

Chapter 16

Benefits of the Transics Fleet Management System

Petre Ilchev

Medical University of Lodz, Poland

Klaudia Pilichowska

University of Lodz, Poland

Anna Palczewska

University of Lodz, Poland

Remigiusz Kozłowski

University of Lodz, Poland

Michał Marczak

Medical University of Lodz, Poland

ABSTRACT

This chapter defines a fleet management system (FMS), describes the functionalities, architecture, and modules of Transics FMS. The next topic is the role of a fleet management system in a transport company and areas of improvement of business processes. This is based on the presentation of selected Polish transport companies using Transics software. The chapter gives a comparison of the functionalities of the Transics solution with other similar commercially available FMS, like European freight exchange platform Trans.Eu. The paper presented the prerequisites for a successful implementation of fleet management software – the basic principles and conclusion from the experience of Polish companies. The chapter showed the impact of the Transics solution on the effectiveness and competitive advantage gained by transport firms, as well as the benefits offered to those firms and their customers.

INTRODUCTION

Recent years have seen an increase in the popularity of fleet management systems (FMS). After joining the EU, the integration of the new member, the EU economy gained an unprecedented momentum. The rapid development of the transport sector in the European Union, including Poland (Kozłowski et al., 2015), indicates a growing need to use such systems to improve overall corporate management. An FMS is defined as a system supporting fleet and process management in transport companies. FMS offer many an ever wider range of functionalities to meet the requirements of transport companies and their customers and insurers. This technology has also become more affordable. FMS software is designed to support optimization processes and to reduce costs while improving customer service levels. However,

DOI: 10.4018/978-1-5225-0973-8.ch016

there are scarce literature data on the conditions of FMS implementation in transport firms. The objective of this chapter is to present the benefits of the fleet management system, based on Transics FMS.

BACKGROUND: THE ROLE OF FLEET MANAGEMENT SYSTEMS

The increasing numbers of transport companies delivering both raw materials and finished products have given impetus to the development of systems supporting the management of these processes. According to Sehgal, fleet management is a field of transport management (Sehgal, 2011) consisting of the subsystems of transportation planning and execution as well as freight audit and payment. Ross enumerates the following elements of transportation management:

- Fleet and third party logistics management.
- Routing, tracking, optimization.
- Compliance with safety regulations.
- Transport management system technologies (Ross, 2011).

According to Bowersox, Closs, and Cooper, transport management systems (TMS) consist of the following components: calculating the optimum route, scheduling, load building, shipment consolidation, carrier rate management, documentation, claims management, and management of reverse logistics (Bowersox et al., 2002).

The role of solutions supporting fleet management is to improve the operations of transport companies. A “fleet management solution” is interpreted here as an IT system used for supporting the management of a transport company rather than software alone (Boyson et al., 2004). Indeed, contemporary supporting fleet management systems are something more than software. They are typically offered as software, but they could also be deployed as a service model that includes not only software installation and use, but also additional services, such as user training, uninterrupted access to the system, data storage, etc. Fleet management systems are also known as transport management systems (TMS) and traffic management systems (Hill, 2011). The main objective of fleet management is defined by Ross as effective use of transportation assets, appropriate technical maintenance, and reduction of overall costs at a given service level (Ross, 2011). Transport company management is affected by developments in its environment. The main factors of fleet management in transport companies, apart from those listed by Ayers (Ayers, 2010), include: increasing competition, growing customer requirements, safety regulations, etc. All of these factors encourage company specialization and process outsourcing, especially in the face of a turbulent environment, volatile trends, and pressure to increase effectiveness.

Transport services have undergone a substantial evolution. Initially, manufacturing companies owned their own transport assets (trucks or delivery vans). Subsequently, they tended to lease transport fleets, while now they often contract transport services out to third parties. Companies outsource non-core processes to entities that are able to carry them out equally well or better in an economically advantageous manner. The increasing transportation costs and the need to synchronize logistics processes also contribute to changes in goods delivery organization. Manufacturing and trading companies often give up their own fleets of road vehicles, ships, etc., and outsource transport services to specialized companies (Hugos, 2003). Due to the high contribution of logistics costs to the financial results, companies have consistently put a downward pressure on the prices of transport services (Schönsleben, 2007).

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/benefits-of-the-transics-fleet-management-system/166814

Related Content

Examining the Relevance of Intellectual Capital in Improving the Entrepreneurial Propensity Among Indians

Ahmed Musa Khan, Mohd Yasir Arafat, Mohd Anas Raushanand Imran Saleem (2020). *International Journal of Knowledge Management* (pp. 123-140).

www.irma-international.org/article/examining-the-relevance-of-intellectual-capital-in-improving-the-entrepreneurial-propensity-among-indians/243641

Use of Organizational Memory Systems in a Police Organization

Denise de Cuffa, Rodrigo Kraemerand Andrea Valéria Steil (2018). *International Journal of Knowledge Management* (pp. 37-47).

www.irma-international.org/article/use-of-organizational-memory-systems-in-a-police-organization/210685

Viable Communities within Organizational Contexts: Creating and Sustaining Viability in Communities of Practice at Siemens AG

Benjamin Frostand Stefan Schoen (2004). *Knowledge Networks: Innovation Through Communities of Practice* (pp. 133-141).

www.irma-international.org/chapter/viable-communities-within-organizational-contexts/25429

Visualizing Knowledge Networks and Flows to Enhance Organizational Metacognition in Virtual Organizations

Mark E. Nissen (2009). *Connectivity and Knowledge Management in Virtual Organizations: Networking and Developing Interactive Communications* (pp. 74-88).

www.irma-international.org/chapter/visualizing-knowledge-networks-flows-enhance/6947

Sketching in Knowledge Creation and Management

Fernando Ferriand Patrizia Grifoni (2011). *Encyclopedia of Knowledge Management, Second Edition* (pp. 1438-1447).

www.irma-international.org/chapter/sketching-knowledge-creation-management/49088