



## Investigation of Fundamental Factors for Multimodal Transportation and Developing a Strategy

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### Abstract:

Low cost transportation, transportation security, better support services and access to more markets are the aim of any exporter and importer country. Today, with the formation of multimodal transportation and applying logistics services and supply chain, the possibility of these demands is going to be true. Not considering this topic in the fifth layer of development and expectation of increasing revenue from this area without creating infrastructure and appropriate definitions of system, will be illogical. In this paper with mention the major routes of transportation and its difference with others, some solution in order to optimize the multimodal transportation will suggested.

Key Words: multimodal transportation, logistic, freight, cargo

### Introduction:

Doubtless multimodal transportation is the most revolution in the realm of transportation and logistic. With the emergence of several of lawful and connected transportation channels, those transportation systems are faced to reduction price and cope with the ascending of safety. Transportation is the best of a hard and powerful economy that we should try our best for its improvement. Ignorance of paying so attention to this subject in fifth improvement submission and the except of increasing income in this realm without making substructure and special definitions that are related to systems are unreasonable. In this article we investigated effectible elements on multimodal transportation and we verify the usefulness of this way and introducing new ways are presented.

The cheapness of transportation, the safety of them and supportive facilities that are so top and accessibility to more markets are the demand of each country that import and export goods. Today with

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emergence of multimodal transportation and with using of logistic science and supply chain, the demand of these needs become objective, but what is the effect and use of these ways in transportation and what is the difference between this kind and traditional transportation.

Table.1: Characteristics of multimodal transportation and traditional transportation.

Characteristics of multimodal transportation	Characteristics of traditional transportation
Using from ro and ro veins	integration of various aspects of transportation
unit by unit	systematic vision and systematic conception
cellular shipment	informational system
multi rates structure	logistic channels
Use the following crane barrel	Barrel multimodal transportation operators
specialty terminals	High facility in seaports
Having terminal support	Control of account by specified bills and rates
Previously standardization	Following managers and vise-managers decisions

As it is shown in table we can infer and conclude that multimodal transportation even with its systematic integration and with informational system and logistic channels are better than traditional transportation, the result of this method is reducing expense and reduction of delivery time.

Effective factors on multimodal transportation:

- 1-International expenses have direct effects on trade, factors as foreign exchange and transportation tariff.
- 2-Direct effects of insurance right in final cost and so increasing of GDP.
- 3-Geographical situation of country and being strategic in transportation (especially Iran) which it deals with and access to free oceans.
- 4-Quality of transportation, better support that lead to increasing costs especially when we talk about insurance and JIT (JUST IN TIME).
- 5-We should be careful that increasing expense especially import expense can lead to ascending of inflation and local costs that at last lead to loosing shop for export countries with attention to demand.

With analyzing transportation ways and multimodal transportation on different countries we can understand that the empirical evidence show that expenses and quality of facilities are affected by various factors that are also international and out of control. Today with having (IT) and (ICT) power and

improvement of substructures we can transport goods better and safer. In the following discussion we introduce some ways which improve the situation.

1- Up to now most of companies are responsible of delivery of goods from one truck to another. In under developmental country as Iran we can propose the ban of transportation of foreign country between in our country. This affair needs to build

Train rails on Bazargan Boundary to Turkey and in Mehran Boundary to Iraq. For building rails we need a lot of cost.

A-Stability and durability of services

b-Attention to biological environment

c-The high volume

d-Having economical expense that all of this effectiveness should not lead to such factors as: relationship and affectability from geographical toll- Inflexibility in rail transportation.

2-Attention to employed human resource and automation system in seaport Transportation system related to sea in Iran are (A. seaport as: Imam seaport, BOUSHEHR seaport, Bandar abbas and CHABAHAR seaport), To all of the world.

B. Directional transportation from ANZALI and NOUSHAHR from channels and rivers to countries with the same properties to Baltic Sea and North Sea and Atlas Ocean.

C. MCSL ways (Mediterranean Caspian sea line): Direct transportation from Anzali and Noushahr by little ships by Volga-Don to AZOV Sea and black and Mediterranean Sea.

### **Suggestions:**

- 1- There are some transportation companies which are using service truck yet. In developing regions such as Iran in order to support the national industry of railways ban on crossing foreign trucks can be considered.
- 2- Iran could face sanctions by offering suggestions such as low cost of transportation, warehousing, insurance, workers and expand its activities.
- 3- In the southern ports especially Chabahar port, we can increase the efficiency up to 35% through automation and training of personnel.
- 4- We can increase the volume of ports and berthing platform on the Caspian Sea - Mediterranean route which is used for transportation from Turkey's ports.

Our suggestion is that in southern seaports, expanding of automation and support and education of resource (Human resource) should be considered. In (MCSL) in accordance to be considered. In (MCSL) in accordance to small volume of seaports and with no complete substructure for safe transportation we can see

economical affairs. Fortunately in road transportation to Afghanistan and Pakistan we have more safety from last.

So we should say that in Tabriz, Isfahan, and Kerman, Ahvaz transport that we can have direct transportation by road and truck from Iran, Bulgarian and Turkey and Italy and even polish to east Europe. Also west Europe from Bazargan boundary with the trust between countries we should support and pay attention to industry of railway. With this the country can gain insurance and can improve (GDP) and also we can reach to capability of Iran in safe transportation on world.

### **Conclusion:**

With all of these criteria, reaching to these services and multimodal transportation and bringing economical relation that is so stable and dynamic we can think about competition on economical affairs on world. Although decision and investigation have been done on national level, coordinate and collaboration on international affairs are important roles. These are technical collaboration, memorandum of understanding that is so critical in decision making. So making rules and law on seaports and railway should have a special standard and should follow them in a perfect way. Iran in accordance to bans can improve its activity by submitting law expense on transportation, saving, insurance and employers.

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