

## PERFORMANCE MANAGEMENT MODEL FOR THIRD PARTY LOGISTICS COMPANIES

Ilie NAE<sup>1</sup>, Irina SEVERIN<sup>2</sup>

*The current paper analyses how Top 20 Third Party Logistics companies have defined their Performance Management System. This choice is critical for a company having a decisive role for its future. The study shows a comparison between the 3PLs and then on how each Performance Model could cover the requirements of the logistics sector. In order to be relevant both for academic and business community the research was conducted on two perspectives: practical and theoretical. The results are showing a lack of consistency and homogeneity between the companies and approaches which makes difficult the assessment of Performance management models in 3PLs environment.*

**Keywords:** Performance Management, Evaluation, Third-party logistics, Excellence models, Continuous Improvement.

### 1. Introduction

The notion of Performance Management was initially used in Human Resources Management domain starting with 1990, focusing mainly on how to enhance the performance of employees in a systemic way. The components of the process are: Performance Planning (goal setting), Performance monitoring and coaching, Measuring (evaluation) Individual Performance linked to organizational goals, giving him/her feedback, rewarding the individual based on his/her achievements against set performance goals and required competences [11]. The subject was developed by many others authors: John Lockett – Effective Performance Management (1992), Michael Armstrong – Performance management (1994) or Mike Walters – The Performance Management Handbook (1995).

This approach was extended to a larger scale when Kaplan and Norton presented in 1992 a new management tool called Balanced Scorecard that shaped next decades of performance management at organizational level.

Originally, Kaplan and Norton thought the Balanced Scorecard was about performance measurement. Once organizations developed their basic system for measuring strategy, however, we quickly learned that measurement has consequences far beyond reporting on the past. Measurement creates focus for the

---

<sup>1</sup> Eng. PhD Student at University POLITEHNICA of Bucharest, Romania

<sup>2</sup> Prof. at University POLITEHNICA of Bucharest

future. The measures chosen by managers communicate important messages to all organizational units and employees. To take full advantage of this power, companies soon integrated their new measures into a management system [6].

In parallel, strategies such as Lean and Six Sigma were getting more and more adepts through outstanding results in all type of industries, creating a massive dynamic around topics such as quality and productivity.

These two waves of initiatives aiming to achieve the Excellence were embraced by many companies but still separately and partially: Lean and Six Sigma for operations and Performance Management for global performance governance. The difficulty appeared when companies tried to adapt these methodologies to their specific by implementing a mix of tools and principles, which finally ended with many failures.

One size of continuous improvement do not fit all parts of the organization. The kind of rigor required in a manufacturing environment may be unnecessary, or even destructive, in a research or design shop. Certainly it is important to inject discipline into product and service development, but not so much that it discourages creativity. Customize how and where continuous improvement is applied [2].

Logistics sector have not followed other path, being influenced by its customer's trend and programs. This led to silo management systems, designed and structured differently, keeping the same goal to satisfy customers and stakeholders. Interviewed experts claim that it is very important to select the best criteria to ensure "3PL" service improvement as a priority. However, it is necessary to consider "3PL" as a unity, because "3PL" service improvement is a broad and complex system, thus one cannot distinguish one major criterion [3].

The current paper work makes an analysis of the current practices of Organizational Performance Management that Third Party Logistics (3PL) companies are running and aims to develop a study of homogeneity within these companies. The research explores the perspectives of a common framework that fits to logistics environment requirements by gathering data and facts from Top 3PLs companies.

## 2. Research methodology

The study was conducted on two perspectives:

- *Practical research*, focused on current logistics environment, mainly on top European and Global Logistic Service Providers analyzing their Performance Management approach by identifying key elements and strategies. The study includes Top 20 companies taking into account their gross revenue, global worldwide presence and performance management information availability. The source of information was primarily from the

publications that the companies shared, either their website or other articles/conferences.

- *Theoretical research*, based on current initiatives and strategies that Top 20 3PL companies adopted, has captured the following approaches: Improvement methodologies, Excellence models and Performance Management models. This analysis is qualitative and oriented to identify key elements of each approach.

### 3. Practical research

In the contemporary business world there is a tendency to eliminate side activities by transferring them to the specialized companies. The transference of the companies' logistics activities to a specialized company is known as "3PL" services (also referred to as third party Logistics) or "3PL" [3].

The 2016 20th Annual Third Party Logistics Study showed that 70% of those who use logistics services (shippers) and 85% of 3PL providers said the use of 3PL services has contributed to overall logistics cost reductions, and 83% of shippers and 94% of 3PL providers said the use of 3PLs has contributed to improved customer service [7].

Based on 2016 financial results, the ranking of top 20 companies worldwide is presented in Table 1 [1].

Table 1

Top 20 Third-Party Logistics Provider (3PL)	
Company Name	Gross Revenue 2016 (US\$ Millions)
DHL Supply Chain & Global Forwarding	26,105
Kuehne + Nagel	20,294
Nippon Express	16,976
DB Schenker	16,746
C.H. Robinson	13,144
DSV	10,073
XPO Logistics	8,638
Sinotrans	7,046
GEODIS	6,830
UPS Supply Chain Solutions	6,793
CEVA Logistics	6,646
DACHSER	6,320
Hitachi Transport System	6,273
J.B. Hunt (JBI, DCS & ICS)	6,181
Expeditors	6,098
Toll Group	5,822
Panalpina	5,276
GEFCO	4,800
Bolloré Logistics	4,670
Kintetsu World Express	4,373

Source: Armstrong & Associates

These companies have few common general traits:

- They have a global presence around the world and continue to expand;
- All of them have ambitious development plans: either organic or through acquisitions;
- They have a clear defined Strategy: Vision, Mission, Values and a tactical program.

Analyzing the core elements of their strategy and tactical initiatives which build the Organizational Performance Management, these companies are focused on specific approaches such as: Customer, People, Continuous Improvement, Process Engineering, Quality, Safety, Environment, Operational Excellence, Social, Innovation, and Talent Management. Almost all of them have their own Performance Management Program, combining elements from various models of Continuous Improvement, Excellence and Performance Management.

Companies such as Panalpina are interested in Operational Excellence like Shingo Prize, meanwhile GEODIS took as reference the European Excellence model – EFQM. Others have implemented a mix of Lean and Six Sigma, adapting the principles and tools to their company culture and strategy, such as GEFCO or CEVA Logistics.

Table 2

**Top 20 3PL companies – Summary of Performance Management approaches**

#	Company Name	Program Name	Program/Strategy based on
1	DHL Supply Chain & Global Forwarding	First Choice	Lean and Six Sigma
2	Kuehne + Nagel	Out + Perform	Continuous improvement, Streamlining end-to-end operations, Customer satisfaction, People, Innovation, Quality, Security, Compliance, Results
3	Nippon Express	Quality / Security / Environment Management	Global Human Resource Development, Quality, Environment, Risk, Safety, Corporate Social Responsibility
4	DB Schenker	FLEX – Flawless execution	Sustainable improvement culture, Quality, Operational Excellence, Six Sigma, Eco Excellence, Knowledge Excellence
5	C.H. Robinson	TMC (dedicated division)	Technology, Process Management, Innovation, Six Sigma, Operational Excellence
6	DSV	DSV Sigma	Quality Management, Customer, Lean, Six Sigma, Change Management
7	XPO Logistics	XPO Operating System	Lean management, Six Sigma

8	Sinotrans	N/A	N/A
9	GEODIS	Stakeholders' Total Satisfaction	Business excellence (EFQM), Environment, Quality
10	UPS Supply Chain Solutions	General Strategy	Quality, Efficiency, Safety, Business Process re-engineering, Innovation, Lean Six Sigma
11	CEVA Logistics	Operational Excellence	Business Process Management, Business Process Improvement, Quality, Lean, Business process re-engineering
12	DACHSER	General Strategy	Standardization, Ecology, Social
13	Hitachi Transport System	General Strategy	Compliance, Customer Focus, Innovation and Excellence, Safety, Environment
14	J.B. Hunt	General Strategy	Lean
15	Expeditors	General Strategy	Excellence, Environment, People, Processes, Technology
16	Toll Group	One Toll	Operational excellence, Safety, Environment
17	Panalpina	LogEx	Lean manufacturing, Operational Excellence, Performance, Innovation, Environment
18	GEFCO	Gefco Management System	Quality, Safety, Lean management, Environment
19	Bolloré Logistics	N/A	Quality, Safety, Environment
20	Kintetsu World Express	N/A	Quality

Source: own, - content information retrieved from companies website

The research confirms that all major 3PLs companies have adopted either an existing Performance Management model or they created a tailored one, inspired from other worldwide recognized models. The most common approaches are: Lean, Six Sigma and Operational Excellence such as EFQM or a combination of other Excellence models.

Additionally, even though the domain of activity is similar, the companies studied have chosen different models, assuming the limitations of each other.

In this mixed environment, several questions arise: "How could we assess their Performance Management System? Which approach is more developed than the other? How can we leverage completely the power of the other models and integrate them into an unique Performance Management Framework for 3PLs companies?"

#### 4. Theoretical research

Within the theoretical research, three categories of programs or methodologies have been considered relevant for current business approaches: Business Process Improvement, Excellence models and Organizational Performance Management models (Table 3).

Table 3

**Summary of Models and Methodologies studied**

Business Process Improvement	Excellence Model	Organizational Performance Management
Lean Manufacturing	EFQM – European	Bob Paladino – Corporate Performance management
Six Sigma	Malcolm Baldrige Award Shingo Model	

Source: own

Lean Manufacturing is a business system for organizing and managing product development, operations, suppliers, and customer relations that requires less human effort, less space, less capital, less material, and less time to make products with fewer defects to precise customer desires, compared with the previous system of mass production [8].

Six Sigma is a rigorous, focused and highly effective implementation of proven quality principles and techniques. Incorporating elements from the work of many quality pioneers, Six Sigma aims for virtually error free business performance [10]. This business philosophy is focused on reducing variance and based on statistical tools to reduce the defects to 3,4 cases per million of opportunities. The methodology consists in five phases: Define, Measure, Analyze, Improve and Control.

The EFQM Excellence Model provides a holistic tool for assessing how effective you are in developing and delivering a stakeholder focused strategy. The 4 result areas focus on what's important to the 4 key stakeholder groups (Business, Customer, People, Society) [5]. There are 5 key enablers needed to ensure the results (Leadership, People, Strategy, Partnership and Resources, Processes-Products-Services).

Malcolm Baldrige Award is the USA national quality award offered annually to companies implementing the Baldrige Excellence Framework and reporting outstanding results. Key components of the framework are: Leadership, Strategy, Customers, Measurement, Analysis & Knowledge Management, Workforce, Operations, Results [4].

Shingo Prize is an excellence model developed by Shingo Institute focusing on 10 principles : Respect every individual, Lead with Humility, Seek Perfection, Embrace Scientific Thinking, Focus on Process, Assure Quality at the

Source, Flow and Pull Value, Think systemically, Create Constancy of Purpose, Create value for the customer [12].

Bob Paladino developed a model called Corporate Performance Management, a framework developed after studying top awarded companies. High-performing enterprises practice these Five Key Principles: Establish and deploy a CPM Office and Officer, Refresh and communicate strategy, Cascade and manage strategy, Improve performance, Manage and leverage knowledge [9].

Analyzing in detail the existing approaches, below are mentioned key characteristics of each

*Table 4*  
**Coverage matrix of Models and Methodologies on 3PLs focus**

Focus of 3PLs	Lean	Six Sigma	EFQM	Malcolm Baldrige	Shingo	Bob Paladino
Customer	-	✓	✓	✓	✓	✓
Process	✓	-	✓	✓	✓	✓
People	-	-	✓	✓	✓	✓
Corporate performance	-	-	-	-	-	✓
Quality	✓	✓	✓	✓	✓	-
Environment	-	-	-	-	-	-
Safety	✓	-	-	-	✓	-
Scientific Thinking	-	✓	-	-	✓	-
Value	✓	-	✓	✓	✓	-
Strategy	-	✓	-	✓	-	✓
Leadership	✓	✓	✓	✓	✓	✓
Partners	-	-	✓	-	-	✓
Learning and Development	✓	✓	✓	✓	-	-
Knowledge Management	-	-	✓	✓	-	✓
Continuous Improvement	✓	✓	✓	✓	✓	✓

Source: own, - content information retrieved from the reference list of publications

The theoretical research shows that there is no existing Performance Management model which covers the main characteristics that Top 20 3PLs companies are focusing. The adoption of any of the Models studied would create some gaps versus the ambitions of the companies.

## 5. Conclusions and implications for future research

The current research paper studied how Third-Party Logistics providers are organized regarding the Organizational Performance Management and what are the current possibilities to assess and compare these companies from this point of view. The conclusions are given as follows:

- (1) The selection of the Performance Management models within the top 20 3PLs companies is not homogenous. The size of the company does not influence the choice which gives an opportunity to generalize this conclusion for the entire 3PL business environment;
- (2) The worldwide recognized Performance models have design limitations against the 3PLs environment sector, not able to cover the entire specter of needs;
- (3) Having various Performance Management models in place, there is impossible to assess the maturity, the implementation degree and the efficiency of these models among the 3PLs.

The current study opens the possibility of exploring the creation of a tailored Performance Management Model for 3PLs companies.

## R E F E R E N C E S

- [1]. *Armstrong & Associates*. (2017). Top 50 Global Third-Party Logistics Providers (3PLs) List. Armstrong & Associates.
- [2]. *Ashkenas, R.* (2012). It's Time to Rethink Continuous Improvement. Harvard Business Review.
- [3]. *Ashkenas, R.* (2017). "3PL" Service Improvement Opportunities in Transport Companies. Procedia Engineering.
- [4]. Baldrige Excellence Framework. (2017). A system approach to improving your organization's performance. US Department of Commerce, NIST.
- [5]. EFQM. (2016, 07 30). Retrieved from European Foundation for Quality Management: [www.efqm.org](http://www.efqm.org)
- [6]. *Kaplan, R. S., & Norton, D. P.* (2001). Transforming the Balanced Scorecard from Performance Measurement to Strategic Management Performance Management System. Accounting Horizons.
- [7]. *Langley, J. C.* (2015). 2016 Third-Party Logistics Study. The State of Logistics Outsourcing.
- [8]. Lean Lexicon – 4th Edition. (2008). Lean Enterprise Institute.
- [9]. *Paladino, B.* (2007). Five Key Principles of Corporate Performance Management. John Wiley & Sons.
- [10]. *Pyzdek, T.* (2003). The Six Sigma Handbook. McGraw-Hill.
- [11]. *Sahu, R. K.* (2007). Performance Management System. Excel Books.
- [12]. Shingo Institute. (2016, 07 15). Retrieved from <http://www.shingoprize.org>