Information Construction in Guangxi Xijiang River Based on SWOT Quantitative Analysis

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Abstract
This paper used SWOT quantitative analysis to figure out the SWOT strength of the construction of the “golden waterway” logistics information, and to construct the “golden waterway” logistics information strategy SWOT quadrilateral. Finally, the paper will provide a new thought for logistics information construction development strategy in “golden waterway”.
Key words: *component, "golden waterway", SWOT, information construction*

1. The Analysis of “Golden Waterway” Logistics Information on SWOT Method

Logistics Information is the soul of the modern logistics industry. Due to the business between the owner and logistics, vehicle owners and drivers even between the seller and the buyer often become one of "information island", the cost of logistics and logistics efficiency is reduced, which becomes the enormous obstacle to the development of Guangxi Xijiang River golden waterway "traditional logistics industry transformation and upgrading. According to the existing literature, news and research results this chapter will draw up a list of the advantages, disadvantages, challenges and opportunities of the informatization of "golden waterway"

The strengths, weaknesses, challenges and threats of the "golden waterway" logistics information construction, as shown in “*Table 1*.”

Table 1– SWOT analysis of "Golden waterway" logistics informationization construction

	Internal condition		External environment
Advantage	**S1** Geographical advantages	Opportunity	**O1** Our policies support the development of the logistics
	S2 Better the existing waterway, railway network of		**O2** Guangxi huge logistics market
	S3 Basic information construction cost of human resources and other		**O3** Growing demand for information management system construction of ports
	S4 National logistics information policy concessions		**O4** The logistics technology has made considerable development
	S5 The age advantage of logistics information technology innovation		
Inferiority	**W1** Not applied to advanced logistics technology	Threat	**T1** Public logistics information service platform for docking risk
	W2 Low degree of network because of poor hardware facilities		**T2** Lack of professional logistics information talents
	W3 Logistics information management system partitioning, poor		**T3** Logistics and information technology needs change threat posed
	W4 Guangxi insufficient attractiveness of advanced information management,		

2. SWOT Quantitative Analysis Model

2.1 Establish IFE and EFE Model and Calculation Efforts SWOT

Strategic analysis of this chapter text will establish IFE and EFE matrix "golden waterway" of logistics information technology. Through the use of external factors in the evaluation model to evaluate the external factors in the SWOT analysis，We will evaluate and summarize the factors that facilitate or restrict the Xijiang River "golden waterway" construction of logistics information, summed up the establishment of Guangxi, the establishment of public logistics information platform advantages and disadvantages, so that governments and businesses more targeted to develop a good logistics information development plan [1].This section will use the internal and external factors evaluation matrix for construction of logistics information "golden waterway" for analysis：

(1) List the strengths, weaknesses, challenges and threats of the "golden waterway" logistics information construction.

(2) Giving weight to each factor, the weight of the value of the interval [0, 1] and the IEF, the sum of the weights for all elements of the EEF difference between the two is 1, reflects the factors that affect the construction of logistics information's relative size.

(3) According to the degree of effective response "golden waterway" of the key factors in the construction of logistics information score, the score is a positive integer [1,4] between 1-4 representing slightly sensitive, sensitive, sensitive and very sensitive. The dominant chance of scoring is a positive number, weaknesses, challenges the score is negative, the greater the absolute value of the score, the greater the strength of the factors. [2]

(4) The score of each factor multiplied by the corresponding weight, to give a weighted score for each factor.

(5) The weighted score for all factors are added to obtain the overall weighted score. [3]

According to scholars of the past, we use the expert assessment of the various factors and methods of scoring, and assess the external environmental factors and probability of establishing logistics information system [4], and then the statistical results were statistically give IFE matrix and EFE matrix and get the IFE matrix and EFE matrix and calculate the strength of SWOT.

The results are: total superiority efforts S=0.3696; the total disadvantage intensity W =-0.276; the total opportunity efforts O=0.52925; Total threat intensity T=-0.29933. These data are displayed in “*Table 2*”.

Table 2– Internal and External Factors Estimation of "Golden Waterway" Logistics Informationization Construction

	Factor	weighter mean	score	weighted score		Factor	weighted mean	score	weighted score
S	S1	0.042	1	0.042	O	O1	0.216	4	0.864
	S2	0.16	4	0.64		O2	0.085	3	0.255
	S3	0.19	4	0.76		O3	0.243	4	0.972
	S4	0.098	3	0.294		O4	0.026	1	0.026
	S5	0.056	2	0.112					
W	W1	0.08	-2	-0.16	T	T1	0.15	-3	-0.45
	W2	0.091	-1	-0.091		T2	0.168	-2	-0.336
	W3	0.19	-4	-0.76		T3	0.112	-1	-0.112
	W4	0.093	-1	-0.093					
	Total	1		0.744		Total	1		1.219

2.2 Strategic Types Logistics Information Development of "Golden waterway"

Use the previous section SWOT intensity data calculated on the corresponding axle plot points [5], and in turn connected to four points, constitute a strategic quadrilateral S1O1W1T1, as shown in "*Fig .1*."

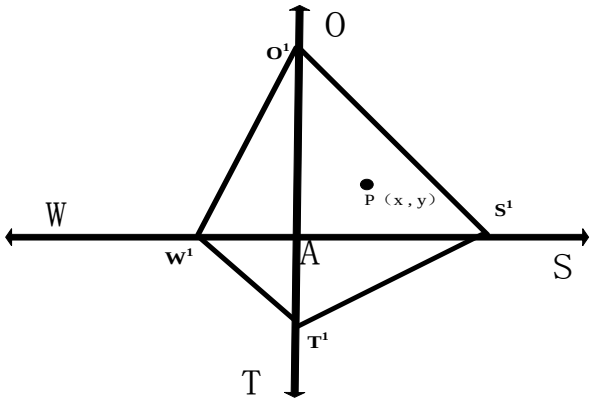

Fig .1 – SWOT strategic quadrilateral of "Golden waterway"

In the strategic quadrilateral S1O1W1T1, by using the formula P（x, y）=($\frac{\sum x_i}{4}, \frac{\sum y_i}{4}$)= ($\frac{\sum(S_i+W_i)}{4}, \frac{\sum(O_i+T_i)}{4}$) Calculating coordinates of the center of gravity P（0.372，0.30475），Azimuth of its strategy is θ=arctan(y/x)≈56.305°.Point P is not only the combination result of four factors of "golden waterway", but also the reflection of the strength of combination effect of four factors to focus on one point of strength. Quadrilateral strategic center of gravity falls first, second, third and fourth quadrants represent the object of analysis need to adopt strategies SO, WO strategy, WT strategy, ST strategy, the "golden waterway" Logistics information technology can be used SO strategy.

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3. Conclusions

According to the above analysis, We should give full play to the advantages of the" golden waterway", seize the development of China's logistics industry and a great opportunity for the country to support the construction of logistics information [6], use the geographical advantages of our region, transportation network edge, efforts to introduce or develop its own advanced logistics technology and high Technology logistics equipment, invest more in building a modern logistics facilities, the development of information technology professionals and the introduction of preferential policies to resolve logistics information management system partitioning [7], poor information sharing issues, try our best efforts to reduce the risks of the enterprise information management systems and public logistics information service platform to a minimum. We can also reduce logistics information needs change impact on building enterprise information management systems threat. Guangxi port

has a large-scale port logistics, which allows logistics enterprise information management system construction increasing demand and brings opportunities of establishing logistics information management system [8]. In addition, the golden waterway can seize the opportunity to develop and develop the port of Guangdong, Shanghai, Dalian and other places to develop the logistics information technology personnel, break simply introduce "off the shelf" talent introduction the traditional framework [9]. While in the Guangxi Zhuang Autonomous Region in cooperation with the university, we can build first-class logistics, information management and improve teaching quality colleges and universities to actively respond to the lack of information professionals specialized logistics Guangxi threat.

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