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QUALITY - A FACTOR OF MANAGEMENT IN ROAD TRANSPORT OF GOODS

SUMMARY

Providing services on a quality level is an important factor of management in the trade rivalry for the control over the market. The factors affecting quality comprise technical factors and operational and organisational ones. The technical factors include the choice, the due care and maintenance of the vehicle. The operational and organisational factors are the quality offer, performing the transport service, the response in case of action, and the information efficiency.

The necessity to control the total quality management is the responsibility of the management. All staff members must participate in the improvement of quality management in their particular working environment. Improved quality management provides for a higher safety of business operation and jobs, resulting in enhanced social security, which is gaining importance in mutual relations.

1. INTRODUCTION

Already in prehistoric time Man discovered the benefits of transportation of goods: without that man could not provide for the fundamental requirements for his survival in the long run. Without bringing food he could not establish - and maintain - the basic unit of society - his family.

Also with animals, the carrying of cubs and food goes back before the tools were applied. Therefrom a hypothesis may arise that the commencement of transport goes back before the application of tools.

Fast development of means of transport, organisational skills and information science excludes the issues of quantitaveness that involve quantities, distances and speed. Fast political and economic changes demand to appear in the market with a competitive and quality service in the transport of goods. Today, mainly the methods of work change which are oriented to fulfil the expectations of the client and social environment. The latest trend is to exceed the expectations of the client and to surprise him with an offer that surpasses his demands and the possibilities of competition. In the market only those companies are successful which provide quality services and exceed the current offer. The service must be currently accomplished and adapted to the changes in the internal and external environment, which is all the more unpredictable and dynamic.

Total quality assurance of the transport service performed represents one of the few opportunities that are still available in the trade rivalry in the market. In following this objective, the strategic planning of each company is oriented also to total quality of operations. Unfortunately, total quality has no alternative, which means that quality is never expensive. Care should be taken on the optimum of the balance between the labour cost and quality assurance cost. It is very difficult to establish the cost of 'non-quality' in advance: this can be done much more easily for the past period - though only then when the total quality is already established.

The problem of the quality in commodity transport is expressed with the total quality of the service which is the result of the hard and soft quality combined of the company as a whole. Hard quality is generally known and considered as a category of the operation which comprises:

- the quality and adequacy of equipment,
- the quality of process organisation in providing the services,
- concern and responsibility for the goods,
- the timely execution of the services.

In this manner the quality becomes measurable, visible and tangible.

The soft quality lies mainly:

- in the general philosophy of the quality, as regarded by the people,
- in mutual relations in the company,
- in the quality and manner of the leadership,
- in the relation and attitude to the customer,
- in the loyalty to the company,
- in the willingness of the employees to do their best for a successful execution of the transport service.

In order to achieve the quality outwards, it is indispensable to establish quality inwards: a prerequisite for that is to create an internal customer who has all the dispositions of an external customer, concerning the mutual relations as well as in the management. In order to maintain and increase the quality, all the quality factors which affect the quality of the transport service must be under control.

Also in the service market there are more and more demands to create uniform comparable criteria of quality management, easy to understand for each interested party, not requiring any special quality tests. The reply is found in the ISO 9001 and ISO 9002 Standards, which differ only in the application scope. The former standard assures quality also for the research & development. A company that has acquired an ISO 9001 or ISO 9002 certificate satisfies the requirements according to the standard quality, which does not mean that a higher quality - or excellence cannot be achieved. An advantage of standardised quality is in that the customer knows in advance what level of quality is implied with a specific supplier, without having to perform a special test.

2. FACTORS INVOLVED IN THE QUALITY SYSTEMS

To assure the total quality of road transport service we have to find out what factors actually affect the quality of a service. Without awareness of that, one cannot start developing the quality process in transport. Some factors involved in the quality system can be relatively easily measured, with others that can only be done with difficulty. The influential factors affecting quality are basically divided in tangible and intangible factors. The tangible factors are measurable, visible or can be simply compared to others. When a service is in question, it is different: as it cannot be measured by conventional methods of quality assessment, the most frequent methods of assessment are by comparing individual properties and possible deviations from the agreed standards.

2.1. Tangible factors of quality

The tangible factors of quality system consist of technical factors on one hand, and operational and organisational factors on the other. It is typical of these factors that some can be assessed by the customer, whereas others cannot. All of them have a major effect on the quality of a transport service.

2.1.1. Technical factors of quality

Technical factors of quality comprise: the factor of choice of the vehicle at the time of purchase, the factor of the due care for the vehicle, and maintenance of the vehicle.

2.1.1.1. The factor of choice of the vehicle

It is not irrelevant what kind of vehicle is purchased by the carrier. The purchase must be the result of the requirements of the market. It is essential to define the vehicle's purpose and capacity with respect to the expected weight and volume. As to the type of vehicle it can be a head truck or a head truck for trailer, a universal or specialised freight vehicle.

In the choice of the type and manufacture of a vehicle, the quality and range of its service network in the area of providing the transport services, as well as the buyer's experience in the cost of exploitation, have an important role. The choice of the type of vehicle can also be influenced by commercial factors, particularly those relating to the performance of the operations required.

A further influential factor is the power of the engine, affecting the average travelling speed and the fuel consumption. As a rule, higher power results in higher travelling speed and lower fuel consumption, provided that the transmission ratio from the engine to the driving wheels is correct.

The equipment of a vehicle has two functions. It contributes to the feeling of the driver, which in turn results in his safe driving and improves his willingness for his favourable attitude to the customers and his work. The equipment also allows for additional activities, such as transportation of dangerous goods, provided that the vehicle has the ADR-outfit and the required certificate. It also contributes to the quality of social environement, such as the concern for ecology.

2.1.1.2. The factor of the due care of the vehicle

The factor of the due care of the vehicle comprises two complexes: the technical part, and the complex comprising the integral hygienics of the vehicle. The technical factor is the concern of driver's daily care and control over the faultless operation of all components of the vehicle. This chiefly applies to all the systems that are relevant for the safety and economy of driving. The safety aspect involves the lighting systems, steering systems and braking. The economy aspect relates to the condition of tyres - the pressure, the fuelling system, the engine and the lubrication system. The cargo transport system, i.e. fixing, airtightness, safety, correct distribution of weight etc., is of major relevance, too.

The complex involving the integral hygienics of the vehicle relates to its orderly condition - both internal and external. A washed vehicle and clean space for the cargo make a good impression on the customer; an orderly appearance of the driver and a tidy cabin contribute no less to the image of the carrier. A fresh appearance of the driver, zealous and ready to help, and

of his tidy and orderly vehicle can exert a positive influence on the customer and its staff members. The very satisfaction of the customer's staff may be decisive in retainig the business relation.

2.1.1.3. The factor of the maintenance of vehicle

Regularly maintained vehicles assure a much higher driving safety; that is vital for the quality of a transport service over the whole transport chain. Maintenance involves relatively high costs, which often results in neglecting the preventive maintenance. As a rule, unsystematic maintenance is more expensive than regular maintenance: the action required for the salvaging vehicles in break-down on the road only results in incurring additional cost and repairs. These costs are increased by the distance from the carrier's own logistic service centre. Since the customer is inevitably affected, a detrimental - often irrecoverable damage is caused to the image of the carrier. A sudden failure of the vehicle also results in the destruction of the time schedule over the whole transport chain.

2.1.2. Operational and organisational factors

These include the following factors: of quality and offer (availability), of quality in providing transport service, of the response in case of action, and the factor of information efficiency.

2.1.2.1. The factor of the offer and contract quality

Before issuing an offer, the market research is usually carried out and the information on the potential customer, the business in question and persons responsible obtained. This part of the process is one of the most relevant in the whole business. The requirements of the customer have to be perceived and cosidered carefully, and then weighed against the carrier's possibilities, compared to the competitors. The carrier's capability must tend to higher levels of requirements and exceed the capability of the competitors. It should never fall under the level that is already mastered by the carrier, although it may be sufficient for the customer. If the quality of the service is higher than required by the customer, it should be offered as such.

The offers must be complete and feasible, comprise the elements of quality assurance with the required action and control functions.

In the offer, as well as in the contract following the offer, it is perfectly right to say no; but to accept the order and fail to fulfil the promise is wrong. This is one of the axioms of the quality business culture in respect to the customer.

2.1.2.2. The factor of quality in providing transport service

The process of transport begins with placing the vehicle to the point of loading. Several quality requirements have to be satisfied here: if only one requirement is not satisfied, we cannot speak of placing the vehicle for loading on the required quality level. The elements of loading are:

- just-in-time delivery - not earlier nor later,
- adequacy of the vehicle according to the agreement,
- adequate staff,
- readiness of the vehicle.

Particular attention should be paid to the early delivery of the vehicle for loading. This may arise from the competitiveness, but it may intrude on the integrity of the process, and is therefore inappropriate.

A special quality element is the communication response of the vehicle on the transport route, which must be pre-determined. The driver has, according to the pre-set time schedule, to call and report to his dispatch service which controls the movement of the vehicle on its route in the function of operational decision making. This facility allows the carrier, at any time, to advise its customer on the position of the vehicle and any possible trouble. The information on the position and condition of the vehicle is indispensable in order to win time in case of need, or due to possible action taken by the authorities. The care for the goods carried, such as securing and the influence of atmosphere, is also important during transportation.

The same quality requirements apply to the arrival of the vehicle at the point of unloading. At customer's request, other quality elements can be added: all of them must be under permanent control and subject to action in case of failure of implementation.

2.1.2.3. The factor of response in case of action

In road transport, the most frequent action may be taken in case of serious defects and accidents. At least the basic guidelines of salvaging the vehicle and goods, in order to reduce the damages, must be defined. These guidelines comprise the time which is acceptable for release of goods, and the responsibility for the staff, if injured. Both the sender and receiver of goods must be advised on the salvaging of goods. Here the information on the condition of goods and the delay caused is relevant.

The efficiency of salvaging, or of the action taken, reflects the quality of business operation of the carrier.

2.1.2.4. The factor of information efficiency

An efficient and reliable global information system that covers the whole operational area is required to provide for a good control of all quality factors. It must be accessible for all those participating in the management and control of the transport process. A computer-aided information system which integrates all the information required is idispensable for business op-

eration with a large number of vehicles and an increasing number of customers.

The information system must comply with the following requirements:

- adequate hardware
- secured safety and secrecy of data
- simplicity
- user-friendly applications
- fast response

Moreover, the current relevant information and the input of changes (up-dating), as well as the selection of the information required for decision making must be provided for.

2.2. Intangible factors

Intangible factors are gaining importance. Often they are decisive in the relations with an external and internal customer. The soft quality of a service is a hardly measured category: there are only relative and comparative techniques available, which differ from case to case. The quality offered to the customer depends firstly on the motivation and quality of the internal party. A subjective feeling of quality perception which involves the establishment of a link to, and relations with, the customer, is very important for a service. Both parties, the contractor and the customer have the same objective, that is the quality of the service performed.

The elements of intangible factors are:

- ability to understand the position of the customer and share his feelings;
- willingness to take the incentive,
- personal engagement for the customer,
- attentiveness of the sales staff members and drivers,
- accessibility and fast response,
- obligingness with advice and solutions, in particular in problematic situations,
- general positive energy of the participants,
- ability to constructive communication,
- confidence in business.

All these elements are the basis for establishing and maintaining the partnership in business, whereas dissatisfaction of the customer leads to the loss of business. In business, the highest damage is a loss of a good customer, because finding a new customer involves great efforts and new investments.

We must be aware of the fact that intangible quality can only be assured by motivated and satisfied employees.

The layout represents principal organisation of the total quality management. The director or president of the company are at the top of the entire organisation. All reports are collected by the person responsible for the quality system implementation in the management team for quality. The person in charge prepares the summative reports and selects the problems according to their influence on quality. The management team for quality charges the technical team, which may be only a temporary team, with the preparation of professional solutions of possible problems. The management team assigns the technical solutions adopted on the subordinate organisational units.

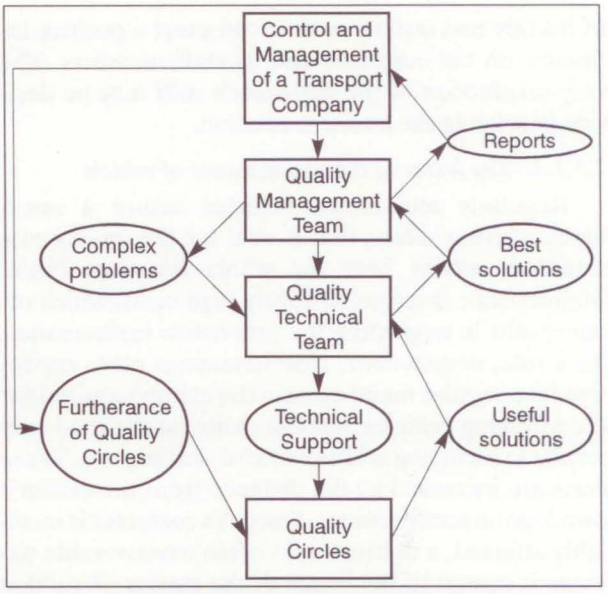

Figure 1 – Recommendable quality layout

The principal task of the management team is to spread the culture of the quality management on all employees; this can only be achieved by including the employees in the activities of quality promotion, which are embodied in the quality circles, or in as broad a range of employees as possible. The quality circles must have a comprehensive and efficient support of the Management team: otherwise their function is a purpose for itself and produces no effect.

3. CONCLUSION

The necessity to control the total quality management in a road transport company (haulier) is an urgent task for the management in order to compete in the acquisition of new businesses, as well as in keeping them. Keeping the customer must be given top priority to all the staff members: namely, the cost of acquiring a new customer is five times higher than the cost of retaining the customer. All staff members, without exception, must take part in the improvement of quality management, each of them according to his or her working environment. The employees must be aware that total quality management provides for higher safety of jobs and consequently improved social security, which is all the more important factor in mutual relations and personal happiness.

POVZETEK

KAKOVOST - DEJAVNIK POSLOVANJA V CESTNEM PREVOZU BLAGA

V konkurenčni borbi za obvladovanje tržišča je med dejavniki poslovanja pomembna kakovostna storitev. Faktorji kakovosti so lahko tehnični in operativno organizacijski. Med tehnične faktorje kakovosti se šteje: Izbira vozila, skrb za vozilo in vzdreževanje vozila. Operativno organizacijski faktorji pa so kakovostna ponudba izvajanje prevoza, odzivnost v primeru ukrepov in informacijska učinkovitost.

Potreba po obvladovanju celovite kakovosti je predvsem naloga poslovodstva. Pri dvigu kakovosti poslovanja morajo sodelovati vsi zaposleni, vsak na svojem delovnem okolju. Večja kakovost poslovanja nudi večjo varnost poslovanja in delovnih mest, s tem pa tudi večjo socialno varnost, ki je vse pomembnejši faktor v medsebojnih odnosih.

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