Company: Drink's distributor - Brazil

Authors: Pedro Vieira Souza Santos, Maurílio Arruda de Araújo

Title: Lean logistics as support for strategic management practice

Problem / Root Causes:
Due to the need to ensure improvements along the chain productive, including logistical activities, the company noted the need to apply management tools as a way to ensure, above all, the competitive advantage vis-à-vis competitors in the beverage distribution sector.
In this sense, the problem is to adapt the logistics operations of the company so that they are more efficient and consume less resources and, in addition, fit within the goals established by the local administration.
The root cause may be based on the lack of operational standards and indicators that effectively reflect the effectiveness and efficiency of logistics operations. In addition, the organizational culture directed to lean logistics is necessary to reach a greater rationalization of the resources used and other benefits.

Current Situation Analysis:
The company has been operating in the beverage distribution segment for twenty years. The focus of the company is to offer services that satisfy customers more effectively, in order to remain competitive in the local market. Having a differentiated and effective transportation,
faster processing of information, minimized delivery time and quality after-sales services are some of the critical points the company wants to make better.
In the intervention, at first, several indicators associated with local logistic performance were considered for comparison between the current situation and the future, after the application of the lean philosophy; however, due to time constraints and accessibility to the company, only three performance indicators (KPI) were performed: return, route (predicted vs. realized) and budget dispersion.

- KPI 01 : Devolution ;
- KPI 02 : Route (predicted x realized);
- KPI 03 : Dispersion of budgeted km;

Tools Used for Solution: To achieve the expected results, the following tools were used:

- Kaizen: for regular and incremental improvements in the service level process.
- Hoshin Kanri: Align company goals (Strategy) with average management plans (Tactics) and work done on the factory floor (Action);
- Key Performance Indicators (KPI): to track and encourage progress toward critical organizational goals;
- PDCA: Used for continuous process control and improvement;
- Action Plan: A useful tool for listing activities needed to achieve the proposed goals and objectives.

Action plan: To achieve the expected results to improve operations, the main actions were performed:

What	Why	Where	Who	When	How
Elaboration of operational standards	For the stability of the improvements and for the organizational development.	Logistics sector	Sector Supervisor	20 days	Defining how it can be the best way to accomplish a set of activities
Review and definition of KPIs	Essential to evaluate the management process.	Logistics sector	Sector Supervisor	10 days	From mathematical formulation; defining the measuring range
Putting kaizen into practice	To increase productivity and reduce costs.	Logistics sector	Supervisor and employees of the sector	25 days	Through the PDCA

Results and Conclusions:

The application of lean methodology in a logistics system is possible and has the advantage of making it possible to simplify the processes involved. This is achieved through intervention in activities that obstruct the flow of the process (usually reflected by management indicators), always seeking to reduce costs by eliminating waste and, at the same time, maximizing the added value to the client.
The improvements in the selected indicators were significant, as shown in the table below.

Key Performance Indicators			
Initial situation (Monthly average)		**Final situation** (improved)	
KPI 01	**5.9** %	KPI 01	**2.4** %
KPI 02	**35.1** %	KPI 02	**17.5** %
KPI 03	**13.3** km	KPI 03	**7.1** km

Therefore, it was concluded that by identifying the most recurrent problems in the logistics and distribution sector of the company under study, it was possible to apply some tools such as Kaizen and action plans, which revealed a significant improvement in the values of devolution, dispersion of mean values of KM and route (predicted versus realized).