Chapter 17
Analysis of the Possibility to Implement the Transics System and GBOX Assist Systems in a Selected Company

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ABSTRACT

The aim of this chapter is to present the implementation of a fleet management systems (FMS) in selected transport companies. Transport management systems (TMS) / FMS evolve as a result of developing novel functionalities. The greatest challenge is TMS integration within the existing IT infrastructure of the company. Calculating return on investment (ROI) based on data analysis is important to select the optimum FMS. During the implementation of an FMS, of importance is to adapt the system to the business processes and train the employees in software usage. The architecture of an FMS affects the process of its implementation. Its implementation has many benefits and greatly improves company performance, including profitability.

INTRODUCTION

The decision to purchase a fleet management system (FMS) should be preceded by a series of analyses addressing the question of its profitability. The implementation of fleet management systems always represents a challenge involving great effort and risk both for the system provider and the transport company. Appropriate project management principles and rules can reduce that risk and increase the quality of implementation (FleetSMARTS, 2011). To implement an FMS system successfully, one must

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know the business processes of the company and the special features of FMS projects, and carefully evaluate the costs and benefits. One should also refer to the experience of transport companies which have already implemented FMS solutions and use them in everyday fleet management. The aim of this chapter is to present the implementation of an FMS in selected companies.

BACKGROUND

Characteristics of Information and Telecommunication (ICT) Projects

Transport management systems (TMS) / fleet management systems (FMS) evolve as a result of developing novel functionalities, such as claims management and freight bill payment. The greatest challenge is TMS integration within the existing IT infrastructure of the company, with the critical component being the data interface. Combining a TMS with the existing system may provide a platform for workflow automation and streamlined document processing.

The implementation of a TMS involves the following stages in the decision-making process:

- Researching fleet management systems providers.
- Presenting a TMS to the transport company and discussing its functionalities.
- Calculating return on investment (ROI) based on data analysis to select the optimum TMS.

There are a large number of models for calculating ROI on TMS (UltraShipTMS, 2014; FleetMind, 2016), with every system provider offering a different ROI calculator. For instance, Teletrac (Teletrac, 2016) provides a downloadable spreadsheet, while other firms, such as Intelligent Mechatronic Systems (Intelligent, 2016), Astrata (Astrata, 2016), Verizon Telematics (Verizon, 2016), and Telogis (Telogis, 2016) offer such tools on their company websites. The selection of the ROI calculator most suitable for the transport company can be facilitated by a comparison of different models. Table 1 shows the input data used by the various ROI calculators, so in the next step, the availability of such data must be veri-

Table 1. Comparison of different ROI calculators

Criteria\Company	ABC	…..	XYZ	Available Data
Driver remuneration system (hourly rate, monthly salary, etc.)				
Number of vehicles				
Number of drivers				
Average kilometers per truck, per year				
Average fuel price				
Communication costs				
Regulations concerning drivers' working hours				
Vehicle maintenance costs, per year				

Source: Own work.