

Research on the Problems of Enterprise Logistics Transportation Cost Management and Optimization Countermeasures

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Abstract: For modern enterprises, logistics and transportation is an important factor affecting the profit of enterprises, and its role is obvious and critical. However, how to effectively manage and reasonably control logistics and transportation costs in the new era to improve the economic benefits and competitiveness of enterprises has become an important issue that every enterprise needs to consider and resolve. In this context, this paper analyzes the role of transportation in logistics, discusses the connotation of enterprise logistics transportation cost, and elaborates on the problems of enterprise logistics transportation cost management and optimization countermeasures, aiming to provide useful reference for enterprise development and competitiveness improvement.

1. Preface

As we all know, the development of enterprises cannot be separated from cost management, and only through good cost control can we achieve the maximum benefit of enterprises. However, logistics transportation cost management, as an important part of enterprise cost management, is the key to the cost management and interest protection of modern enterprises. Therefore, it is of great practical significance for the development of enterprises to explore the management problems of logistics and transportation costs and put forward timely and effective optimization measures.

2. The Role of Transportation in Logistics

Logistics mainly includes loading and unloading, transportation, storage, processing, packaging and distribution, while logistics transportation refers to the delivery of the relevant goods to the designated places to sell or to consumers. According to the actual situation of logistics and transportation, time and space effects are the key to guarantee the efficiency of enterprise logistics, and both need to be completed through storage and transportation. In the increasing development of science and technology and the continuous improvement of enterprise management, the influence of the time effect of storage on enterprises is gradually weakening, instead, transportation is playing a more important role in modern enterprises to control logistics. Therefore, good cost management of transportation becomes the key to ensure the efficiency.

3. Costs of Logistics and Transportation of Enterprises

3.1. Cost Composition

The cost elements of enterprise logistics transportation are mainly composed of costs of fuel, route, management, maintenance and labor, etc. Each element has an important influence on the cost of logistics transportation. However, they will change with changes in transportation volumes, service volumes and fixed costs. In logistics transportation, transportation costs in terms of routes are variable costs, which include not only fuel and labor costs, but also maintenance, loading and unloading, pick-up and delivery costs; however, for fixed costs, they mainly include the cost of facilities with endpoints. Overall, logistics and transportation costs are mainly composed of the following three aspects. First, direct labor costs. Direct labor cost refers to the salary expenditure of logistics transportation personnel, mainly including the cost expenditure incurred by drivers and assistants in logistics transportation and vehicle repair. Second, the direct material cost. Direct material cost refers to some material consumption in the process of logistics transportation, which includes fuel and tires. Fuel consumption refers to the diesel, gasoline and other materials consumed by the vehicles in logistics transportation. Tire consumption includes both the vehicle outer tire consumption and the repair and retreading costs of vehicle inner tire, cushion belt and other aspects. Third, the cost of other items. Other cost items of logistics and transportation costs mainly involve maintenance and repair, road maintenance, depreciation and other costs in four areas. First of all, the cost of

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maintenance and repair is mainly the cost of vehicle maintenance and repair. Secondly, the road maintenance fee refers to the road maintenance fee that needs to be paid according to the relevant regulations. Furthermore, depreciation is the cost of operating vehicles in terms of depreciation. Finally, other costs include accommodation, bridge toll, car wash and insurance.

3.2. Cost Accounting

For the enterprise logistics transportation cost, its accounting involves several accounts, and different means of transportation and modes of transportation will not only affect its cost, but also have an impact on the quality and effectiveness of logistics. Therefore, how to do cost management and control at the same time to ensure that the choice of means of transport and transportation modes is reasonable and scientific has become the top priority of logistics cost management and accounting.

3.3. Influencing Factors

3.3.1. Rationality of logistics transportation

The rationality of logistics transportation has a great influence on its cost management, and only by ensuring the rationality of logistics transportation can we realize improvement of both cost and service quality. In the actual cost accounting process, the rationality of unit cost should be continuously predicted, assessed and analyzed, and then effective prediction should be made based on the analysis results, so as to ensure the rational management and control of transportation cost as much as possible. The rationality of logistics transportation mainly includes four aspects. First, the transportation distance. Transportation distance is a direct factor affecting the cost of transportation. It will have a direct impact on the cost of fuel, labor and maintenance. Second is the amount of cargo. There are certain economies of scale in transportation, where fixed costs such as tools, equipment and administration costs are effectively shared. The cost of transportation decreases as the volume of cargo increases. Therefore, the only way to achieve effective control of transportation costs is to ensure the rationality of cargo volume. Third, transportation time. Transportation time is an important factor influencing the rationality of logistics transportation costs. There is a trade-off between it and logistics transportation costs, and if you want to make transportation time shorter, then the cost will inevitably rise. If the time requirements are not strict, you can choose a more appropriate mode of transport, so as to ensure the rationality of logistics transportation and further control the costs. Fourth is the density of goods. As we all know, logistics transportation is mainly cargo transportation, if the cargo transportation tool space is effectively used, that is, the cargo density is relatively reasonable then the transportation cost will be effectively reduced.

3.3.2. Quality and timeliness of logistics transportation

The quality and timeliness of transportation are important factors influencing the management of logistics transportation costs. Nowadays, in the increasingly competitive situation of logistics and transportation services, how to ensure the quality and timeliness of transportation has become the top priority of logistics and enterprise development. Therefore, logistics and transportation enterprises should also take this as the base point, make good choice of transportation methods and means of transportation, and choose reasonable means and methods of transportation under the premise of ensuring customers' demand for quality and timeliness, so as to realize cost control and achieve the purpose of win-win situation for all parties. At the same time, the logistics transportation cycle and storage costs will be reduced when the logistics transportation timeliness is guaranteed. There are many ways to improve the effectiveness of logistics, the most important of which is to integrate logistics resources, which has also become an important trend in the development of corporate logistics. Management in terms of transport quality can help enterprises to reduce as much as possible some non-essential expenses during logistics transport and reduce its process consumption costs. Since there are certain opposites and contradictions between quality and timeliness assurance of logistics transportation and its cost control, so in the practice of enterprise logistics transportation, we should actively seek the balance point among them, and do a good job in the effective management of transportation cost around the quality and timeliness that customers are concerned about, so as to realize the effective unification of service, quality and cost control.

3.3.3. Enterprise Logistics Talents and Management

For enterprises, talents and management are fundamental to their survival and development, and the same applies to logistics and transportation. Enterprises to ensure the effectiveness of logistics and cost management effect, must do a good job of building a team of talent and management framework to build work. First, in terms of talent to strengthen the sense of responsibility. Only to ensure good logistics and transportation talent accountability construction and standardized management to achieve the purchase and sale control of transportation costs, in order to promote the effective protection of enterprise logistics revenue; Second, in the management of a reasonable and scientific transportation cost management system. Only the construction of a reasonable and scientific transportation cost management system can effectively reduce the cost of transportation expenses, which is also the current enterprise transportation cost control and management must go through.

4. The Current Situation of Logistics Transportation Cost Management

4.1. Transport quality needs to be improved

In the new era, only by doing a good job of quality assurance can the enterprise stand invincible for a long time. Therefore, for the logistics transportation of enterprises, quality is like its lifeline, the significance of good quality assurance work is not only to ensure good economic benefits, but also to gain a better accumulation of reputation, and more to enhance their competitiveness. Quality assurance is mainly for customers, and only the recognition of customers can be considered high-quality products and services. In the process of enterprise logistics and transportation, quality assurance often requires the cooperation of various links to ensure the timeliness and accuracy of information transmission, so as to achieve effective follow-up and feedback in the distribution process. If this process appears to be unreasonable cooperation, it will directly affect the transport data and information. In today's enterprise logistics transportation, shipping information and data are two aspects that enterprises must control. Once the data or information distortion occurs, it will lead to the inability to accurately verify the purpose and safety of transported goods. Combined with the reality, although many enterprises attach considerable importance to the issue of transport safety, but because the customer does not put in high insurance, so that many goods exist selective input insurance, which makes once the situation of transport cargo damage, will directly lead to disputes arise. In order to deal with the problem, it is necessary for enterprises to do a good job of transport quality, especially safety hazard prevention, only in this way can achieve double protection of services and profits.

4.2. Severe Logistics Brain Drain

Serious logistics brain drain has been the main resistance to the development of enterprise logistics and transportation. The main reason for this is that some managers have improper cognition. For example, some managers think that logistics transportation is simply about handling, loading and unloading, and transportation, in fact, this view is not correct. Because logistics is a combination of several modules organically connected, they are interlocked and inseparable from the beginning to the end. At present, although China's logistics industry is developing rapidly, and the logistics business of various companies is also in full swing, there is a widespread phenomenon of neglecting talent training and recruitment. We all know that in the process of company development, few companies pay attention to the logistics industry talent training, which makes the logistics talent skills literacy insufficient. As we all know, in the process of company development, few enterprises pay attention to the logistics industry talent training. This makes logistics talents lack of skill literacy, which in the long run will form a vicious circle in which leaders do

not pay attention to it and enterprise revenues decrease, leading to the loss of logistics talents, and laying negative hidden dangers for the good production and development of enterprises.

4.3. Lack of Transportation Cost Management

Whether it is a professional logistics enterprise, or a company of various sizes, in the process of its logistics transportation, there will often be empty car transfer, empty drive and empty car without cargo. This kind of problem is mainly due to the fact that many enterprises carry out logistics transportation through their own vehicles, which will cause the phenomenon of empty transportation. At the same time, because of the nature of the source of goods and other reasons, some logistics transportation is not suitable to replace the cart, otherwise it will cause cost waste, coupled with some logistics personnel's poor planning or planning error, will make the source of goods not real. In addition, the excessive crossing management between regions will also make the logistics transportation of vehicles too dedicated, and the goods can not be transported by vehicles between regions. In addition, some staff do not have enough mastery of the regional ground environment, regional climate and customer requirements, which will also lead to a surge in transportation costs. Finally, due to the system defects in logistics transportation, it may also lead to empty driving, repeated and abnormal transportation, which brings great influence to the management of enterprise transportation costs. Therefore, to do a good job in logistics and transportation cost management, we must build a scientific management mechanism system, in order to reduce and control logistics and transportation costs.

5. Logistics and Transportation Cost Management Countermeasures

5.1. Ensure the rationality of transportation decisions

Logistics transportation decision is an important part of enterprise logistics activities, which mainly includes the transportation route, transportation mode, service providers, transportation capacity and planning decisions. In order to further optimize the logistics transportation cost management, enterprises should effectively improve the rationality of transportation decisions. Specifically speaking, can start from the following four aspects.

First, in the context of the concentrated destinations of freight transportation and large quantity of goods, the enterprise logistics transportation should use direct form of transportation as far as possible. Its advantage lies in that it can reduce the cargo damage or loading and unloading costs caused by medium conversion load, so as to realize effective cost control.

The second is to do a good job in advance of the transportation route analysis, choose the shortest transportation route. In this process, it is necessary to

consider the road conditions, transportation convenience and transportation costs between the origin and destination, and select a more appropriate route based on the existing transportation means and traffic conditions. At the same time, the choice of transportation means should be combined with route factors and distance factors, analyze the effective method to balance the cost and time, and select a most appropriate transportation mode and route with high timeliness. On this basis, it is necessary to carry out short and medium distance logistics transportation of highway, waterway and railway distribution, in order to further improve the logistics transportation capacity. We should give full play to the advantages of highway transportation speed and convenience while ensuring the timeliness of waterway transportation service. As for air logistics transportation, due to its high cost, effective choices can be made based on actual customer needs to avoid the waste of transportation costs.

Third, combining with the cost management objectives of reducing hidden costs and minimizing costs to make reasonable transportation decisions. In the actual process of logistics transportation, it is necessary to adopt a comprehensive perspective to analyze the loading and unloading time, product characteristics and consumption time of transportation. Combined with the frequency and plan of its own logistics transportation, it is necessary to analyze the cargo volume of each logistics transportation, so as to improve the transportation decision.

Fourth, we should do a good job in the optimization of centralized transportation and reduce the cost of some intermediate dispersed freight transportation. To do this well, enterprises should focus on the logistics needs of customers and the market, do a good job of deployment, and maintain the relationship between the middle and downstream of the logistics line, so as to ensure the rationality of transportation decisions.

5.2. Pay Attention to the Use of Information Means

Nowadays, information technology is developing rapidly, and it has been widely used in various fields, including logistics industry. With the support of information technology, logistics transportation not only realizes the upgrade of information accuracy and technology advancement, but also obtains the effective opportunity of cost control. In this regard, it is necessary for enterprises to base on the development situation of the information age and to further implement the logistics transportation cost control based on the information means. Specifically, it mainly includes the following three aspects.

First, enterprises should do a good job in the optimization of logistics storage information system, achieve accurate logistics distribution, reduce the distribution errors in the process of transportation, in order to ensure the effectiveness of cost control.

Second, it is necessary for enterprises to optimize the facilities system and strengthen the construction of

network based on information means.

Third, enterprises needs to take in the whole process of logistics information management, data exchange network, implement logistics process, and enterprise information sharing between customer and ensure good logistics information in the process of tracking, and effective control of enterprise logistics transportation of information, capital, ensure the implementation of cost control and management goals.

5.3. Improve the Organizational Structure and Incentive Mechanism

First, the relevant managers should pay attention to the comprehensive use of negative constraints and positive incentives, so that logistics staff can maintain a good working attitude and ability through the two-pronged approach. On this basis, establish the relevant organizational structure, and formulate good system and policy, especially to do a good job in the formulation and optimization of incentive mechanism, through this move to ensure the quality of logistics and transportation talent team. In this process, we should pay special attention to the construction of incentive mechanism. Practice has proved that only by ensuring the benefit income of talents, their sense of belonging can be gradually improved and their enthusiasm for work can be effectively guaranteed. Therefore, in the face of the loss of logistics talents, enterprises must do a good job in the construction of incentive mechanism, to achieve rewards and subsidies, so that logistics personnel can get more benefits, so as to further improve their enthusiasm for work. On this basis, the enterprise should combine the actual situation of logistics and transportation work, actively carry out the monthly, quarterly and annual excellent staff selection and reward work, so that talents can get due harvest, further improve their satisfaction, stimulate their work enthusiasm.

Second, we must do a good job in promoting training matters. For the logistics development of enterprises, training is a necessary means to ensure the quality of talents. If the training is not done well, the personal skills and quality of employees will not be guaranteed. This will not only hinder the good development of its logistics, but also bring more cost consumption to the follow-up logistics transportation. In this regard, enterprises must pay attention to the logistics personnel training matters. On the one hand, enterprises can actively connect with some logistics transportation experts, regularly carry out relevant training matters, provide logistics staff with more advanced working concepts, enrich their professional knowledge and cognition, further strengthen their working attitude, and reduce the situation of unadaptability to the post through industry experts' speeches or technology delivery services. On the other hand, enterprises should also do a good job of internal training, such as quarterly excellent staff evaluation or skills competition, regular selection of model models in logistics and transportation. On this basis, guide them to share experience internally, so as to deepen personnel's job cognition, create an atmosphere of mutual driving

and overall promotion, effectively improve the comprehensive quality of logistics personnel, and reduce the subsequent increase in cost caused by the lack of talent quality or talent loss.

5.4. Build a Market-oriented Transportation System

The establishment of market-oriented transportation system can not only boost the development of enterprise logistics transportation, but also is the only way of logistics transportation cost management. In this regard, enterprises should build a group logistics organization around logistics business as soon as possible, and further strengthen their own logistics transportation strength and competitiveness. For example, we can actively connect commodity logistics and distribution centers, form a mutual cooperation and promotion relationship with them, and build a nationwide logistics transportation and distribution service network for all branches, so as to further reduce the cost loss in logistics transportation and distribution process. At the same time, enterprises should focus on some transportation hub areas and actively build regional warehousing, which can not only reduce logistics transportation costs, but also lay the foundation for further expansion and development of logistics business in the future, which can be said to kill multiple birds with one stone. In addition, we should actively integrate the logistics supply chain information network to provide effective information support for warehousing, distribution and transportation of enterprises. Through this, we can realize the effective integration of logistics and transportation information resources and further reduce the cost loss in the process of logistics and transportation of enterprises.

6. Conclusion

In general, logistics and transportation occupy an important position in modern enterprises. Effective management of logistics transportation cost is a necessary measure for enterprise logistics development, and also the only way for enterprise modernization and expansion. In the new period, it is necessary for enterprises to base on the existing problems in logistics transportation, constantly use new ideas and methods, and actively create a scientific, reasonable and modern logistics transportation normal, further reduce the logistics management costs of enterprises, and lay the foundation for the good development of enterprises and their logistics.

References

1. Liu Y. (2019) Financial management of logistics and transportation enterprises. *China Journal of Commerce*, 16:12-13.
2. Guan L. (2017) Research on logistics transportation cost management. *Modern Economic Information*, (23): 221-221.

3. Zhang R. (2016) Study on transportation cost management and control strategy of small and medium-sized logistics enterprises. *Modern Business*, 8:159-160.
4. Liu H. (2021) Analysis of enterprise cost management strategy under lean management, *Times Finance*, 20: 82-83.
5. Li N. (2013) How to reduce the operation cost of enterprise logistics, *Hebei Enterprises*, 6:40-40.