

Three Benefits of Digital Transformation for Transportation Management Services

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Logistic complexities and service-level expectations have increased dramatically today and supply chains are expected to be more nimble and frugal to beat the competition. In parallel, as a result of port closures, increased supplier, and product demands, natural disasters and similar changes, supply chain failures are increasing, damaging brand names and profit margins.

As risk and volatility increases and global transportation options evolve, sophisticated transport management services are no longer an option - they are a necessity. This need is spurring the growth of the global transportation management market which is expected to grow from USD 78.20 Billion in 2017 to USD202.14 Billion by 2022, at a CAGR of 20.9%. The accelerated growth is the changing face of the real-time economy which demands faster and timely execution of business processes.

Across industries but more so in the supply chain, logistics, and transportation industries, speed, timing, efficiency, and optimization are the crucial defining factors, achievable due to the adoption of digital technologies. With advancements in technology, capability and deployment methods, companies of all sizes, across industries and geographies, can quickly benefit from the value of active, optimized transportation management technology service.

Background

Transport Management Services (TMS) are mostly used by shippers (manufacturers, retailers, distributors, and wholesalers) or non-asset based, third -party logistics (3PL) organizations. They empower organizations to use a wide range of shipping modes including, road transport, private fleets, rail, intermodal, air, and ocean. TMSs help to manage freight sourcing, planning, execution, and settlement. Within the above components, they offer several subcomponents such as load matching and consolidation, routing, mode selection and so forth. TMSs have been able to help customers achieve efficiencies by getting their products faster and cheaper to wherever they need to go.

Integrate vertical and horizontal value chains. Develop new digital business models through data analytics. Manage increasing cost pressures. These new requirements – which are vital to remaining competitive – are fundamentally transforming the transportation and logistics industry.

Data from a recent global survey¹ shows how transportation and logistics companies are responding to these challenges through digital transformation and measuring the business impact of their efforts.

Embracing digital transformation

- **83%** defined a new vision for a digital enterprise
- **83%** embraced digital technologies to redefine how they run their businesses
- **87%** are hiring the right talent
- **62%** are disrupting their industry with advanced digital initiatives

Adopting key technologies and practices

- **88%** implemented agile; **31%** have scaled it across the company
- **91%** using DevOps; **43%** have integrated it into their IT culture
- **69%** using APIs for development; **38%** using them to drive revenue
- **84%** report that identity-centric security is critical to the business

TMS companies are expected to manage several challenges to be considered as an alternative to tried and tested methods. For example, inter-modal transportation requires complex sequences involving trucks, ships, and planes. This seamless transition will definitely help to enhance the speed of delivery while saving money. TMSs should offer options to maximize inter-modal transportation for which they need to have strong knowledge of international currencies as well as border treaties, hot spots, taxes, regulatory laws and governmental requirements. They should offer information on risky areas so companies, and offer adequate information on the largest single cost of all supply chain activities, i.e. transportation management. Many TMSs have traversed past these hurdles to offering the solutions that their customers look for, thanks to new digital technologies designed to drive efficiencies.

¹Coleman Parkes Research, “Keeping Score: Why Digital Transformation Matters”, June 2016

Three Benefits of Digital Transformation

1

Digital Freight Matching

TMSs have over the years relied on their existing systems which can range from manual entries to balancing delivery windows with costs. However, the pressure for tighter, faster and more deliveries combined with technology innovations such as machine learning, artificial intelligence, and automation are reinventing this space. An emerging development is a category of on-demand, software solutions referred to as Digital Freight Matching (DFM). DFM is gaining traction because it addresses key pain points for both shippers and drivers. DFM lets shippers directly and almost immediately find drivers with the capacity to transport their truckload, partial truckload, and less-than-truckload freight on the right types of trucks on the dates and routes they need. Shippers get competitive and transparent rates upfront and can track in-transit and the delivery details so they always know the status of their shipments.

DFM eliminates protracted processes and additional costs in working through middlemen. Brokers, for example, could charge nearly 50 percent of delivery cost per load as commission, according to a March 2016 report in *The Economist*.

DFM offers truckers information such as 'know-before-you-go', and faster payment as it enables drivers to upload proof-of-delivery confirmations in real-time via a smartphone camera. Shippers benefit by getting better freight rates because truck drivers using DFM have lower working capital requirements.

2

Seamless Connectivity

Rapid globalization and expansion into new sourcing and selling regions are transforming supply chains. Transportation methods that worked in the past are no longer viable for many companies. Now, companies are using multiple partners and logistics service providers. They are making decisions based on data from several transportation management applications. TMSs understand that tracking shipments in isolation from other supply chain functions create blind spots that have a real impact on performance and customer service. To remedy this, they are adopting cloud-based systems that bring every transportation partner and application under a single control layer. The increased control and visibility into shipments and analytics lead to shorter lead times, quicker reaction to disruption, and fewer costs being passed on to the customer.

Transportation management systems being hosted in the cloud is fairly new to the shipping industry. But the fact is, the cloud offers unique benefits to shippers, vendors, customers and logistics providers. Traditional challenges, like managing updates, integration between different systems and multi-location deployment, can be overcome through cloud-based TMS. The basic benefit and reason for the cloud-based deployment of a TMS lies in storing information in a central location. This allows the provider to manage updates without disrupting user access. In turn, user access can be maintained and expanded through cloud-based scalability, ensuring all users can access the system without interruption. New

Factors such as the need to reduce costs, and improve productivity, efficiency and customer service are driving the growth of the market through 2021. The Americas region is expected to continue to lead the global TMS market, followed by EMEA, with the APAC region expected to have the largest growth.

features can be deployed automatically, eliminating traditional constraints on internal IT departments and remote customer service centers.

Cloud-based TMS eliminates the need to store equipment, servers, and software in one building. Also, cloud-based solutions require less investment to maintain and deploy, translating into decreased adoption costs for new users. This savings leads to direct cost reductions for users. Going a step further, the TMS can be accessed from any internet-enabled device, including mobile technology.

Historically, TMSs were out of reach for companies moving less than \$100 million in freight, but cloud-based systems give everyone a fair chance at the best rates.

Cloud computing for TMS comes with cyber security and TMS solutions ensure that they protect user information.

Finally, cloud-computing uses real-time data to process analytics and provide superior insight. For the applications of a TMS, the connected nature of the cloud uses real-time data in algorithms and cross-sectional analyses to define the most elusive of metrics and key performance indicators (KPIs). Furthermore, the expansion capacity of the cloud redefines forecasting standards to generate the most accurate and responsive KPIs for your business.

Cloud-based TMS solutions are an integral part of modern shipping, promoting efficiency, cost reduction and a better understanding of critical supply chain functions.

3 Carrier Compliance & Rate Management

Contracts are core to transportation management and organizations leverage negotiated lanes and preferential terms through a centralized electronic database that provides access and innovation to the transportation management team.

TMSs provide rich contract management functionalities to handle multimodal agreements flexibly. They are easy to set up and offer role-based access making it easy to handle thousands of contracts and millions of rate lines in real time. There can be further customization by defining geographies, transit times dates and notifications.

Also, contract management is important to manage complex base rates, surcharges, and inland rates. It helps logistics and transportation companies to centralize disparate rate management into a single, global system. It helps customers to manage multiple rate sources and customized calculations including analysis of customer's private data, market and third-party rates. Rate analysis helps in pricing and data management and helps to make insights visible.

Trigent's offering to the Transportation & Logistics industry

Trigent helps Transportation Management Software (TMS) companies be more competitive. At Trigent, we enable "logistics-as-a-service" business models for TMS providers. Our services facilitate flexible integrations with other key business processes to optimize all operations. Our cloud development and digital transformation services provide flexibility and scalability, as well as standardized and harmonized processes across the whole organization, which is especially important for those Logistics Service Providers (LSP) or carriers who have grown through acquisitions, and currently rely on a patchwork of legacy systems.

Trigent helps Fleet Management Companies modernize and optimize their operations, comply with ELD and other regulations, develop, maintain and test on-board equipment (OBE) software and integrate IoT into their operations.

About Trigent

Trigent is a CMM Level-4 technology solutions company with its US office at Southborough, MA, and India office at Bangalore. Trigent provides comprehensive solutions for business problems via outsourced software product and applications design, development and quality assurance. Trigent serves customers like Independent Software Vendors (ISVs), enterprises and SMBs in the High Tech, Healthcare, Education, Ecommerce and Manufacturing areas. Trigent's solutions help clients overcome budget, schedule and resource constraints.

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