

Performance Assessment for the Workshops Network of a Major Commercial Vehicle Manufacturer

Andreea Gagea, Andrei Gagea

IVECO Ltd., IVECO House, Road 1, Winsford Industrial Estate, Winsford, Cheshire, CW7 3QP,
United Kingdom
email: andrei_gagea@yahoo.it

Abstract

The paper presents the methodology used by one of the biggest commercial vehicle manufacturers in the world in order to increase the managerial and economic performance of the workshops network as a global action to improve level of service offered through its after sales network, brand image and market share.

Key words: *vehicle manufacturer after sales network, performance assessment*

Introduction

Automotive industry and in particular the sector of commercial vehicles is one of the most competitive industry in modern world economy. The commercial vehicles industry is an business to business activity characterised by a few numbers of global manufacturers who are competing themselves in order to secure an comfortable market share which allows them to continue to develop in an more and more competitive environment.

In such a competitive environment the role of the after sales network is fundamental as a lever to maintain and increase customer satisfaction about the product and brand. In order to achieve this objective, the after sales network in the commercial vehicle industry:

- Must be very customer oriented and focused on it's real necessities;
- Must be very efficient in order to create added value both for customers, manufacturers and shareholders;
- Must have processes under control in order to guarantee a high level of service and efficiency;
- Must have persons very well motivated and very well prepared from a technical, commercial and behavioral point of view;
- Must be committed for continuous improvement;
- Must be able to transmit an quality and reliable image.

The after sales network of a commercial vehicles manufacturer is organised and structured based on the following aspects:

1. Commercial vehicles industry is a business to business environment where customer's needs and expectations are very high as economic efficiency and productivity plays a significant role.
2. The products are very complex as legislation constrains are very strict regarding environment protection and as well customers demands are very high in terms "whole life cost of the product". These demands have a direct impact on the level of complexity of the product which implies that the after sales network must be very specialised. A high level of specialisation can be achieved only with a significant level of investments (training, technology, etc).
3. Commercial vehicle industry is characterised by high volumes activity which has a direct influence on the distributive model: manufacturer direct after sales network or external after sales network?

Manufacturer Strategy in Supporting the After Sales Workshop Network. General Considerations.

The after sales activity is carried out through an external network owned by private entrepreneurs and is organised on 2 levels: primary network (dealer workshops) and secondary network (authorised workshops). The primary network offers a wide range of services including very complex maintenance and repair works and the investments required (technical facilities, productive and non productive personnel, training, workshop bays, tools, technology, etc) are substantial. The secondary network does not offer the same type of services offered by primary network and the required investments are on a lower level. Its main objective is to be able to carry out normal maintenance operations and small repairs. The advantage of such after sales organisational model (two levels of network) is its capillarity which on a business to business environment is crucial. The main problem of this model is the difficulty to maintain and control a constant level of quality across entire workshop network.

The Western European after sales network consists of around 250 dealer workshops partners and another 1600 authorized workshops. In all these Workshops roughly 15.000 mechanics interact with customers on a daily basis and transmit the image of the manufacturer.

In order to extend the value chain and develop the full potential of its assistance network the manufacturer must be vigorous in transferring know-how on the field and supporting the workshops in developing their business.



Fig. 1 Manufacturer strategy in supporting the workshop network

Manufacturer decision is to support its workshops network on focusing on mainly two areas, internal efficiency and Quality and Service. Focusing on these two areas it will generate a "win – win" situation for both parties: workshop internal efficiency will lead to workshop profitability which allows making investments in quality and service to improve customer

satisfaction, to improve manufacturer image, stimulate vehicle sales and increase the running park which generates more business for workshops, as shown in figure 1.

Methodology to Analyze Workshops Performance

In order to assure the highest workshops performance, it is necessary to define a methodology to be applied across its entire European network in order to define, measure and analyze all parameters which are determinant for the workshops performance.

The objectives of this methodology are:

- to define the optimal performance interval;
- to define “best in class” workshops and spread across entire network the “best practice”;
- to identify the workshops which are performing under the acceptable level of performance and intervene with direct and “tailor made” action plans.

The following ten parameters give a complete picture of workshop performance regarding the following areas: market share, workshops internal processes, customer’s perception about the level of service and quality offered and finally workshops profitability. They illustrate complete workshop performance on the whole process “from demand to profitability” and they are crucial for workshops productivity and their commercial performance. In figure 2 the components of the demand-profit process are shown.

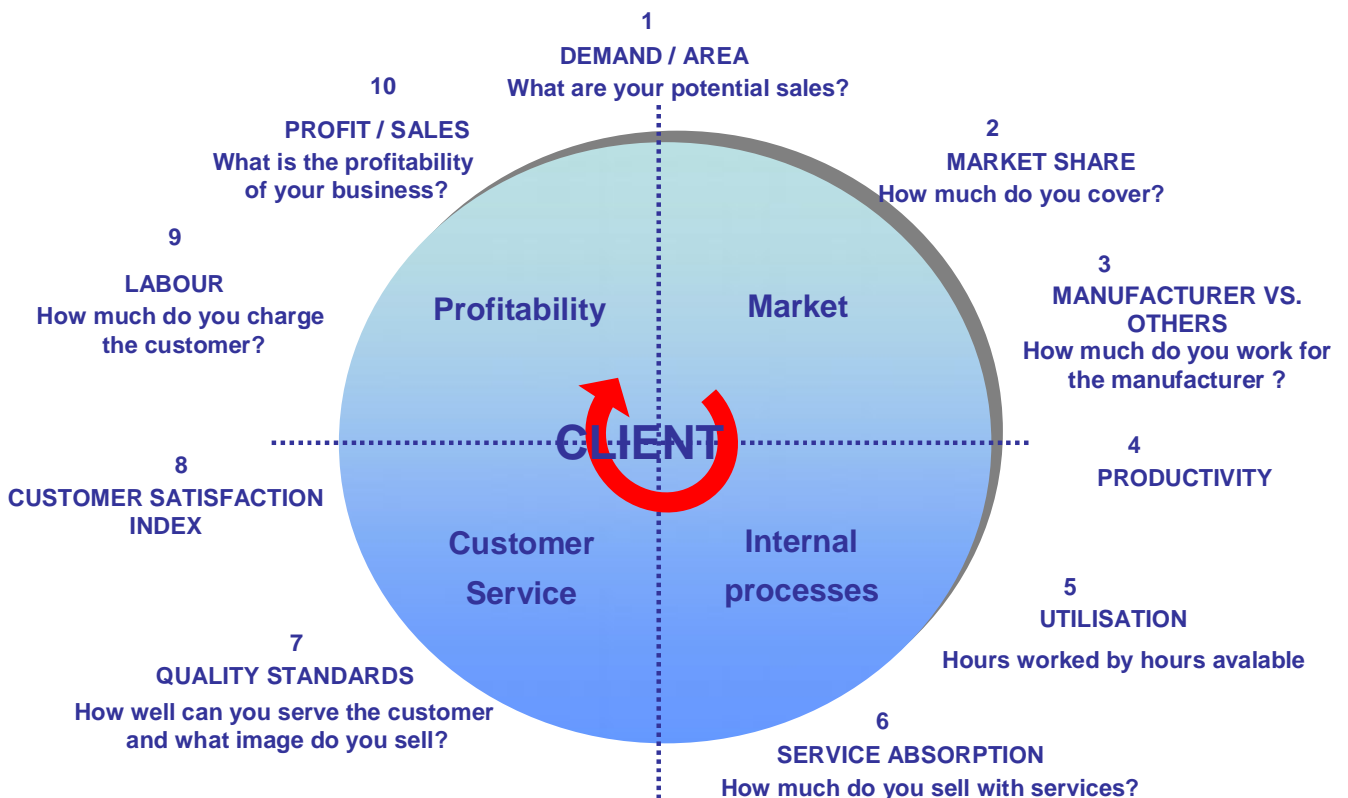


Fig. 2 The way from demand to profitability

Note: CSI – Customer Satisfaction Index

The Assessment Parameters

1. i_{DEMAND} (demand index - Area Labor rate) - potential of sales hours available in covered territory (calculated on base of running Vehicle Park and general labor hours per vehicle).

$$i_{\text{DEMAND}} = i_{\text{VEHICLE PARK}} \times i_{\text{PARTS CONSUMPTION RATE}} \quad (1)$$

i_{DEMAND} = Total Labor hours demand for a specific area index or labor hours consumption per vehicle

$i_{\text{VEHICLE PARK}}$ = Vehicle Running Park number

$i_{\text{PARTS CONSUMPTION RATE}}$ = Labor hours consumption per vehicle

2. $i_{\text{MARKET SHARE}}$ (market share index) - actually sold hours by the workshop divided by the potential of the area.

$$i_{\text{MARKET SHARE}} = i_{\text{SOLD LABOR HOURS}} / i_{\text{DEMAND}} \quad (2)$$

3. $i_{\text{MANUFACTURER VS. OTHER MANUFACTURERS}}$ (manufacturer vs. other manufacturers index) - percentage of labor hours sold for Manufacturer vehicles vs. total number of labor hours sold by the workshop.

$$i_{\text{MANUFACTURER VS OTHERS}} = i_{\text{SOLD LABOR HOURS FOR MANUFACTURER OF VEHICLES}} \times i_{\text{MANUFACTURER}} / i_{\text{TOTAL SOLD LABOR HOURS}} \quad (3)$$

$i_{\text{TOTAL SOLD LABOR HOURS}}$ = Total Labor Hours sold index

$i_{\text{SOLD LABOR HOURS X MANUFACTURER}}$ = Labor Hours sold per manufacturer index

4. $i_{\text{PRODUCTIVITY}}$ (productivity index) - labor hours sold divided by hours worked.

$$i_{\text{PRODUCTIVITY}} = i_{\text{SOLD LABOR HOURS}} / i_{\text{ATTENDANCE HOURS}} \quad (4)$$

5. $i_{\text{UTILISATION}}$ (utilisation index)- hours worked divided by hours available in the workshop.

$$i_{\text{UTILISATION}} = i_{\text{HOURS WORKED}} / i_{\text{HOURS AVAILABLE}} \quad (5)$$

6. $i_{\text{SERVICE ABSORPTION}}$ (service absorption index) - a business performance indicator comprising all Customer Service Departmental Profits divided by the sum of all other departmental fixed expenses.

$$i_{\text{SERVICE ABSORPTION}} = i_{\text{PROFITS OBTAINED FROM CUSTOMER SERVICE ACTIVITIES}} / i_{\text{TOTAL DEALERSHIP FIXED EXPENSES}} \quad (6)$$

7. $i_{\text{QUALITY STANDARDS}}$ (quality standards index) - workshop quality level according to manufacturer standard requirements (qualitative parameter, suggesting quality standards achievement).

8. $i_{\text{CUSTOMER SATISFACTION INDEX}}$ (customer satisfaction CSI index) - the level of service perceived by clients (qualitative parameter obtained using customer survey).

9. $i_{\text{AVERAGE LABOR RATE}}$ (average labor rate index) - sales divided / hours sold.

$$i_{\text{AVERAGE LABOR RATE}} = i_{\text{TOTAL INCOME FROM LABOR}} / i_{\text{TOTAL NUMBER OF HOURS SOLD}} \quad (7)$$

10. $i_{\text{WORKSHOP PROFITABILITY}}$ (workshop profitability index) - profit of workshop department divided by sales of workshop department.

$$i_{\text{PROFITABILITY}} = i_{\text{PROFIT}} / i_{\text{TOTAL INCOME}} \quad (8)$$

The above mentioned Key Performance Indicators (KPI's) have been grouped in two different categories:

- **managerial parameters** (figure 3) which are responsible for workshops capability to cover the area and to increase market share penetration in terms of labor rate hours, workshops capabilities to manage properly its internal processes in order to have minimum idle times and maximum productive efficiency;
- **economic parameters** (figure 4) which reflect workshops capabilities to maximize the difference between labor rate revenues and labor rate costs.

MANAGERIAL PARAMETERS

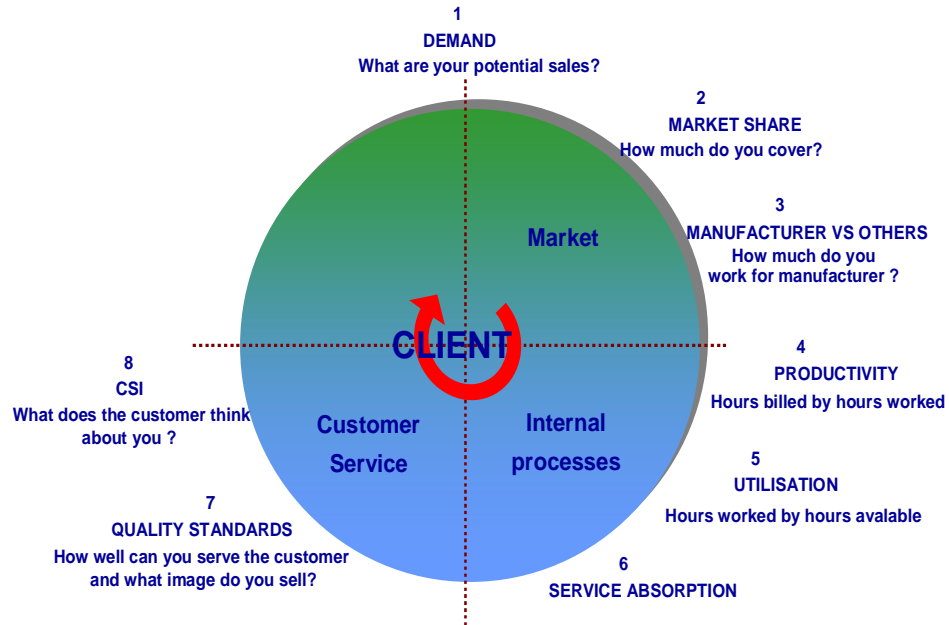


Fig. 3 Managerial parameters – from demand to profitability

ECONOMIC PARAMETERS

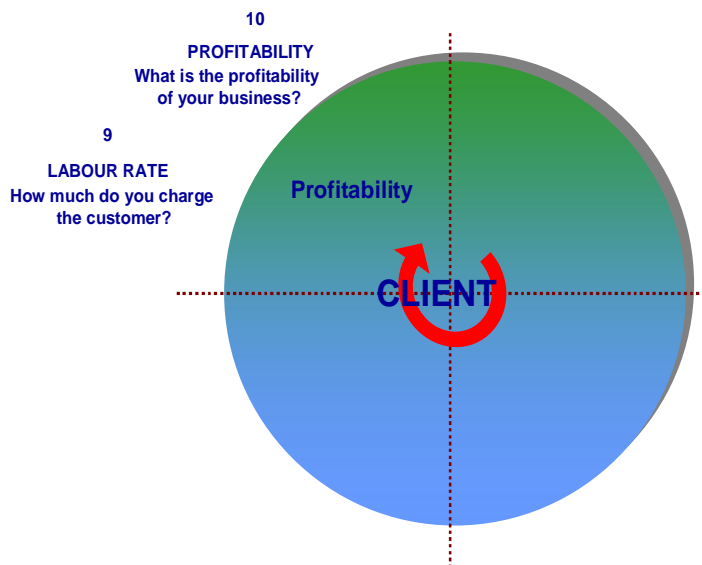


Fig. 4 Economic parameters – from demand to profitability

The average market values for these two parameters represent the reference level within each European market analyzed.

The workshops which perform both from managerial and economic parameters better than their respective market average are performing well and on contrary the ones which are performing below the average market value are critical ones.

Amongst the “good performers”, the ones with the highest values of these parameters can be considered “Best in class”. Their “Best practice” in terms of organisation, management processes, and quality standards must be analyzed in detail and spread across the network.

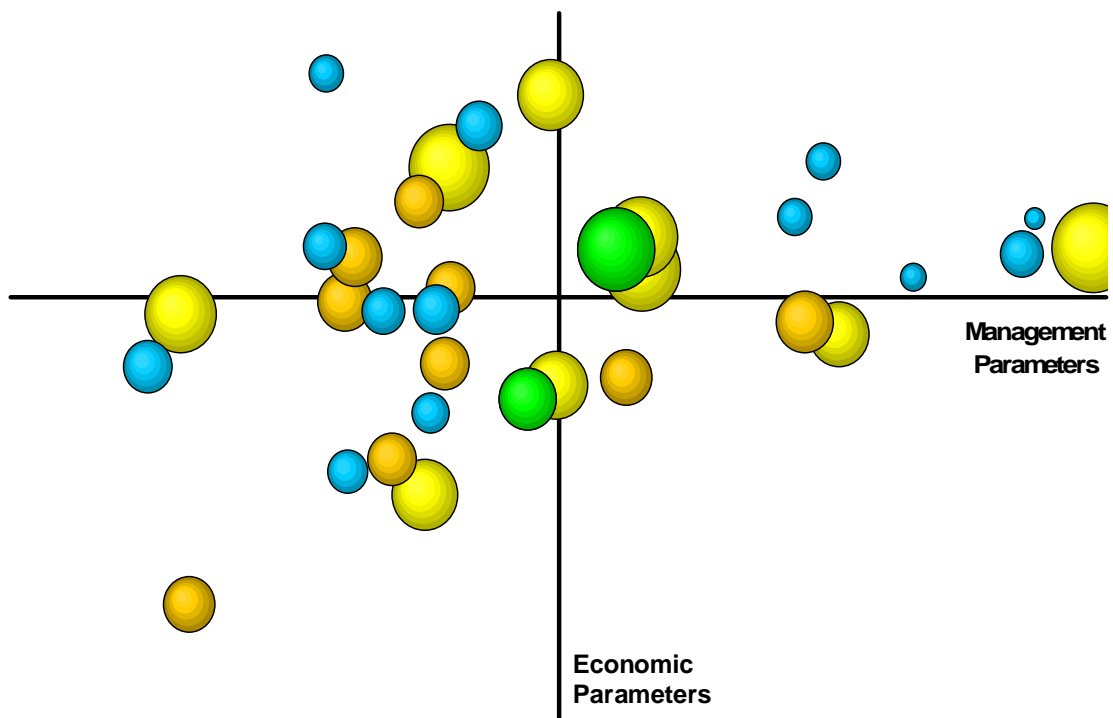


Fig. 5 Bubble graph for identifying the “good performances”

In the above graph (figure 5) every “ball” represents one workshop. The dimension of the “ball” is proportional with workshops turnover.

The workshops which perform on both parameters below market average are critical workshops and be analyzed in detail and gap recovery plans must be identified and implemented.

The benchmark level of performance is considered the average market value for each KPI's.

The benchmark level is dynamic as average value for each KPI's varies when workshops modifies its performance.

For each individual workshop a radar analysis is available; these one immediately highlights weak areas (figure 6).

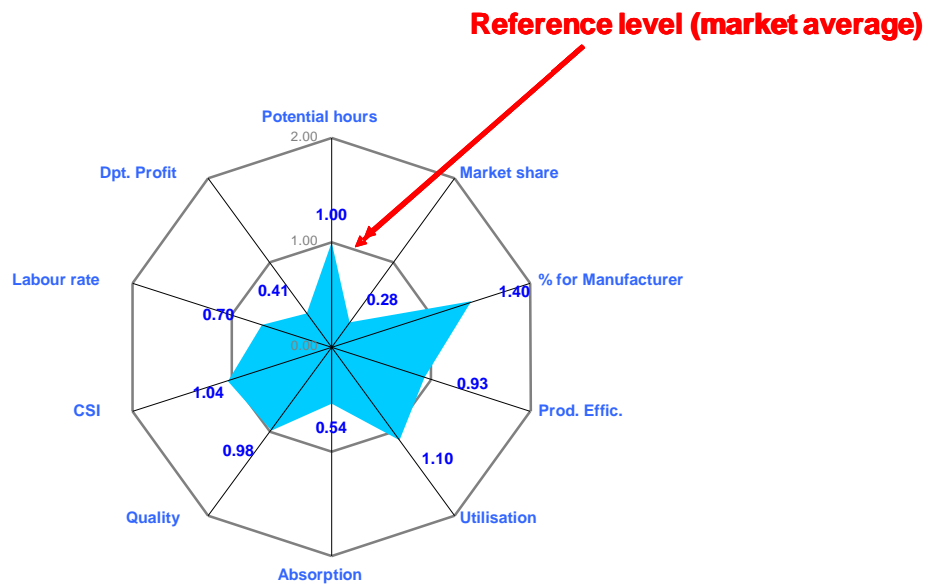


Fig. 6 Radar graph for workshops global performance assessment

Each of the parameters which are below average market level must be analysed in detail, understood the cause of misalignments and gap recovery plans introduced.

Conclusions

This methodology is the first step of a wider process initiated by commercial vehicles manufacturer in order to increase the performance of its after sales network as a lever to increase customer loyalty to its brand and stimulate sales of new vehicles.

The methodology allows manufacturer to identify immediately for each western European market the workshops which are performing well and workshops for which gap recovery plans are necessary.

A deeper analysis is available for each individual workshop and the radar graphs highlight immediately the critical areas.

The model chosen for this analysis is based on average market values for each individual parameter analyzed and the advantage is that this model is dynamic as performance change.

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Evaluarea performanțelor pentru rețeaua de centre de vânzare și service a unui producător important de vehicule comerciale

Rezumat

Acest articol prezintă metodologia utilizată de către unul dintre cei mai mari producători mondiali de vehicule comerciale, în vederea creșterii performanțelor manageriale și economice ale rețelei de centre de vânzare și service, ca o acțiune globală pentru îmbunătățirea nivelului serviciilor oferite prin intermediul rețelei post-vânzare, imaginii mărcii și cotei de piață.