The Impact of Management Practices on Organizational Effectiveness in a Transport Company

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Abstract

Freight transport today directly affects major business decisions of customers on market coverage; purchasing; route/itinerary design; quality policy; pricing policy and payment terms, which makes it imperative to develop a system of management practices to improve the efficiency and performance of the road haulage service.

Based on this argument, we set out to analyse the management practices that road transport organisations implement and use to improve efficiency, approached from an internal perspective, in order to cope with major changes in technology, markets and organisational structures, given that the key transport processes, approached in a unitary manner, integrate a series of operations that concern not only transport itself but also storage, handling and transhipment and transport packaging. Ensuring that the transport service meets market standards is a major factor in retaining customers and increasing efficiency and performance.

Key words: effectiveness, management practices, organisational effectiveness, transport management, logistic management **J.E.L. classification**: M10, M19

5.E.E. classification. W110, W1

1. Introduction

Road haulage, together with other modes of land and water transport, directly affects the major business decisions of customers on market coverage; buying; route/itinerary design; quality policy; pricing policy, etc. The growing importance of road freight transport is largely due to the advantages of this mode of transport as well as factors such as the development of combined freight transport technologies, in which road transport plays a decisive role, and the outsourcing of freight transport which is growing rapidly, driven by the expansion of increasingly competitive logistics chains for many categories of goods subject to transport (Goodman, 2009; Rushton *et. al*, 2014).

Over the past 20 years, major changes in technology, markets, organisational structures and organisational management practices have led to new ways of conceptualising the transport process, which involves fulfilling orders according to high standards set with customers. Freight transport in general, i.e. road freight transport, which is the subject of the research, is no longer seen individually as a simple movement in space, but as a process that integrates a series of operations concerning: transport itself, storage; handling and transhipment; packaging of goods for transport (Crişan & Ilieş, 2010, p.26).

According to current practice in the field, the transport of goods, regardless of the mode of transport (direct or combined), involves the unified treatment of all the operations of the transport process, namely: transport itself; storage; handling and transhipment of goods, in and from the

means of transport, consisting of groupage means (pallets, large containers); packaging for transport, by coordinating the actions of all partners involved in this process. Because of its undeniable advantages, above all its flexibility, road transport features in almost all combined transport options as an important component of the logistics chain (Stock, & Lambert, 2001, p.313).

In order to understand the concept of transport correctly, we need to look at the transport activity within freight forwarding companies as part of logistics chains, which require high standards of customer service. In this context, the freight transport process requires an important exchange of information to ensure a fast and flexible flow of goods according to customer requirements and expectations (Goodman, 2009)

The outsourcing of the transport function alongside other logistics activities over the last two decades has resulted in the rapid growth of third party 3PL logistics providers taking over the function of shipper, these organisations manage the transport capacity they contract and their warehousing facilities, based on specific expertise in the field. In recent years we have seen the growth of 4PL logistics service providers, which take over the entire transport operation and offer sustainable logistics solutions requested by the customer (Ilies et al, 2011, p.44).

2. Literature review

The ability of transport companies' management to meet customer expectations and needs is an important factor in determining customer satisfaction, ensuring trust and facilitating the achievement of business objectives, and plays a decisive role in ensuring competitiveness in the market. This requires aligning interrelated management processes with the mission of these organisations that gives strategic direction, and facilitates staff awareness of improving effectiveness as a measure of performance (Rushton *et. al*, 2014).

Information technology and the information subsystem is a key success factor in the management of road haulage companies, playing an important role in improving organisational effectiveness from an internal perspective and customer satisfaction from an external perspective. At the same time, it contributes to the integration of the following managerial activities into a unified and effective process, based on a strong customer orientation: order processing; choice of transport route; load consolidation, shipment scheduling, transport scheduling, cargo handling and storage (Christopher, 2005; Murphy & Knemeyer, 2018).

An effective and efficient information system can help managers in the decision-making process in transport companies, with important effects on quality assurance as an important factor of performance. Well-informed and real-time decisions are an effective tool for managers to communicate quickly with other employees. At the same time, the use of information technology facilitates the development of realistic and effective strategies and policies.

In order to ensure the effectiveness of the road haulage service, they must ensure: adequate and specific skills for all employees, primarily front-line employees such as drivers; customisation of the service offered to customers according to their requests; and offer IT-based customer service capabilities; prompt responses to receive and resolve customer complaints.

Organizational effectiveness, "is seen by most researchers as the degree or extent to which the firm/company meets its stated organizational goals" (Kinicki, & Fugate, 2016, p.540).

More and more authors are defining the effectiveness of organisations in different fields of activity on the premise that this concept is multidimensional, which is why there is a wide variety of criteria and approaches when it comes to the needs and expectations of relevant stakeholders. Successful businesses draw on an appropriate mix of effectiveness criteria to suit their objectives (Robbins & Coulter, 2018). Measuring organisational effectiveness, as a multidimensional concept, can encompass several internal performance objectives, associated with those external measures that relate to meeting the requirements of external and internal stakeholders.

Based on the observation that organizational effectiveness is a multidimensional concept, there are many recognized authors (Sinding & Waldstrom, 2014) use four generic approaches to its measurement, which refer to: Goal attainment, by comparing the results for key processes with predetermined objectives; Resource consumption required to operationalize key processes that determine market competitiveness; Key processes within the enterprise that determine organizational effectiveness, through an appropriate combination of efficiency, quality, productivity, flexibility and innovation (Kinicki & Fugate, 2018); Relevant stakeholders with their specific objectives, which can facilitate the promotion of a sustainable business model, not only financially but also from a social and environmental point of view. An ongoing challenge for the management of freight haulage companies is to achieve a functional balance between strategic stakeholders (De Waal, & Kourtit, 2013).

An analysis of the objectives of a representative road haulage company, i.e. the empirically studied company "TRANS", showed that it focused its efforts on achieving the highest possible organisational effectiveness through appropriate management practices and policies, focused on: providing transport service according to customers' needs and expectations; efficient use of vehicles and human resources; flexibility. Strong competition and the pace of technological renewal in the construction of goods vehicles are driving road haulage companies to innovate in order to be as competitive and flexible as possible. This makes it easier for them to carry out the necessary organizational changes, which are increasingly frequent and complex (Sighiartău, 2022). In this context it can be noted that more and more studies, in the field of transport and logistics, highlight the fact that business strategies focused on organizational effectiveness, which emphasize the evaluation of employee and customer behaviors has required the development and use of appropriate and effective feedback programs from both employees seen as internal customers and external customers (Ilies et al, 2011).

3. Research methodology

Starting from the main objective of our study, which was to measure the impact of management practices on organisational effectiveness, the "TRANS" road haulage company was chosen for the analysis, which is relevant in terms of activity and results obtained, and which operates in Romania and on international markets, especially European ones. It has a large fleet of vehicles (169 vehicles, of which the largest share is represented by high-capacity vehicles) which meet international standards for circulation on European roads.

The research sample comprises 31 respondents from all organisational sub-units of the company, consisting of 7 managers and 24 employees of the transport company. As a research hypothesis we sought to determine the extent to which "The effectiveness of the transport company's management practices has a significant and positive impact on its organizational effectiveness".

The study was carried out, i.e. the primary data were obtained by means of a survey, using a questionnaire, which includes management practices and factors that determine organizational effectiveness - relevant items that express the respondents' perception of the potential of the enterprise to apply the most appropriate management practices and factors that determine organizational performance. The evaluation of the questionnaire items was done on a scale from 1 to 5 (1 - total disagreement, 5 - total agreement).

In order to obtain in-depth data and information on the management practices used and on the factors that determine the enhancement of the effectiveness of the road haulage enterprise, we also conducted a semi-structured interview with 9 people, including 3 managers and 6 employees. The interviews lasted approximately 40 minutes and were conducted between 01 July 2023 and 31 October 2023. For the analysis of organisational effectiveness and management practices used by transport companies, a series of primary data obtained from the questionnaire and interviews were used, together with a number of documents provided by the transport company and relevant studies published by a number of recognised authors in the field.

The model chosen to measure and analyse the impact of management practices on organisational effectiveness at the company "TRANS" is based on two aggregate variables, which we considered relevant to the objective of the empirical study, namely: "Organisational effectiveness of the transport company", represented by the aggregate variable Effic.org.tr and "Effectiveness of management practices in the transport enterprise" represented by the variable Effic.mg.tr. The results of the reliability analysis, are contained in Table 1 and express that the two

variables are representative in terms of the construct, registering acceptable Cronbach's Alpha coefficients, respectively 0.75127 for the aggregate variable *Efic.org.tr* and 0.78362 for the aggregate variable *Efic.mgt.tr*.

Variable	Sign	Number of items in the scale	Cronbach's Alpha	Average interitem covariance	
Efic.org.tr.	+	24	0.75127	1138102	
Efic.mgt.tr	+	16	0.78362	.1244293	

Table no. 1 Reliability analysis test scale

Source: Own research. Results provided by STATA 18

4. Results and discussion

4.1. Analysis of organisational effectiveness

Organisational effectiveness, as a measure of the internal performance of the road haulage company, represented by the variable $Efic_org_tr$, measures employees' perceptions of the ways in which the company's employees meet organisational objectives. The aggregate variable $Efic_org_tr$ has a structure consisting of 24 items representing the primary variables of the model. The structure of the variable is characterized by an acceptable degree of internal consistency, expressed using *Cronbach's Alpha* coefficient of 0.75127 (Table 1), which confirms the representativeness of the variable $Efic_org_tr$, for the study. We can also see that the aggregate variable $Efic_mg_tr$, composed of 16 items or primary variables, has an acceptable internal consistency (*Cronbach's Alpha* coefficient of 0.78362), which demonstrates its representativeness for the study.

Table no. 2 Efic_org_tr, Efic_mgt_tr, statistics (count mean sd semean cv)

Variable	Ν	Mean	sd	se(mean)	cv
Efic_mgt_tr	31	3.8142	.2076	.0397	.0958
Efic_org_tr	31	3.7631	.1645	.0342 .	.0892
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Source: Own research. Results provided by STATA 18

The organisational effectiveness of the road haulage enterprise of goods represented by the variable $Efic_org_tr$, has a good average of 3.7631 (Table 2). The values of this variable are lated to the mean of the observed scores, register a standard deviation (*sd*) of 0.1645. At the same time, the standard error is 0.0342, which expresses that the observed mean value, with 95% probability, will be in the range 3.6947 (3.7631 - 0.0342 x 2) and 3.8315 (3.7631 + 0.0342 x 2).

The magnitude of the coefficient of variation (*cv*), is 0.0892, and expresses that the statistical population has a good degree of homogeneity. If we refer to the variable Efic_mgt_tr, we can see that it has a good mean score of 3.8142, with a standard deviation (*sd*) of 0.1645 and standard error of 0.0342, which expresses that the observed mean value, with a probability of 95%, will be in the range 3.7348 ($3.8142 - 0.0397 \times 2$) and 3.8936 ($3.8142 + 0.0397 \times 2$). According to the results, presented in Table 2, the descriptive statistics indicators for the two aggregate variables record values that express the relevance and correctness of the construct. The construct validity of the aggregate variables *Efic_org_tr* and *Efic_mgt_tr* is also demonstrated by the item-total correlations, which express the statistical relationships between the scores of the primary variables and the scores of the aggregate variables of which they are part. Thus the coefficients calculated for the item-total correlations express that in the case of the variable:

- *Efic_org_tr:* 8.34% of the total item-total correlations express very strong statistically significant links; 45.84% express strong statistically significant links; 41.36% express moderate statistically significant links; 4.16% express weak statistically significant links, which means that the construct of this variable is valid, providing a good measure of the primary variables;
- *Efic_mgt_tr:* 14.29% of the total item-total correlations express very strong statistically significant links; 35.72% express strong statistically significant links; 42.84% express moderate statistically significant links; 7.15% express weak statistically significant links, which means that the construct of this variable is valid, providing a good measure of the primary variables

At the same time, the examination of the primary variables composing the two aggregate variables *Efic_org_tr and Efic_mgt_tr*, from the content point of view, confirms the validity of these variables and expresses that they are representative for their measurement.

The analysis of organisational effectiveness, represented by the variable *Efic org tr*, highlights the importance of the factors, represented by the primary variables, that determine it. Thus, according to the perception of the respondents to the questionnaire, the primary variables that made the most important contributions to ensuring the organizational effectiveness of the company "TRANS", i.e. its strengths, in the perception of the employees who are part of the research sample, refer to: analysis of the company's key results and comparison with the objectives set in order to identify problems and make the necessary corrections (4.0251); the organization's management ensures a good relationship between its employees and customers, (4.0134); the organization's management is concerned with ensuring employees' skills and involvement, to achieve the organization's common goals, (3.9824); the transportation organization's management sets clear and realistic goals and responsibilities (3.9213); the management of the transport company ensures effective communication between organisational departments and between employees, (3.9141); there is a strong customer orientation in the transport company, (3.8711); the objectives of the transport company are known and accepted by the employees, (3.8821); the company's strategies and policies are an important support in achieving the set objectives, (3.8666) employees of the transport enterprise ensure that the core values of the organization are promoted and shared, (3.8609); management of the transport enterprise recognizes achievements in individual or team performance of employees and rewards them, (3.8566); managers of the transport enterprise are concerned with identifying and implementing good management practices, (3.8037); managers use a system of appropriate and effective indicators to measure employee performance, (3.8291.

If we consider the lower rated factors, represented by the primary variables with lower scores, we can show that the weak points refer to: ensuring employee skills to help the company achieve its objectives; alignment of organisational objectives both at the level of the organisation's functions and at the different organisational levels; appropriate employee retention policies and practices; managerial expertise of transport company managers; applying a system of incentives to ensure effective motivation; developing effective training programmes for both managers and employees, especially for drivers who are engaged in international traffic.

According to the analyses carried out at management level, some of these problems were caused by certain dysfunctions generated by the labour crisis, with reference primarily to drivers for international traffic. Nevertheless, the company has remained competitive, but the energy crisis exacerbated by the war in Ukraine and the problems it generates may continue to affect its stability, organisational effectiveness and efficiency.

In conclusion, I believe that the company "TRANS" has an organizational structure that ensures good cooperation between organizational departments and the information necessary for the proper functioning of the organization, has proven and proves that it has the potential to remain competitive in an increasingly dynamic and uncertain market.

4.2. Analysis of the effectiveness of management practices

Based on the structure of the aggregate variable *Efic_mgt_tr* the primary variables that compose it, according to the perception of the respondents to the questionnaire, record the following scores:

- Transport company management:
- has appropriate and effective structured management systems, policies and procedures in place to achieve organizational objectives, (3.9515);
- has clear and realistic specific objectives in all functional areas, (3.9343);
- adequately and effectively manages "key" business processes, (3.8831);
- has specific and effective operating standards for the key elements that ensure organizational performance, (3.8642);
- has appropriate human resource management policies, practices and procedures (3.9544);
- ensures effective measurement and monitoring of performance in all functional areas of activity, (3.8156);
- assesses operational performance in all areas against specific indicatorsI, (3.9608);
- effectively measure and monitor customer satisfaction whenever necessary, (3.8783);
- effectively measure and monitor employee satisfaction, (3.8578);
- ensures appropriate individual and team responsibilities for the effective operation of work processes, (4.0557);
- provides monitoring and control of processes to facilitate the achievement of overall and individually specific objectives, *Mgt12* (3.8829);
- ensures the evaluation, control and revision of management procedures, when required, to facilitate the achievement of expected performance, (4.0832);
- provides key competencies appropriate to operationalize management policies, practices and procedures to ensure the performance of interrelated processes, (3.8457);
- involves customers in the process of improving the quality of the services provided,

According to these results, it can be observed that the most important factors contributing to the improvement of the effectiveness of management practices in general relate to: Evaluating, controlling and reviewing management procedures; responsible concern for solving environmental problems; ensuring appropriate individual and team responsibilities for effective operationalization of work processes; *evaluating* operational performance in all specific areas; having adequate infrastructure (software and hardware) for computerization of activities and processes; having adequate and effective structured systems, management policies and procedures for achieving organizational objectives; having adequate and effective policies, practices and procedures for ensuring organizational performance.

According to the interview on the appropriate and effective use of management practices, the interview respondents highlight the importance of a number of factors to improve organisational effectiveness, namely: 77.78% of the respondents believe that an effective and transparent motivation system should be ensured; 66.67% want to set clear and realistic organisational objectives; 44.45% believe that employees' skills should be improved in view of the company's opportunities to integrate into competitive supply chains: 55.56% believe that managers need to have relevant information that relates to the customer's experience with the organization; 66.67% believe that there is a need for clearer definition of responsibilities, which ensures a better understanding of the behaviors and results they need to achieve in order to meet the company's goals.

4.3. Statistical relationships between variables *Efic_org_tr*, *Efic_mg_tr*

In order to determine the statistical association relationships between the variables *Eft_org_tr* and *Efic_mgt_tr*, correlation coefficients were determined, taking into account that the relationship between the two variables is of regression type, in order to express the significance of the statistical relationships between these aggregate variables. Thus based on the correlation coefficients we can

see that between the aggregate variable *Efic org tr* and the variable *Efic mgt tr* there is a positive and strong correlation (correlation coefficient 0.66).

To determine the impact of the independent variable *Eflc mgt.tr* on the dependent variable *Efic org tr, we performed regression analysis,* the results of which are summarised in Table 3.

Independent variable	Ν	Prob > F	R-squared	Reg. coef.	Std. Err	t	P> t
Efic_mgt_tr	31	0.0000	0.6324	.6735211	.0913925	7.36	0.000

Table no. 3 Influence of the independent variable Efic mgt tr on the dependent variable Efic org tr

Source: Own research. Results provided by STATA 18

Based on the data in Table 3 we can say that the econometric model used is correct. The variable Efic mgt tr has a significant impact on the variable Efic org tr. In support of this statement comes the "F" test whose Prob > F = 0.0000 (is less than 0.05). The independent variable factor *Efic mgt tr* explains 63.24% of the variation of the dependent variable *Efic org tr* (Rsquared = 0.6324). The impact of the independent variable is significant because P > |t| = 0.000 is less than 0.05. The regression coefficient of the variable Efc mgt tr is .6735, which means that for a one unit increase in the variable Efic mgt tr the dependent variable Efic org tr increases on average by .6735 units.

The results obtained from the analysis of association relationships and regression analysis, express that the effectiveness of management practices (Efic mgt tr), has a significant and positive impact, on organizational effectiveness (Efic org tr). This means that the effectiveness of management practices (Efic mgt tr) is a strong predictor for the increase in organizational effectiveness (*Efic org tr*) of the enterprise under study.

5. Conclusions

If we take into account the results of the analysis of the association relationships of the statistical links between the aggregate variables Efic org tr and Efic mgt tr we can see that there is a positive and strong association relationship between them. At the same time the regression analysis expresses that the aggregate variable *Efic mgt tr* positively and significantly influences the aggregate variable *Efic org tr*. Based on the results of the analysis of the two variables and the statistical links between them we believe that managers, road haulage company together with other members of the organization, should focus their efforts to improve organizational effectiveness, on identifying and implementing a set of management practices that take into account the following aspects:

- adapting to the ever more frequent changes in the market, according to customers' needs • and expectations;
- ensuring efficiency and flexibility in the operation of the transport organisation as a measure of business performance;
- ensuring flexibility and adaptability to changes in the market to meet customer needs and expectations without neglecting competitors;
- conducting management reviews, translated into appropriate management policies and practices, to facilitate the achievement of organisational objectives in an effective and efficient manner;
- the promotion by the leadership of the transport company of a value system that fosters the commitment of managers and other employees at work and to the company;
- aligning the objectives of the different functions with the overall business objectives;
- alignment of responsibilities and authority, both managerial and cross-functional, to facilitate improved organisational effectiveness through the development of systems and competencies;

- ensuring appropriate and effective programmes to develop managers and other employees;
- implementing and developing an appropriate and effective system of human resource management practices;
- using feedback programs from both employees seen as internal customers and external customers to assess their behaviors and implement business strategies focused on organizational effectiveness;
- ensuring effective and sufficient communication channels both within the organisation and externally with customers;
- developing and implementing company strategy and policies based on necessary and relevant information;
- reviewing and updating strategy, policies and practices to enable effective and efficient operationalization of programs to improve organizational effectiveness through appropriate actions;
- ensuring and continuously updating the customer database in line with changes in the market and in customer relations;
- implementing effective customer experience management;
- ensuring the effectiveness of the management system of transport undertakings by computerisation of transport processes in their entirety, not just in order processing and monitoring;
- development of an adequate information system to ensure the effectiveness of decisions at the strategic and operational level of transport companies and the ability to process information and generate real-time management reports;
- auditing the management system in road haulage, covering actual transport, transport scheduling, marketing and sales, financial and organisational management, in order to identify best practices in planning, organising, motivating and coordinating and controlling activities, with a view to developing and implementing a sustainable business strategy;
- developing active partnerships with customers, sales agents, distributors in the logistics channels to eliminate malfunctions that may occur during the transport process and to ensure better cooperation in order to exploit the opportunities on the transport market.

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