

Trends in Logistics Technology

Insight into the critical technological developments and solutions that will shape the future of the logistics industry.





Ti Reports



Ti Consulting



Ti Conference

About Ti

Ti's Origin and Development

Ti is a leading logistics and supply chain market analysis company developed around five pillars of growth:

- Logistics Briefing
- Ti Market Research Reports
- Ti Insight portals
- Ti Consulting
- Ti Conferences and Training

Ti acts as advisors to the World Economic Forum, World Bank, UN and European Commission and have 14 years worth of providing expert analysis to the worlds leading manufacturers, retailers, banks, consultancies, shipping lines and logistics providers.

What Sets Ti Apart?

- · Globally recognised and trusted brand
- Global Associate Network provides a multi-country, multidisciplinary and multi-lingual extension to Ti's in-house capabilities
- More than fourteen years of knowledge delivery to global manufacturers, retailers, banks, consultancies, shipping lines and logistics providers
- Unique web-based intelligence portals
- Interactive dashboard
- On-going and comprehensive programmes of primary and secondary research

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This report is based upon factual information obtained from a number of sources. Whilst every effort is made to ensure that the information is accurate, Transport Intelligence Limited accepts no responsibility for any loss or damage caused by reliance upon the information in this report.



About the authors



Ken Lyon is Managing Director of Virtual Partners Ltd and has over 30 years of experience in the transportation industry.

Ken specialises in the use of advanced information systems to manage the operations of 3PL, 4PL and Lead Logistics Providers and their trading partner networks. Over the past few years he has helped start-ups concerned with supply chain technologies and before that, he spent 10 years as a Director and VP of information services at UPS, helping to establish its Logistics and supply chain services Group. Ken was recently appointed Chairman of the Board for an international logistics software group and also sits on the board of Ti. During the past 25 years, he has participated in conferences and conventions for the US Department of Defense, Government of Singapore, The JOC, Nikkei and many others. Ken is a Fellow of the Chartered Institute of Logistics & Transport and a member of the US OSD sponsored Highlands Forum.



As a graduate in International Relations, Alexander Le Roy brings a variety of knowledge and interest to his role as an Analyst at Ti.

Alexander joined the Ti research department in 2013. Since joining the company, he has contributed to 9 top selling Ti reports, in addition to the Global Supply Chain Intelligence portal. The breadth of his analysis includes content on logistics providers, logistics markets and supply chain software. Alexander has developed a significant body of work in the evaluation of log-tech start-ups, and holds a keen interest in the latest technological developments in the industry.

Ken Lyon and Alexander Le Roy have created this report to provide readers with insight into the opportunities (and disadvantages) presented by some of the information systems now emerging. Should you want to know more about Ti's existing research and analysis of technology in the logistics industry, or to commission a bespoke research project around the needs of your business, please contact Ti's Business Development Manager, <u>Michael Clover</u>.

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1.0 Introduction

2.0 Overview and definitions of core technology types

3.0 Moving from functional control to process control

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6.0 Technologies to watch







At Ti we have always understood the significance of technology in the transport and logistics sectors. In today's world it is not just there to support operations, in many cases it has become the operation. This is causing significant changes in the fundamental structure of the industry. As a result we see that many of our clients are trying to understand the implications of this, while at the same time trying to operate businesses in a very challenging commercial environment.

The objective of this document is to describe how sectors of the industry are using information systems to manage their operations, as well as how these solutions are evolving. Ti hopes that by clarifying the context in which many of the established solutions have been used, it can help people understand the opportunities (and disadvantages) presented by some of the solution sets now emerging.

Ti's primary goal is to try and identify the critical developments and solutions that will be transformational, or at least enable transformational capabilities for their users. We recognise that not every organisation can adopt transformational capabilities as fast as they might wish: issues of resources, culture and ongoing contracts are always factors that must be considered. However, Ti believes that it can act as a reference point for companies looking for some insight and perspective into what may seem to be a bewildering mix of nomenclature and choice.

Unlike many of Ti's <u>other reports</u>, this does not include an exhaustive review of every vendor in the market – there are numerous services already doing this. It does, however, reference

certain vendors, particularly interesting new entrants to the market and why they may be significant.

Ti has also highlighted critical global trends and made assumptions as to how they could evolve, potentially resulting in a fundamental shift in supply chain flows. Some of the developments taking place with e-commerce match this description and you will find Ti's conclusions in that section.

In concert with this document, Ti would also like to create, over time, a forum for discussion around many of the trends that develop around the impact of technology. To 'socialise' the discussion you might say. Ti is still exploring the best way to do this, given that numerous other platforms and services exist, but we think that it is vital that people have the opportunity to share, directly or anonymously, knowledge or experiences that would help others in similar positions.

Technology now underpins every aspect of global commerce. Ti will continue to identify and share its views on the critical initiatives impacting this industry. Ti hopes you see the value in its efforts and if not, please let us know where we fall short.

To find out more about Ti's technology capabilities and offering, visit the Ti website, or contact Ti's Business Development Manager, Michael Clover.

How can Ti help you with Technology in Logistics?

Ti

Content:

In what ways can Ti help?:

- What is the risk to listed market leaders from disruptive technologies?
- Which companies have the most resilient business models and which are threatened by new market entrants such as Amazon?
- How defensive are freight forwarding, contract logistics and road freight models and where are they in terms of the economic cycle?
- What questions should you be asking senior management about their businesses and market space?

Logistics Briefing

What does Ti's Technology Suite include?:

- Ti Reports
- GSCi online knowledge
 portal
- Ti Consulting

Key benefits of using Ti's Technology Suite:

- Ti analysis provide unbiased analysis of the key technologies to be aware of
- Ti's research team are experts in profiling companies and getting to the heart of organizational strategy
- Through the unique GSCi portal you will get a holistic view of the market and be able to benchmark your offering against other companies in the industry
- Ti's data allows for informed decision making

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