

# Research on Marketing Strategies on Existing Line in Cargo Transport Market under the Separation of Passenger and Freight Traffic in China

Fenling Feng & Lingling Xiong

School of Traffic and Transportation Engineering, Central South University

Changsha 410075, China

E-mail: FFL0731@163.com

Received: July 7, 2011 Accepted: July 27, 2011 doi:10.5539/ijbm.v6n9p183

*The research is financed by Ministry of Education of the People's Republic of China Central Higher Education Basic Scientific Research Business Charge Central South University Core Project (2010QZZD021); Railway Ministry of the People's Republic of China Research Cultivation and Planning Project of Science and Technology (2010X014); Railway Ministry of the People's Republic of China Research Cultivation and Planning Project of Science and Technology (2008X020-B)*

## Abstract

Based on the SWOT analysis of railway cargo transportation market, the paper chose and fixed the position of the object market of the existing lines of cargo transport after the separation of passengers and cargoes into different lines by rail, pointed that we should be actively develop new products to satisfy the market diversified demand and further made suggestions for the marketing, including establishing a flexible rate system, improving marketing channels, promotional efforts, personnel quality and service quality.

**Keywords:** Separation of passenger and cargo into different lines, Cargo transport by rail, Marketing strategies

For a long time, China took use of railways to transport cargoes and passengers together that is, the busy main lines should both express passenger trains and transport cargoes at low speed. When these trains travel on the same lines at different speed levels, they interfere with each other. As a result, not only do the passenger trains are affected by the cargo trains and meet difficulties to speed up, but also the cargo train extends the transport schedule because of frequent right-of-way over any passenger trains, both of which directly affect the quality of transport. In November 2008, the Railway Ministry of the People's Republic of China published the Planning of the Adjustment and Scheme of Long and Medium-term Railway Network, according to which, by 2020, the railroad will reach to 120,000 km, multiple used line rate and electrification rate will reach to 50% and 60% of the above respectively, the passenger lines will reach to 16,000 km, the main busy lines will be used by passenger trains or cargo trains only. The gradual implementation of separating passenger trains from the cargo trains on different lines will enable the Chinese railway freight capacity to get a great release from limit, to promote the change of railway transport from restrictive mode to loose mode gradually in China, and to increase the competition between different transport vehicles when market demand changes significantly, economy develops quickly and industrial structure has been adjusted rapidly. In the new situation, a new concept on railway freight marketing should be set up to work out marketing strategies on existing lines in the cargo market after separating cargo and passenger trains into different lines, which will be significant to improve market share of rail transport and development of rail transportation. In marketing theories and practice, many national and foreign scholars have done a lot of relevant research to the railway transport<sup>[1]-[5]</sup>, which provided a good foundation for this research.

## 1. Effects of separation of cargo and passenger lines on existing lines in cargo transport organization

There are mainly two effects of separation of cargo and passenger lines on existing lines in cargo transport organization: first, the transport organization mode will change; second, the capacity of cargo transport will be released and cargo transport will be more efficient. At present, there are three kinds of research of organization of transport modes of existing lines after separating cargo from passenger trains: first, the train volume determines that cargo or passenger trains can travel during some part of time; second, the cargo and passenger trains travel together; third, the lines are mainly used by the cargo trains and partly by the passenger trains if needed. According to Chinese conditions, the passenger line will be built to serve to high speed trains, the existing lines will be used mainly by cargo trains passengers and serve auxiliarily to passenger trains of the low and medium speed, the arrangement of which will satisfy the demand of passengers on different levels, at the

same time satisfy the social cargo transport demand ultimately. At that time, "cargo first, passenger next" will be the main principle of the train schedule arrangement, the existing lines will not be used restrictedly to passenger train. Passenger trains prior to cargoes trains during the Spring Festival and the Summer Holiday will not happen any more. The existing lines will mainly serve to cargo transport in the future.

After separation of cargo lines from the passenger trains, the capacity of existing lines has been released greatly. In 2010, on the existing lines of Jingjin, Jiaoji, Wuguang, Zhengxi, Huning after the operation of high speed trains, the new operating trains are 4, 33, 33, 5, 32 double respectively, increasing the transport volume of 10.95 million tons, 29.20 million tons, 87.60million tons, 14.60 million tons and 83.95 million tons respectively, totally to 23 million tons. After separation of cargo lines from the passenger trains, the released capacity of existing lines in most part of railway will reach to 50% to 190%, which gives a chance to the development of direct transport, heavy loading transport and express transport and provides conditions to realize "bulk cargo be direct, high value cargo be rapid".

## **2. SWOT analysis on cargo transport market by rail in China**

### *2.1 Strengths*

Rail freight has a series of advantages, including being high capable, low cost, high efficient, low carbon, free of climate and geographical conditions comparatively. Therefore, it takes the traditional advantage in the long distance and medium distance transport of bulk commodities. At the same time, the railway network is monolithic. Its infrastructure network, information network and operation network cover all over the country. While the railway network expands and separating lines for cargo or passenger transport increase, the railway transport supply increases, which offers conditions to develop direct transport, express transport and railway marketing works. Moreover, the railway in China has an independent communication network and relatively perfect management information system, which can realize the whole routine monitor on goods from receipt, loading, traveling and arriving by computers; and can collect and feed back the information during the transport.

The energy usage rate is high for railway transportation because the electric traction will reduce the use of fuel, and it has also the advantages of being less contaminated, the earth economy, and being less noisy, which presents the feature of sustainability of development. In our society that advocates low-carbon economy, rail will be a prior mode of transportation. China's railway freight implements the strategy of the big client, whose cargo transport volume has reached 35%of all and has created the significant benefits for railway transport. Otherwise, the railway transport takes the advantage of being social and public, being low cost, being safe and has attracted more and more consignors. Nowadays, the railway transport has set up the good social image by exploring new products and promoted service standards.

### *2.2 Weaknesses*

Although a series of reforms have been implemented, the transportation system is not strong enough. One problem is that the government does not separate from the enterprises, which results in that the subjectivity in the market remains uncertain. The government's strict control and too much interference on the railroad companies leads to the latter's weakness in operations the lack of vigor. In addition, the railroad financing system is not perfect and financing are mainly acted by government. The source of funds to the railway is its own income, which are mainly government own capital. The unique investor cannot solve the problem of capital shortage and is not conducive to adjustment of ownership structure of railway transport enterprises.

With the restructuring of industrial structure, high added value goods with the characteristics of small quantities, batches, short period increase transport demand, and their owners have a high service requirement of promptness, security, convenience and logistics. However, railway transport is unable to meet a variety of the transport demand because of being less prompt and its limited shipping products. It is especially less competitive in short distance, and high added value goods transport on the market. At the same time, price mechanism is not perfect and lacks flexibility, marketing and service level is low, marketing system is not perfect, all of which has restricted the development of railway transport.

### *2.3 Opportunities*

China's rapid economic growth in 2006 to 2010 presents the average GDP growth rate of 11.2%. The economic development will promote the resources and energy demand for bulk materials, and the railway freight demand will continue vigorous. In recent years, our country has given great support to railway, especially high-speed railway development, and provided the guarantee to separation of passenger from the cargo transport on the busy lines. With the implementation of separating passenger from cargo transport on the existing lines, the cargo transport capacity of the existing lines will expand rapidly, the trains will speed up and the railway transport will be more competitive in the transport market. Otherwise, global economic integration and rail freight market expansion happen together, and foreign investors can make the railway companies absorb advanced technology and management level, all of which will speed up the development of rail transport sector.

The restructuring of industrial structure has increased freight demand of high added value goods by rail transport. Although in the transport market of high added value goods, railway is less competitive, as freight capacity

expansion and network construction of express transport network, the rapid growth of high added value goods will promote the freight market development. In addition, rapid development of modern logistics and electronic commerce has also provided conditions to rail freight development. The railway transport has extended service scope, raised service quality and got greater and greater satisfaction from the consignors. Otherwise, when the concept of low carbon is expanding in the whole society, railway transport has got strong advantages of being less contaminated, high capacity and less noisy.

#### *2.4 Threats*

In recent years, transportation means have developed rapidly and the competition between them is fiercer. Rail freight market share shrinks at about 5% every year, facing great competition from roads and water transport. At the same time, china's accession to WTO put rail freight in a more competitive situation. After China's WTO accession, railway freight market has been open gradually, the means of production and marketing from abroad are relatively practical, but in China, business concepts and services modes, transportation agents, shipping products are relative backward. When comparing with large international transport enterprises, our railway transport companies are at a disadvantage. In addition, the state industrial structure adjustment increases the produced products' demand rapidly, resulting in new growth point of the traditional, extensive railway transport on a disadvantage. As the state strengthens to adjust the economic layout, promotes miniaturization of economy, limits the investment by energy and resources consumed large industrial enterprises. Therefore, the industries, such as coal, metallurgy, building materials, electricity, which has closed industrial relation with rail industries, were introduced the policy of limiting production and reducing stock, slowing down the increasing rate of bulk commodities transport demand.

Insert table 1 here

### **3. Object market location of existing lines after separation**

After separating the cargo lines from passenger lines, the bulk goods in transit will remain the focus of rail freight. The increase of demand of less mass, batches, of high added value materials will move the goods transport to a broader market. With the trend of contemporary railway heavy loading, direct, and logistics, rail freight target market should be dominated by transport of medium distance and long distance and supplemented by short distance transport; dominated mainly by bulk and stable cargo sources and supplemented by odd cargo sources; at the same time, railway transport should develop vigorously container and express transportation and move the goods transport to a larger market share.

#### *3.1 Stabilize bulk cargo transport market and strengthen medium and long distance transport market*

Medium and long distance transport market and bulk cargo transport market are the traditional superior railway freight market in China and have a group of big clients who has contributed great transport volume to railway transportation. After separating cargo lines from passenger lines, these markets will be the focus of railway cargo transport. Big customers will continue to promote the strategy of vigorously developing mass direct trains and two-way loop the trains, which can be attractive by moderate speed and low cost.

#### *3.2 Develop of high added value goods transport market*

Following separating cargo lines form passenger lines, the train running faster and faster and setup of express cargo transport network, the besides railway transport should take the most important position in its advantageous market, it should explore high price, most efficient and safer transport market, promote 5 fixed trains, baggage trains, inter-city trains, cargo and passenger mixed trains and offshore express trains to occupy the express transport market. The cargo transport products should locate on high speed, high price and choose East-South part as the main object market to express transport market.

#### *3.3 Develop container transportation and the combined transport market*

High added value goods have characteristics of being less mass, batches, low weightiness, most of which should be frozen during transport. So they have a relatively high requirement about security, speed and containers. With the development of this kind of goods, the demand on containers is increasing. At the same time, the transport capacity release caused by the separation of cargo lines from passenger lines, many factors have contribution to construction of railway container market, such as construction of national railway container center, construction of synthetic traffic and transpiration system and cargo transport logistics. The railway container transport will focus on the medium and long distance transport with high speed and high price.

### **4. Marketing Strategies of existing railway lines after separating cargo lines from passenger lines**

#### *4.1 Product strategies*

According to the target market demand features and the product target, the different cargo transport products should be designed and developed in order to satisfy diversified demand in the market at different levels. Based on the focus of bulk commodities transport, we should promote brand famous railway transport products, such as five scheduled trains,, baggage trains, express and direct trains, container trains, extend their usage and quantity, and upgrade these products based on the changes of the cargo transport market. The following new products can be cultivated in the high value added products express transport market:

#### 4.1.1 Seasonal express direct train

For a number of large, strong and highly seasonal goods, such as daily used products and seasonal agricultural by-products, we can open express direct train temporarily.

#### 4.1.2 Underloaded express direct train

For big wave properties and the high demands on timeliness products, we can open a surplus of the train on a fixed routine but unfixed schedule in order to encourage the unified transport of many kinds of products and to make reform of containers' transport conditions and pricing standards.

#### 4.1.3 Inter-city freight train

For the supply of small quantity, high value added goods transported between big cities at a relatively short distance, we can open inter-city trains of a small group, high extensive, rapid, fixed departure and destination, and fixed schedule.

#### 4.1.4 Cargo and passenger integrated train

For high value added, timeliness, underweight cargo, we can open a cargo and passenger integrated express train. The new cargo train or added van should be used in order to implementing high-speed, on time, the security operation.

#### 4.1.5 Key pick-up train

For the timeliness and high value added and high demand on security cargo, we should open key pick-up trains, which can be pick up and down vans at the chief technology station by arrange primarily train number, departure station, destination, pick-up and hang time and departing time and realize operation like that of passenger trains.

#### 4.1.6 Network cycle trains

For the supply of big sources, large quantity and return goods, we can supply network cycle trains, that is, adding "Ding che di" to five scheduled train. The cycle trains are efficient and rapid, which is suitable for the bulk commodities transport.

### 4.2 Price strategies

In order to overcome the current problems of china's railway projects, such as charged projects are various, price is not flexible, charges are not reasonable, we can implement the following strategies:

#### 4.2.1 Establish sound pricing system

The railroad price should be adjusted according to market changes by co-existence of the government giving prices, the government guiding prices, market prices. A flexible response mechanism will reflect the supply and demand rules and value rules.

#### 4.2.2 Standardize the charging standard

After separating of cargo liens from passenger lines, in order to occupy the express cargo transport market, railway cargo transport should encourage container transport of more various, small quantity, high added value goods. At the same time, a rule that the goods of different transport charges can not be mixed up has be out of time when the cases involving express cargo transport after separating of cargo liens from passenger lines. Therefore, this rule should be improved. In addition, the pricing method of fixing routine should be reformed too, in order to reduce the cargo owners' additional charges by adjusting the appointed routine.

#### 4.2.3 Adopt flexible pricing strategy

According to market demand, we should adopt elastic, flexible pricing strategy, such as imposing season prices, areas prices. In accordance with different time and place, set up floating freight prices, for example, in the restricted area the price climbs in order to release the pressure of transport within the area, and in other areas the price reduce in order to attract cargo transport sources, both of which can balance the usage of railway.

### 4.3 Channel strategies

#### 4.3.1 Strengthen the competitiveness of railway freight marketing channels

On one hand, we can simplify the procedures and optimize the core products and services, operate reasonable charge, improve service quality of the yard, and make the cargo owner satisfied. On the other hand, we should continue to strengthen cooperation with bigger customer, ally professional persons into big customers' factories to grasp their demand and feedback information promptly, and provide them tailored services.

#### 4.3.2 Improve railway freight distribution channels

Rail freight distribution channels should be improved from the following perspectives:

(1) Expand freight service network and increase the distribution outlets. In order to better occupy the high added value goods transport market, the distribution outlets should be set up within the area of extensive enterprises; the outlets should be also set up in the service area which the railway is not reaching, changing a zero into a whole, and railway can cooperation with roadway to extend the scope of the rail freight service.

(2) By the way of cooperation with other transport means, foreign invested companies, large distribution center and wholesales market, cargo transport businesses should be integrated and a freight service centre should be set up to provide the cargo owners timely, perfect logistics service, realizing complete service from starting point to the finish.

(3) Carry out web marketing. Build on-line marketing system consisting of web services, market research and analysis, the development of production, marketing strategies, information feedback and etc to provide information consulting, order, payment, complaint, settlement and other on-line services. It is not only conducive to the railway departments to optimize the process, raise productivity, but also help upgrade service quality and simplify formalities.

#### *4.4 Promotion strategy*

In the increasingly heated market competition, rail freight enterprises need to adopt a variety of sales-promotion to promote the characteristics of railway transport, such as safe products, economy and express, the old and new and even potential cargo owners in order to win their understanding and credit and to promote railway transport market share.

##### *4.4.1 Staff promotion*

Professional marketing promotion organization should be established, the marketing staff should be organized to get into commodities markets and large distribution center to get businesses. The position should be set into the customs' factory to grasp the production, transport, distribution and inventory, based on which the economic and reasonable transport plan can be set up.

##### *4.4.2 Sales promotion*

Based on different demand and supply caused by different time, place, and object, the preferential policies should be pushed out to stimulate the cargo owners' demand of transport by rail, such as lowering transport price during the Spring Festival, big client preference, mixed loading preference or whole train leasing preference.

##### *4.4.3 Advertising promotion*

By advertising marketing, rail freight should introduce the characteristics of the new products in order to set up wide range of perception among cargo owners.

##### *4.4.4 Public relations*

The brochures, posters, and papers should be published, the news press meeting, cooperation meeting between different departments should be organized, and the activities related to public benefits, charity and local projects should be widely participated in order to promote the railway enterprises' good image.

#### *4.5 Staff strategies*

New circumstances lead to setup of the new concept of total staff marketing. Rail transport production will be accomplished by cooperation of various departments. Therefore, the railway departments at various levels and the public should establish a marketing concept of marketing and should give a good image to customs, n especially the professional salesmen whose behaviors and quality will influence the service quality directly. The railway freight marketing organization should select staff who have excellent capacity of operation, organizations, public relations and advertising, strengthen the business training of marketing personnel, set up scientific examination system and stimulation mechanism to marketing personnel, lead in competition mechanism, strengthen construction of enterprising culture and improve enterprises' cohesion.

#### *4.6 Process strategy*

New marketing concepts should be set up in the new situation that is, implementing marketing strategy before sale, during sale and after sale n the whole process. Before production, the marketing staff should study the cargo owners' demand, explore market opportunities, and locate target market; during production, the staff should use the marketing strategies portfolio of production, pricing, channel, and promotions to realize the transport production; after production, staff should do service and information feedback to work. Through the race for the marketing qualified and considerate services can be provided to the customs.

#### *4.7 Custom service strategy*

Customer service strategies ask for the railway departments focusing on customs' demand, that is, customs' transport demand guide production activities. The railway freight transport department should be actively find customers' and potential customers' demand, strengthen analysis of product sources, grasp enterprises' production, supply, distribution and inventory, and set up the transport plan after communicating with enterprises closely, in transit minimize the damage, the thieves, and be quick, accurate, timely and secure in the delivery service.

## **5. Summary**

The separation of passenger and cargo lines by rail gives a new chance to railway cargo transport in China. The railway freight should not only stabilize cargo transport market, but also actively develop transport market for

high added value goods, the freight should use big direct train to catch the bulk cargo transport on the market with five brand famous products, including five scheduled train, baggage train, inter-city class train and cargo and passenger integrated train. Pricing strategies include setting up charge standards, simplifying pricing form, and adopting flexible policies on fixing transport fee. Channel strategies consist of promoting competitiveness of cargo transport direct sale channels, and promote distribution channels, such as increasing sales outlets and setting up Internet marketing. Promotion strategies include personnel promotion, sales promotion, advertising promotion, and public relation promotion, all of which can be used to set up good image of railway transport. Staff strategy, process strategy, and custom service strategy aim to raise the staff's capacity, their services level and their marketing activities focused on clients.

### References

- ESCAP. (1998). Guidelines for Development of Railway Marketing Systems and Procedures [R].UNESCAP, Bangkok.
- Fenling Feng, Dan Lan, and Ren Yuan etc. (2009). Research on Marketing Strategies of Cargo Transport by Rail in China. *Railway Transport and Economics*, 31(10):35-38.
- Jian Sun. (2009). Research on Transport Organization of Existing Line after Separating Passenger Transport and Freight Transport into Different Line. *Railway Transport and Economics*, 31(4): 43-44.
- Lennart Nelldal, Gerhard Troche. (2000). *How the railways should solve Europe's freight transportation headaches*. Sweden: European Transport Conference 2000
- Ting He. (2010). *Research on Marketing Strategies of Existing Line in Cargo Transport Market by Rail after Separating Passenger Transport and Freight Transport into Different Line*. Beijing: Beijing Jiaotong University.
- Yuhua Guo. (2009). Research on Marketing Development of Cargo Transport by Rail in China. *Railway Transport and Economics*, 2009, 31(3): 1-5.
- Yuhua Guo. (2010). Research on Development Marketing Concepts of Cargo Transport by Rail after Separation of Passenger and Cargo into Different Lines. *Railway Transport and Economics*, 2010, 32(1): 5-10.

Table 1. SWOT analysis on cargo transport market by rail in China

	<p style="text-align: center;"><b>Strengths</b></p> <p>1 Prior to other transport means, it has obvious advantages in medium distance and long distance bulk commodities transport.</p> <p>2 It has perfect infrastructure and strong network support.</p> <p>3 It has relatively perfect management information system.</p> <p>4 It has sustainable advantages.</p> <p>5 It has a close relation with a number of o big clients for a long time.</p> <p>6 It has good social image.</p>	<p style="text-align: center;"><b>Weaknesses</b></p> <p>1 It has imperfect cargo transport mechanism and lacks subjects in the market.</p> <p>2 It has imperfect financing system and an unique investor.</p> <p>3 The unique transport service can not satisfy the market demand.</p> <p>4 It is less competitive in the market of high added value goods.</p> <p>5 The transport fee is not fair.</p> <p>6 It lacks perfect marketing system and provides backward services.</p>
<p style="text-align: center;"><b>Opportunities</b></p> <p>1 The rapid developed economy promotes cargo transport demand.</p> <p>2 The State develop railway and provides a new chance to cargo transport by separating cargo from passenger lines.</p> <p>3 The globalization provides wider space to cargo transport market by rail.</p> <p>4 The adjustment of industrial structure leads to the rapid increase of high value added goods transport, which is the new growing point to the rail transport.</p> <p>5 The logistics and electronic commerce develops rapidly.</p> <p>6 The railway transport takes strong advantage when supported by the low carbon economic policies.</p>	<p style="text-align: center;"><b>SO strategies</b></p> <p>1 Develop direct transport of bulk commodities.</p> <p>2 Continue to promote big clients strategy and construct client service center.</p> <p>3 Strengthen information construction and realize information management of railway cargo transport.</p> <p>4 Strengthen promotion activities, promote service quality and set up good company's image.</p>	<p style="text-align: center;"><b>WO Strategies</b></p> <p>1 Speed up self reform and establish market demand adjusted cargo transport system.</p> <p>2 Explore transport market of high value added goods, expand the fixed time trains and direct trains, and set up express transport network.</p> <p>3 Establish reasonable and flexible pricing system.</p> <p>4 develop modern logistics of railway transport and strengthen service quality in the whole process.</p>
<p style="text-align: center;"><b>Threats</b></p> <p>1 All kinds of transport means compete with each other severely.</p> <p>2 China's accession into WTO strengthens competition in the rail transport market.</p> <p>3 Economic layout and adjustment of industrial structure slows down growing rate of transport of bulk commodities.</p>	<p style="text-align: center;"><b>ST Strategies</b></p> <p>1 Cooperate with other transport means, develop united transport, and promote container transport.</p> <p>2 Guarantee the transport of important cargo and material, at the same time, pay more attention to high value added good transport.</p> <p>3 Develop specialized and professional services, and provide a company oriented logistic service planning.</p>	<p style="text-align: center;"><b>WT Strategies</b></p> <p>1 Learn advanced management technology from the foreign invested companies, and introduced the excellent and professional marketing staff.</p>

Table 1 shows the SWOT analysis on cargo transport market by rail in China.