs, and minimize overall supply chain planning expenses.
- **SAP Watch List Screening**
With SAP Watch List Screening, you can optimize screening compliance, reduce supply chain disruptions and delays, and minimize the cost and effort of third-party due diligence.

Let Ropaar help you mitigate the impact of these new technologies on your business. Contact us to learn more.

