#### **1. INTRODUCTION**

#### **1.1 Industry Profile**

The importance of infrastructure for sustained economic development is well recognised. Adequate and efficient infrastructure lowers transaction cost, has strong backward and forward linkages, directly impacts the quality of life and acts as a catalyst in the growth and development of an economy. Transport is a crucial component of infrastructure. A well- developed transport network facilitates the integration and interdependence of different sectors by aiding quick and adequate movement of people and material. Therefore, if agriculture and industry make up the "body" of the Indian economy, transport and communications constitute its "nerves".

#### **Box 1: Functions of Transport**

- 1. Transport contributes in **growth of industries** whose product requires quick marketing. Perishable products, such as fish and green vegetables are carried to various consumers quickly even in distant markets through transport.
- 2. Transport helps in **increase in the demand for goods**. Through transport newer customers in newer places can be easily contacted and products can be introduced to them. Today markets have become national or international only because of transport.
- 3. Transport ensures evenly distribution of commodities into the hands of the consumers throughout the period of consumption.
- 4. Transport **increases competition**, which in turn, reduces pries. Prices are also reduced because of the facilities offered by transport for large-scale production. Advantage of large-scale production is possible only due to transport networks.
- 5. Transport **increases mobility of labour and capital**. It makes people of one place migrate to other places in search of jobs. Even capital, machineries and equipment's are imported from foreign countries through transport alone.

Table 1 (Source: http://shodhganga.inflibnet.ac.in/bitstream/10603/705/9/09\_chapter%201.pdf)

The transport system helps in expanding the market for goods and by doing so, it aids reaping the benefit of division of labour and thereby large-scale production. It is essential for the movement of raw materials, fuel, machinery etc., to the places of production. The more extensive and continuous the production in any sector, the greater will be the need for transport facilities.

India has an extensive road network and provides amenity to millions of people every day, thus road transport is one of the important ingredients for the social and economic development of the country. India has the third largest road network in the world stretching 3.32 million kilometres in length. According to the World Bank, national highways in India constitute a length of close to 70,748 km, which is a mere two percent of the road network, but carry about 40 percent of the total road traffic in India.3 The significance of transportation is relative to the economy and the population of a country; India being the world's second fastest growing economy and being the second largest populated, transportation plays a crucial role in its economic development and sustainable growth.

In the transportation sector, road transport has emerged as a dominant segment with a share of 4.8 percent in India's Gross Domestic Product (GDP) in 2008-09.

Share of Different Modes of Transport in GDP							
Sector	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	
	As percentage of GDP (at factor cost and constant prices)						
Transport of which:	6.3	6.7	6.7	6.7	6.7	6.6	
Railways	1.2	1.0	1.0	1.0	1.0	1.0	
Road Transport	4.3	4.8	4.8	4.8	4.7	4.8	
Water Transport	0.2	0.2	0.2	0.2	0.2	0.2	
Air Transport	0.2	0.2	0.2	0.2	0.2	0.2	

Table 2(Source: Road Transport Year Book (2007-09) available at http://morth.nic.in/showfile.asp?lid=420)

The modal growth rates have varied with road transport growing at a much higher rate compared to other competing modes like inland water, railways and air transport despite significant barriers to inter-state movement of freight and passenger by road (Table 2).

Average Annual Growth (%) in Transport Sector GDP*				
Sector	2004-05/2000-01	2005-06/2000-01		
Overall GDP	6.0	6		
Transport	8.7	8		
Railways	6.0	6		
Other Transport:	9.3	9		
Road	9.7			
Water	7.6			
Air	8.1			
Services **	5.1			

Table 3(Source: http://planningcommission.nic.in/aboutus/committee/wrkgrp11/wg11\_roadtpt.pdf)

Now with the current ambitious target of 9-10 percent economic growth rate, it becomes imperative for the Indian government to ensure cheap, convenient and accessible road transportation. Also, for sustaining that high level of growth would require much higher order of growth in road transport sector. Consequently, transportation by road has steadily expanded over the years and for the purpose of this paper, it can be broadly classified into two groups, i.e. passenger and freight transport

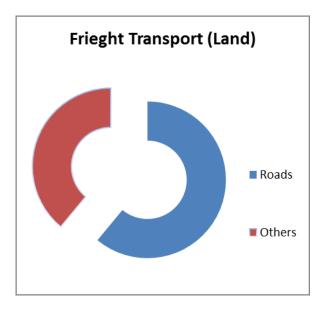


Figure 1(Source: Research study of the road transport sector in India.pdf by The Ministry Of Corporate Affairs, Govt. of India)

#### Market Structure and Reported Competition Issues

Like many economic activities that are intensive in infrastructures, the transport sector is an important component of the economy impacting on development and the welfare of populations. When transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multipliers effects such as better accessibility to markets, employment and additional investments. When transport systems are deficient in terms of capacity or reliability, they can have an economic cost such as reduced or missed opportunities. Transport also carries an important social and environmental importance, which cannot be neglected. Thus, from a general standpoint the economic impacts of transportation can be direct and indirect:

- Direct impacts related to accessibility change where transport enables larger markets to save time and costs.
- Indirect impacts related to the economic multiplier effects where the price of commodities, goods or services drop and/or their variety increases.

Mobility is one of the most fundamental and important characteristics of economic activity as it satisfies the basic need of going from one location to the other, a need shared by passengers, freight, etc. and information. Reduced mobility impedes development while greater mobility is a catalyst for social and economic development. Mobility is thus a reliable indicator of development. Providing this mobility is an industry that offers services to its customers, employs people and pays wages, invests capital and generates income. The economic importance of the transportation industry can thus be assessed from a macroeconomic and microeconomic perspective:

 At the macroeconomic level (the importance of transportation for a whole economy), transportation and the mobility it confers are linked to a level of output, employment and income within a national economy. In many developed countries, transportation accounts between 6% and 12% of the GDP.  At the microeconomic level (the importance of transportation for specific parts of the economy) transportation is linked to producer, consumer and production costs. The importance of specific transport activities and infrastructure can thus be assessed for each sector of the economy. Transportation accounts on average between 10 and 15 percent of household expenditures while it accounts around 4% of the costs of each unit of output in manufacturing, etc.

The roads goods transport industry in India has never been regulated the way it has been in many other countries. But as mentioned earlier, a regulatory framework in the form of the Motor Vehicles Act has been in place since 1939. This did provide for restrictions on permits but over a period of time these have been relaxed to a very large extent permitting easy entry into the industry and for movement all over the country. This is perhaps the only deregulatory move that has taken place in India as far as the trucking sector goes. The credit for this development goes to the Indian railways, which had no capacity to offer on a regular basis even with regard to bulk items. But as observed by the various committees and pointed out by the different studies, the Motor Vehicles departments of states have mainly focused on the collection of revenue (tax and otherwise) rather than on effective enforcement of the provisions of the Motor Vehicles Act.

As a result, an effective regulatory framework has, never been attempted to be put in place. This has emerged over the years as a major external impediment (in terms of a number of dimensions) to the effective growth of the trucking industry in India. This is a matter of concern especially when viewed in the context of an emerging globalised competitive economy.

#### Key Players

Structure of the road freight transport industry in India is highly fragmented. The industry broadly consists of players who provide the transportation services, intermediaries (transport contractors/booking agents) who offer haulage services, brokers supplying equipment, drivers for commission and the consignors constituting the ultimate demand for the services.14 It is primarily composed of three key players as described below.

- Transporters: These are trucking companies which have the primary contact with shippers and receiving customers. They solicit freight, largely on an annual price quote basis, bill, collect, and carry the accounts receivable, are responsible for cargo loss and damage claims and perform the other customer service functions. Some, like the Transport Corporation of India (TCI), are fairly substantial enterprises with many business locations. They typically own a fleet of trucks and often warehouses and terminals as well. But they rely primarily on small truck operators for their line-haul (intercity) transportation.
- Truck Operators: These individuals (often called owner-operators) typically own one or a very small fleet of trucks, which usually are financed by high-leverage debt. In a few cases, these operators own 5 to 10 trucks. This category includes the single (or small truck operators owning 1-5 trucks) truck operator, who are very large in number. Entry barriers are low in the sense that:
  - a) There are low capital requirements,
  - b) ease of availability of capital though at high cost,
  - c) very little expertise required in terms of educational skills, and
  - d) ease of obtaining driving licenses and permits.

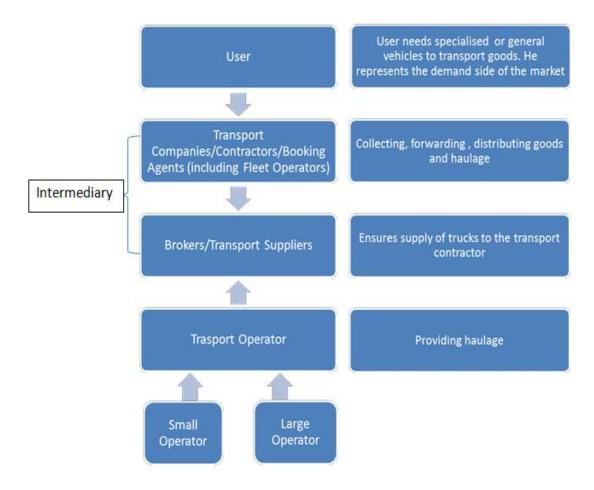


Figure 2(Source: Research study of the road transport sector in India.pdf by The Ministry of Corporate Affairs, Govt. of India)

Intermediaries

Booking agents/Transport Contractors: Booking agents are firms or persons who accept and store goods, both parcels and bulk and arrange for their movement through operators. This agent is really the person who represents the demand, i.e. negotiates with and on behalf of users. He is responsible for collecting, forwarding or distributing goods carried by goods carriages and also for cargo loss and damage claims while performing other customer service functions. In some cases, the agents own trucks and also function as operators. In addition to these services, the agents also advance money to operators (especially small ones) to help meet their working capital requirements and by discounting bills on unloading. As regards the volume of business handled by this category of intermediaries, it is generally accepted that they have a virtual monopoly of most interstate and long-distance movement.

Brokers/commission agents/suppliers of vehicles: A broker is normally expected to represent the supply side, i.e. truck operators, and though in the past there have been booking brokers who have represented user interests for a commission. The broker takes a commission from the truck owners and ensures the supply of trucks to the transport company/booking agent. Given that the dependence on small operators is significant, there are issues of reliability of the operators, the movement etc. from the perspective of the user which is supposedly taken care of by the broker who normally is sought out by truck operators for loads. The World Bank (2005) also observed the necessary role played by brokers in terms of ensuring a quality control on the reliability of the operators. Large fleet operators depend on these brokers for moving a certain volume of traffic over and above what their own fleet would permit.

The evidence that has emerged over quite some period of time is that the middlemen/ intermediaries, which include booking agents and brokers, are the dominant players in the market and they in fact are the real "makers" of the market. Given this feature, the issue is: who and/or what determines the freight rates? National Council of Applied Economic Research (1979) indicated that booking agents, besides other functions, also had a role in fixing freight rates, i.e. the rate charged to the user and the rate given to operators.

Despite many remaining impediments, mainly concerning the existing infrastructure, India has achieved a highly competitive, low-cost road freight transport industry for basic services, with highway freight rates among the lowest in the world. The industry is deregulated and, as in many countries, highly fragmented with many small operators, as mentioned above. The industry's structure, comprising transporters, truck operators, broker agents, etc. is market-driven and appears to be serving the market reasonably well.

Given the very low freight rates, one has to conclude it is an effective industry structure. It is the constant pressure of a highly competitive market that delivers to India's shippers some of the world's lowest freight rates. While the industry delivers very low freight rates, service quality is poor, with low reliability and transit times nearly double that of developed countries.

#### Need for Regulation

Basically, the industry is characterised by large number of operators and users and sufficiently large number of intermediaries between these two players. The question – what are the agreements between the various players? Some are formal while most seem to be informal.

These informal agreements appeared to be often highly iniquitous as a direct consequence of the intermediaries" access to information. The power the intermediaries exert over the industry is not, however, matched by the capital employed by them. This suggests that there is an imbalance in the way the revenue is being shared by the various players in the industry. Clearly, there is need to bring the intermediaries under the purview of regulation. Section 93 of the Motor Vehicles Act provides for licensing inter alia of any agent or canvasser engaged in the business of collecting, forwarding or distributing goods by trucks. The wording of the section seems ambiguous. Any interpretation would imply that this section does not cover brokers and has been mushrooming of booking agents. There unscrupulous brokers/booking agents. There is a need to include brokers/booking agents within the scope of this section explicitly.

#### Evidence of Cartelisation

Further, there are also instances of cartelisation being facilitated by truckers union around major production sites and factories, which also impairs competition in the sector. For example, in 1977, an enquiry (RTP Enquiry No. 32 of 1977) was instituted against Truck Operators Union by the Monopolies and Restrictive Trade Practices Commission (MRTPC). It was held that the Constitution of the Union enabled the existing members to keep out new entrants from the market of transportation of fruits and vegetables on arbitrary grounds. It was alleged before the Commission that if any transporter attempted to enter the market and offered to transport fruits and vegetables, he was restrained to do so by force. While ordering modification of the impugned clause of the constitution of the Union, a 'cease and desist' order was passed against the Union, inter alia, prohibiting it from stopping any truck operator, whether member of the Union or not, from entering the fruits and the vegetable market and offering to undertake transportation services (Order No. February 20, 1978).

Given the dominance of small operators and the user requirements in terms of reliable handling, loss protection, the role of the intermediaries is substantial and proving to be useful to both from demand and supply perspectives. However, concerns have been raised regarding cartelisation practices in local movements and bid rigging practices in the context of attempts to compete for the market by way of tenders and open bid procedures. These concerns need to be looked into and such practices be removed/curbed.

#### Issues related to Taxations

Taxes of various kinds and in varying rates are often imposed without consideration to their distorting aspects. States have often attempted to reduce taxes in a competitive spirit to attract trade and industry to the state concerned]. Such competition in sales tax leads to legitimate concerns and there has also been an attempt to unify and harmonise sales tax rates so as to move towards a value added tax (VAT). However, there is also the issue that in an attempt to absorb the resultant revenue loss from lowering of sales tax rates, states have sought to identify new sources for levying taxes. There has, thus, been a growing tendency to transfer tax liability to the transportation sector for quite some time.

The tax regime is both transport- and commodity-specific. Vehicles are detained for checking payment of commodity-specific taxes such as sales tax, octroi and other local. These checks are generally done by the respective agencies at separate points, resulting in more than one detention for this purpose. At the same time, there are specific taxes levied on the transportation sector, for instance, road tax, national and state permits, etc. Taxation of motor vehicles is a widely used instrument for raising resources. Usually, the transport carrier is detained at five different locations for collection of tax or checking the papers at the state and district level.

Octroi is yet another tax that affects the road transport sector. Its problems include cumbersome and vexatious administration and collection processes, regressive incidence of tax and commodities open to multiple valuation, leading to malpractices. However, octroi yields substantial revenue for local bodies at State level. It is generally based on quantity or weight (specific tax) or sometimes on the value of the commodity (ad valorem tax) entering a local area. It is assessed and collected at the point of entry by stopping the vehicle. However, the tax being mostly specific, there are many rate categories. The point of assessment and collection being the entry point of a local area, this causes arbitrariness in assessment and delays in transportation. It also encourages corruption. Most high powered committees, like the Lakdawala Committee (1974), the Chelliah Committee (1980) and the Papola Committee (1985), have recommended abolition of octroi and its replacement by entry tax or the imposition of an additional surcharge on sales tax. An ambitious recommendation was made by the LK Jha Committee (1977), which recommended octroi's abolition without linking it with any alternative sources of revenue. Various industry associations like Confederation of Indian Industry have also requested the government to substitute octroi with a suitable alternative.

According to Debroy and Kaushik (2001) what differentiates the existing system in India with that of taxation practiced outside India is the delay and harassment in the tax recovery system. Domestic trade taxes in India are in need of reform. The tax regime that is in place today is archaic, irrational and

complex. It interferes with the free play of market forces and competition, causes economic distortions and entails high costs of compliance and administration. Under the Constitution, the basis of excise duties and sales tax, the two principal components of the domestic trade taxes, are distinctly defined – excise duty as a tax on production of goods and sales tax on consumption (sale or purchase). In practice, the two have come to overlap because of the problem in administering taxes at retail level.

The various laws and agencies governing inter-state movement of goods in India can be classified as:

- Carriage by Road Act, 2007
- Carriage by Road Rules 2011
- Central Sales Tax Act, 1956
- Various State Sales Act/State VAT
- Octroi and Entry Tax

#### 2. LITERATURE REVIEW

Since logistics advanced from 1950s, there were numerous researches focused on this area in different applications. Due to the trend of nationalisation and globalisation in recent decades, the importance of logistics management has been growing in various areas. For industries, logistics helps to optimise the existing production and distribution processes based on the same resources through management techniques for promoting the efficiency and competitiveness of enterprises. The key element in a logistics chain is transportation system, which joints the separated activities. Transportation occupies one-third of the amount in the logistics costs and transportation systems influence the performance of logistics system hugely. Transporting is required in the whole production procedures, from manufacturing to delivery to the final consumers and returns. Only a good coordination between each component would bring the benefits to a maximum.

#### 2.1 Overview of Logistics

#### **Definition**

Council of Logistics Management (1991) defined that logistics is 'part of the supply chain process that plans, implements, and controls the efficient, effective forward and reverse flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customers' requirements'. Johnson and Wood's definition (cited in Tilanus, 1997) uses 'five important key terms', which are logistics, inbound logistics, materials management, physical distribution, and supply-chain management, to interpret. Logistics describes the entire process of materials and products moving into, through, and out of firm. Inbound logistics covers the movement of material received from suppliers Materials management describes the movement of materials and components within a firm. Physical distribution refers to the movement of goods outward from the end of the assembly line to the customer. Finally, supply-chain management

is somewhat larger than logistics, and it links logistics more directly with the user's total communications network and with the firm's engineering staff.

The commonality of the recent definitions is that logistics is a process of moving and handling goods and materials, from the beginning to the end of the production, sale process and waste disposal, to satisfy customers and add business competitiveness. It is 'the process of anticipating customer needs and wants; acquiring the capital, materials, people, technologies, and information necessary to meet those needs and wants; optimising the goods-or service-producing network to fulfil customer requests; and utilizing the network to fulfil customer requests in a timely way' (Tilanus, 1997). Simply to say, 'logistics is customer-oriented operation management'.

#### Components of Logistics System

Figure 3 provides an overview of the logistics system. Logistics services, information systems and infrastructure/resources are the three components of this system and closely linked. The interaction of the three main components in the logistics system is interpreted as follows.

Logistics services support the movement of materials and products from inputs through production to consumers, as well as associated waste disposal and reverse flows. They include activities undertaken in-house by the users of the services (e.g. storage or inventory control at a manufacturer's plant) and the operations of external service providers.

Logistics services comprise physical activities (e.g. transport, storage) as well as non-physical activities (e.g. supply chain design, selection of contractors, freightage negotiations). Most activities of logistics services are bi-direction. Information systems include modelling and management of decision making, and more important issues are tracking and tracing. It provides essential data and consultation in each step of the interaction among logistics services and the target stations. Infrastructure comprises human resources, financial resources, packaging materials, warehouses, transport and communications. Most fixed capital is for building those infrastructures. They are concrete foundations and basements within logistics systems.

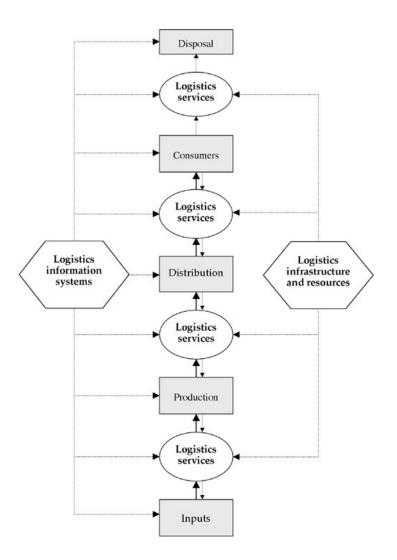


Figure 3. Overview of Logistics System (source: BTRE, 2001)

#### History and Advancement of Logistics

Logistics was initially a military activity concerned with getting soldiers and munitions to the battlefront in time for flight, but it is now seen as an integral part of the modern production process. The main background of its development is that the recession of America in the 1950s caused the industrial to place importance on goods circulations. The term, logistics, was initially developed in the context of military activities in the late 18th and early 19<sup>th</sup> centuries and it launched from the military logistics of World War II. The

probable origin of the term is the Greek logistikos, meaning 'skilled in calculating'. (BTRE, 2001) Military definitions typically incorporate the supply, movement and quartering of troops in a set. And now, a number of researches were taken and made logistics applications from military activities to business activities.

Business logistics was not an academic subject until the 1960s. A key element of logistics, the trade-off between transport and inventory costs, was formally recognized in economics at least as early as the mid-1880s. (BTRE, 2001) Based on the American experience, the development of logistics could be divided into four periods (Chang, 1998), which are represented as Figure 4.

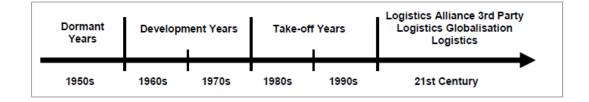


Figure 4. Logistics historical development(source: BTRE, 2001)

Before the 1950s, logistics was under the dormant condition. Production was the main part of the managers concerned, and industry logistics was once regarded as "necessary evil" in this period. During the 1950s to and 1960s, applying new ideas of administration on business was a tendency. Drucker (2001), who thought Logistics was The Economy's Dark Continent, regarded the procedure of physical distribution after producing products as the most possible development area in American businesses but also the most neglected area. Lewis's study (cited in Chang, 1998) in 1956 on the role of air transportation in physical distribution was the application of "total cost concept" and it pointed out the notions of trade-off between inventory and transportation. From the 1970s onwards, more and more applications and researches of logistics appeared. Due to petroleum price rise in 1973, the effects of logistics activities on enterprises grew. Slow growth of market, pressure of high stagflation, release of transportation control, and competitions of the third world on products and materials all increased the significance of logistics system on planning and business at that time.

The further tendency of logistics in the early 21st century is logistics alliance, Third Party Logistics (TPL) and globalised logistics. Logistics circulation is an essential of business activities and sustaining competitiveness, however, to conduct and manage a large company is cost consuming and not economic. Therefore, alliance of international industries could save working costs and cooperation with TPL could specialize in logistics area.

#### Forms of Logistics – Supply chain management

Supply Chain Management (SCM) is the concept for handling the production procedures in broad sense. An effective SCM application could promote the industry to satisfy the demand of new business environment. Ross (1998) defined SCM as 'a continuously evolving management philosophy that seeks to unify the collective productive competencies and resources of the business functions found both within the enterprise and outside in the firm's allied business partners located along intersecting supply channels into a highly competitive, customer-enriching supply system focused on developing innovative solutions and synchronizing the flow of marketplace products, services, and information to create unique, individualized sources of customer value.'

SCM can be divided into three main activities – purchase, manufacture and transport (Thomas et al., 1996). Cooper et al. (1997) analysed the three elements of SCM – supply chain business processes, supply chain management components, and supply chain network structure. Figure 5 shows the entire elements in SCM frame. It displays the details of the whole processes from purchasing, management, production, and distribution to customers. The information flow is like an individual system to link the whole supply chain from supplier and manufacturer to consumer. Unimpeded information flow could increase the operation accuracy for costs saving and promote the competitiveness of firms. The product flow proceeds through the whole from material production processes supply via

manufacturers till providing the finished products to consumers. The items in vertical direction show the various management tasks within the supply chain. Particularly, the return flow, or reverse logistic, is one of the elements in the system but with converse direction from the others.

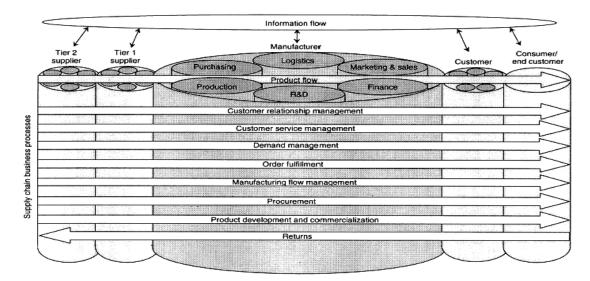


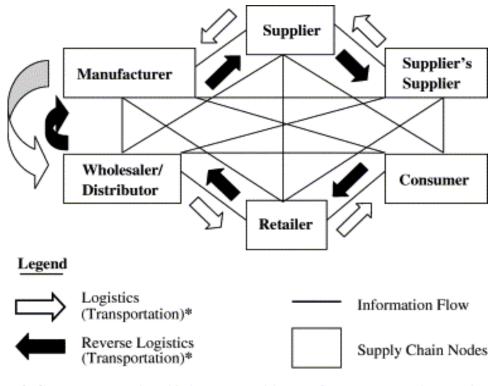
Figure 5. Interaction of business processes and supply chain (source: Cooper et al., 1997)

#### **Reverse Logistics**

The concept of reverse logistics has been applied in promoting customer service and resources recycling. Concerning quality control, the defective components and finished products will be returned to their producers through reverse logistics systems. Nowadays, reverse logistics has been developed rapidly for increasing industries' competitiveness, promoting customer service level, and recycling the reusable material. Meanwhile, the demand of reverse logistics brings out a new market for the third-party logistics industries.

Rogers et al. (1998) defined reverse logistics as 'the process of planning, implementing, and controlling the efficient, cost effective flow of raw materials, in-process inventory, finished goods and related information from the point of consumption to the point of origin for the purpose of recapturing value or proper disposal'. Figure 6 shows the structure of logistics systems, which includes forward logistics, backward logistics and information flow. The flow in black arrows presents the direction of reverse logistics, whose direction is counter to the ordinary logistics represented in hollow arrows. The information flow interlaces between different stakeholders within the system. Each stakeholder can communicate with the others directly to maximum their profitability. Reverse logistics will be adopted in various modes and applications in the future due to its efficiency and benefits in environment protection.

The two main reasons behind the rise of reverse logistics are the globalisation of markets and policies for environment protection. A successful reverse logistics could help to increase the service level of companies and reduce the costs of producing processes. More and more companies want to build their reverse logistics system, however the system needs professional knowledge in logistics management and particular facilities. Thus the third-party logistics service provides another option for small to middle size companies to have their reverse logistics system. Figure 7 shows a system of reverse logistics service on how FedEx, a third- party logistics provider, serves Acer computer, the customer company. At the first step of the system, the customer applies a request for returning the product through the Internet, and then FedEx builds the data of the products; meanwhile the system organizes the route of the delivery trips of the product. The customer can check the processing condition and wait for sending back at the right time.



\* Company owned or third-party providers perform transportation needs.

Figure 6 (Source: Krumwiede et al., 2002)

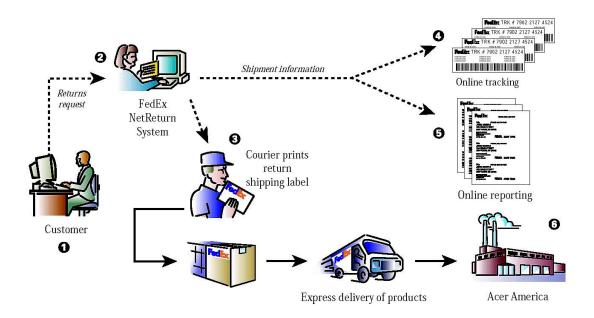


Figure 7 Third-party reverse logistics (Source : <u>http://www.fedex.com/us/solutions/downloads/acer.pdf</u>)

#### Maritime Logistics

Maritime industry plays an important role in international freight. It can provide a cheap and high carrying capacity conveyance for consumers. Therefore, it has a vital position in the transportation of particular goods, such as crude oil and grains. Its disadvantage is that it needs longer transport time and its schedule is strongly affected by the weather factors. To save costs and enhance competitiveness, current maritime logistics firms tend to use large- scaled ships and cooperative operation techniques. Moreover, current maritime customers care about service quality more than the delivery price. Thus, it is necessary to build new logistics concepts in order to increase service satisfaction, e.g. real-time information, accurate time windows and goods tracking systems. The operation of maritime transport industry can be divided into three main types:

- Liner Shipping: The business is based on the same ships, routes, price, and regular voyages.
- Tramp Shipping: The characters of this kind of shipping are irregular transport price, unsteady transport routes, and schedule. It usually delivers particular goods, such as Dry Bulk Cargo and crude oil.
- Industry Shipping: The main purpose of industry shipping is to ensure the supply of raw materials. This sometimes needs specialized containers, such as the high-pressure containers for natural gas.

## Air Freight Logistics

Air freight logistics is necessary for many industries and services to complete their supply chain and functions. It provides the delivery with speed, lower risk of damage, security, flexibility, accessibility and good frequency for regular destinations, yet the disadvantage is high delivery fee. Reynolds-Feighan (2001) said air freight logistics is selected 'when the value per unit weight of shipments is relatively high and the speed of delivery is an important factor'. The characteristics of air freight logistics are that:

- Airplanes and airports are separated. Therefore, the industries only need to prepare planes for operation;
- It allows to speed delivery at far destinations;
- Air freight transport is not affected by landforms.

Research data show that the freight transport market keeps growing. Given the trend of global markets, air freight logistics also has to change their services. The future tendencies of air freight development are integration with other transport modes and internationalisation and alliance and merger between air transport companies The future pattern of air freight logistics is cooperative with other transport modes, such as maritime and land transport, to provide a service base on Just-In-Time, and door-to-door.

#### Land Logistics

Land logistics is a very important link in logistics activities. It extends the delivery services for air and maritime transport from airports and seaports. The most positive characteristic of land logistics is the high accessibility level in land areas. The main transport modes of land logistics are railway transport, road freight transport and pipeline transport.

Railway transport has advantages like high carrying capacity, lower influence by weather conditions, and lower energy consumption while disadvantages as high cost of essential facilities, difficult and expensive maintenance, lack of elasticity of urgent demands, and time consumption in organizing railway carriages. Road freight transport has advantages as cheaper investment funds, high accessibility, mobility and availability. Its disadvantages are low capacity, lower safety, and slow speed. The advantages of pipeline transport are high capacity, less effect by weather conditions, cheaper operation fee, continuous disadvantages and conveyance; the are expensive infrastructures, harder supervision, goods specialization, and regular maintenance needs.

The excessive usage of land transport also brings many problems, such as traffic jams, pollution and traffic crashes. In the future, to improve the land transport in transport efficiency and reliability, a revolution of transport policies and management is required, e.g. pricing.

## Express Delivery

As the increasing demand of time accuracy and decentralization of production, the need to reduce stock costs has led to the Just-In-Time (JIT) delivery principle, which involves more frequent delivery of materials at the right time and at the right place in the production process. The characteristics of express delivery are:

- Door-to-door service;
- Efficiency;
- Traceability;
- Just-In-Time (JIT);
- Growing various delivery demands.

The trend toward increasingly compact products is expected to improve the cost-benefit ratio of express delivery by decreasing the transportation cost share. Smaller products will enlarge the market for express delivery services. Also, the increasing value of products requires rapid transportation, because companies want to reduce the interest costs bound up in stock and inventories. For future development, the industries should consider integrating the services with 24-hour stores so that customers could choose a certain shop as the pick-up station. Meanwhile, the services would become more efficient and controlled due to more regular routes to those shops instead of personal houses.

## E-commerce

E-commerce is the future trend of business style. It brings many benefits for both companies and consumers:

• E-commerce expands the market area from regional to global;

- E- commerce uses electronic techniques instead of traditional paper works, which promotes the industries' efficiency and competitiveness;
- The number of trips is increased. On the other hand the average load of single trip is reduced, which means it needs higher carriage if using the same means of transportation;
- E-commerce will impact on transport system due to the increased trips;
- E-commerce might reduce the number of warehouses and the stock cost. Therefore the prices could be lowered.

Figure 8 express the differences between the transport patterns of traditional trade and e-commerce. However other new topics, of course, accompany with the system and need to be concerned, such as Internet security, transport impacts and door-to-door services. A healthy and successful e-commerce environment is determined by the optimal logistics operation.

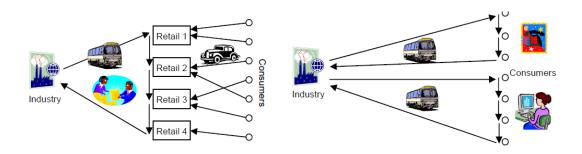


Figure 8. The transport pattern of traditional business (Source: Proceedings of the Eastern Asia Society for Transportation Studies, Vol. 5, pp. 1657 - 1672, 2005)

## **3 RESEARCH METHODOLOGIES:**

## 3.1 Need of the study:

The project was an attempt to find out the irregularities in the Indian road transport sector and then to develop an IT solution to cater to this issue.

With the help of the responses given by the transporters and customers, we were able to understand the requirements of the customers and hence tailor our service accordingly.

## 3.2 Scope of study:

Scope of this study has been limited to Delhi only as of now. However, the operations can be conducted from various major cities in North – India and central India.

## 3.3 Data Collection

## Source of data:

The data collected was both primary and secondary in nature. Primary research consisted of visiting the transporters for understanding their business and the inefficiencies they are facing. Secondary research helped us to validate those inefficiencies.

Primary research also helped us in implementation of our project by assessing the various web developers and choosing the one as per our needs and budget.

Using primary data in research improves the validity of research. First-hand information obtained from a sample that is representative of the target population will yield data that will be valid for the entire target population.

## Data collection:

Data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer the questions regarding the viability of the project and evaluating outcomes. The data collection component of research is common to all fields of study including physical and social sciences, humanities, business, etc. While methods vary by discipline, the emphasis on ensuring accurate and honest collection remains the same.

The method of data collection was face to face interactions.

## Target Group:

The target people were the blue collar workers as well as the managers of different departments in a transport company. The target group was contacted through the board line numbers of the company or by personal meeting.

## Sampling method:

In case of both the transporters and web developers random sampling was used.

## 3.4 Tools of Analysis

Since most of the analysis was qualitative and not quantitative hence no specific tools were used to reach conclusion. However, basic excel functionalities have been used.

## 3.5 Limitations of the project:

- The project requires a large funding for effective marketing and propagation of project idea amongst the prospective users of the system.
- The time limitation is a constraint because this project encompasses larger vision and .IT implementation takes time.
- When interacting with a company representative, the privacy policy hinders getting clear info about the service
- Searching and evaluating the web developer for the project requires an in-depth knowledge of the market and lack of it can hinder the project progress.

#### 4. FINDINGS

Historically, road freight in India has increased since its 1950–51 from a level of 6 billion tonne kilometers (BTKMs) to 1,086 BTKMs in 2009–2010, witnessing a CAGR of 9.21 percent during this period. However, the market scenario is uncertain in future, given the uncertainly in global and domestic economies. Hence, several possible scenarios have been considered to plot market projections for the next few years. While the optimistic scenario assumes GDP growth of 6.1 percent — implying a freight CAGR ~ 7.6 percent — the optimistic scenario assumes a GDP of 9.0 percent, implying a freight CAGR ~ 9.6 percent. The resulting road freight opportunity is estimated to range from about 1,300 BTKMs in 2012–13 to more than 2,000 BTKMs in 2016–17.



Source: "Passenger and Freight Traffic Assessment in the Twelfth Five Year Plan ", Ministry of Road Transport & Highways' Report, Sept ember2011; KPMG in India analysis

#### Figure no. 9

India's third-party logistics (3PL) market is an attractive business opportunity for logistics service companies and should provide further impetus for growth.

Multiple factors — particularly rising domestic consumption — are driving growth in the Indian road transportation segment. Further, improvement in the quality of road infrastructure has played a critical role. For instance, the total length of the country's National Highways has increased from 22,200 km in the First Five Year Plan (1951–56) to over 71,700 km currently.

So this points out to the huge potential of the road transport in India in coming time. However, at present this sector is plagued by much inefficiency which is faced both by the consignment owner and the transporters. Hence, we assessed that there is a need of a platform which can address the issues of both the concerned parties.

Hence this model should benefit the consignment owners by providing:

- One stop destination for your shipping needs.
- Best possible freight charges.
- Cost saving through Load sharing with different transporters.
- A transport model that improves their productivity.

And the assist the transporters by:

- Reducing efforts to find new customers.
- Catering to their business in time and cost efficient manner.
- Providing full utilization of the truck capacity.
- Maximizing the revenues by consolidating the consignments.

## 5. IMPLEMENTATION

## 5.1 Logic

Fataakship is an idea to create an online market place that would provide the transporter as well as the consignment owner a platform to work collaboratively which would make the logistics function of business more cost effective and time efficient.

To begin with the implementation of this idea, Fataakship team first tried to study the feasibility of this platform. We visited various consignment owners as well as the transporters. From the consignment owner's side, we were easily convinced when we talked to some frequent users of transport service. From the transporters side, we were a bit unaware of the fact that they extensively use IT and IT products until we conducted a survey by visiting them personally. They also showed a lot of interest talking to us when we explained and shared with them the benefits of this platform.

Initially when we thought of the concept, we had no idea about how it is already being used in developed countries of US, Europe, etc. During our study, we came across many such platforms that are already being used successfully in these countries. So to ease out our implementation for India, we referred to these sites and tried to refine our concept. Some popular websites referred were:

- www.uship.com
- www.chakkr.com
- www.transportmarketplace.com
- www.eship.co.za

So after being convinced with the feasibility, we started to think of a perfect design and logic of the system.

For implementing the concept successfully, we required a good developer to develop a website at the best price that supported our pockets. So we

requested quotes (Refer to Annexure 1 for Sample Quote) from various web development companies and evaluated each of them before selecting the final one.

After the selection of developer, we sketched out a web design that we had in our minds. Also we thought of a company name, created a partnership deed (Refer to Annexure 4) and finally applied for a PAN in company name (Refer to Annexure 2).

The website after the final approval of all the partners has 2 sections:

- Bid For Consignment
- Expresstruck

Bid for Consignment is the section where consignment owners post their truck requirements and set a bidding schedule. Different transporters view and analyse those requirements and then bid for the same. Bids are visible to customers along with the star rating of the transporter that is system generated based on past experiences of the customers. It is totally at the discretion of the customer as to which bid he wants to select. Based on his selection the winning transporter is notified by email after which he makes a final acceptance and then is redirected to pay a nominal convenience charge based on the package selected by the transporter following which the identities of customer and transporter are revealed to each of them. The system is absolutely free for the consignment owners.

Expresstruck service is basically for shared loads. This service aims to provide an express service to the customer to cater to his urgent needs and also provide an opportunity for the transporter to optimize his truck utilization to its full capacity. The transporter posts his truck with all the details onto the website and waits for a consignment owner to choose his truck. In such a case the transporter may provide the truck at extra ordinarily low price to fully utilize the space and gain the maximum out of his run to his destination. Thus this service may prove to be a win-win situation for each category of users. The website will be an easy to use interface which will be developed in ASP.net and database used would be SQL. The site will have some static as well as some dynamic pages. There will be 2 forms:

## Consignment posting form

This form would be for the customers and would include the details of consignment they want to ship from one place to other. It would have details like Source of consignment, Destination, Pickup date, Delivery date, Type of Load, Dimensions, packaging, etc.

## Express truck posting form

This form would be for transporters for posting their trucks that wish to share load to maximize profitability. It would have similar details as in the one above with some additional details about the type of truck that is being posted.

Apart from the forms above, there would be a page that would represent the marketplace and list all the posted consignments and a page that would list all the express trucks.

For access to personal information and data, each user would have a dashboard based on whether he is a transporter or consignment owner.

At the time of account creation, the users of the website would be requested to create a profile that would have their personal as well as business details based on their user category.

Other than these pages, there would be some static pages that are generally common to every e-commerce website namely about us, how it works, FAQ's, contact us, Register, etc.

The system will also have a feedback system to create a star rating for the transporters. The feedback form will be filled by the customer using a link that would be sent to his mail after his consignment gets dispatched and delivered.

## 5.2 Proposed Website Design:

Fataakship Home page:







#### About us page:

z://fataakship.com/about-us.php 🔎 = 🖒 🔀 Fataakship Dashboard 🕌 fataakship.com 🗙	Þ
About Fataakship	^
Road transport in India accounts for about 62% of the transport and contributes more than 4% to the nations GDP. Though it has improved manifolds in recent years owing to Infrastructure development, there still lies inefficiency in the system. The existing system is highly unorganised. The issues that we propose to deal with include:	
<ul> <li>Small and fragmented operators unable to find right freight for their trucks.</li> <li>Consignment owners unable to find right transporter for their consignment.</li> <li>Lack of transparency that paves a way for arbitrageurs to move in.</li> </ul>	
Fataakship.com is an online transport marketplace that connects transporters with consignment owners (ranging from individuals to business corporates) who want to transport their goods within India. Fataakship.com is a win-win solution for both the category of users and helps each of them increase their efficiency while optimizing time and cost.	
Fataakship.com is a user friendly platform that can be easily used on any web-enabled device to dynamically manage your transportation needs.	
Consignment owners can post consignments for bidding by transporters for best price. It also facilitates a reverse system where transporters can post their trucks ready to leave for a given destination to optimize their space utilization.	
Fataakship.com aims at removing the inefficiencies of the existing system and provides a platform where a synergy can be created between transporter and consignment owner that is mutually beneficial to each of them.	
Fataakship.com is a venture by management graduates from Delhi School of Management, DTU who are highly motivated and passionate entrepreneurs.	
The team aims to go a long way with their initiative and require the support and trust of their customers to accomplish its mission. We promise to provide a continuously improving and growing service in the field of Logistics and Supply Chain to our customers.	~

## Customer Signup page:

	Signup Customer	
First Name: *	Last Name: *	Are you looking for
First Name	Last Name	
Email: *	Confirm E-mail: *	One stop destination for your shipping needs?
Enter email	Confirm E-mail	Best possible freight charges?
Choose Password: *	Confirm Password: *	Cost saving through Load sharing with different transporters?
Password	Confirm Password	
Py clicking this button you agro	e to our Terms of Use and Privacy Policy.	A transport model that improves your productivity?
By clicking this button, you agre	to our remis or use and privacy policy.	
Create my account		

# Transporter Signup page:

	Signup Transporte	er
First Name: *	Last Name: *	Are you looking for
First Name	Last Name	
Email: *	Confirm E-mail: *	Reduced efforts to find new customers?
Enter email	Confirm E-mail	Time and costefficient model to cater to your business?
Choose Password: *	Confirm Password: *	
Password	Confirm Password	Full utilization of your truck capacity?
		Maximizing the revenues by consolidating the consignments?
3y clicking this button, you agr	ee to our Terms of Use and Privacy Policy.	Maximizing the revenues by consolidating the consignments?

## Login page:

Login	
Sign in to your account Please enter your name and password to log in.	
Email Address:	
Forgot Your Password?	
	~ ~

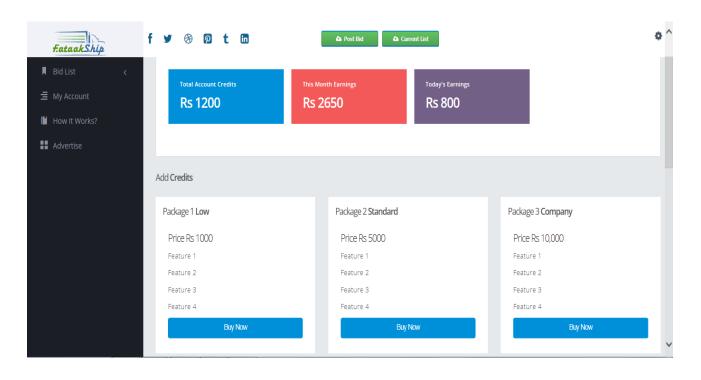
# Customer Load posting page

FataakShip	f 🎐 🛞 🛛 t 🛅	Post Bid Current List	٥
Welcome John Smith	Post A New Bid		
<ul> <li>■ Bid List &lt;</li> <li>My Account</li> <li>■ How It Works?</li> <li>■ Advertise</li> </ul>	Enter Details Product Name e.g. "5 Seater Sofa Set" Send From Select State Alaska Select City Alaska Send To Select State Alaska	Upload Image	V 0 0 X

## Transporter Bid Management page:

fataakShip	🎐 🛞 😰 t (	n 🔷 Post Bi	d 🔒 Current List				¢
Welcome Imp John Smith	ortant: One of your Bid require	es attention.					×
📕 Bid List 🧹	All Time Bids						
	From • To •						
Advertise	PRODUCT NAME	SOURCE	DESTINATION	PICK UP DATE	CURRENT BID	STATUS	
	Sofa	Mohali sector 14, Chandigarh	Ashok Vihar, Delhi	4th March 2014	Rs 2000	Bid Now	
	Bike	Mohali sector 14, Chandigarh	Ashok Vihar, Delhi	4th March 2014	Rs 2000	Lowest Bid	
	Car	Mohali sector 14, Chandigarh	Ashok Vihar, Delhi	4th March 2014	Rs 2000	Completed	
	Sofa	Mohali sector 14, Chandigarh	Ashok Vihar, Delhi	4th March 2014	Rs 2000	Lost	

## Package Details Package:



## 6. CONCLUSION AND FUTURE SCOPE:

As per our study, the transporters in India are using advanced IT systems such as GPS etc. for the tracking, however the issues faced by them is also of concern. We have proposed a viable platform where both transporters and consignment owners can conduct their business more efficiently and effectively.

Since we are charging just 20% of the current amount charged by the brokers, we believe that transporters will prefer us in long run for and this model will be a profitable venture.

From environment point of view, we are helping the transporters to run at full capacity by helping them consolidate their shipments. This will help in preserving the fuel and lowering the cost.

Once we cross the break-even, we plan to expand our base to whole of India in a phase wise manner which will include connecting the Tier-1 cities first.

We also plan to generate revenues by the advertisements and providing the option of freight insurance to the consignment owners.

Our long term goal would be to handle the transportation needs of the big companies and providing those best in class service.

### 6. ANNEXURE

### Annexure 1: Sample Quotation from the developer

## Quotation

## Website Development

Sc.No.	Product	Description	Cost	Time
1	Website Designing	PSD DESIGN	75000	45 days
		PSD TO HTML		
		ALL Browser Compatible		
2	Frontend	Dynamic Pages like (home page, about <u>us</u> , our services, testimonials, terms and condition page, blog, help etc.)		
3	Sell Services	Registration, login, complete		
	(Freelancers)	profile, manage profile, search jobs, bid posting, limitation, Notification, after approval communication with seller, logout		
4	Buy Services	Registration, Login, Complete Profile, Post a jobs, search Freelancers, communication with Freelancers, Post Reviews, Logout		
5	Payment Integration	Integration Of Payment Integration		
	Other Services	<u>Reviews, star</u> ratings, Help desk support, social networking API integration, Searching, Filtration, Dynamic Pages, newsletter, feedback, client testimonials etc		
6.	SMS Integration	1lacs sms bulk	Rs 40000	
7.	Back End Admin	Secure Login (Master Admin), Create multiple admin section, Buyer & Seller Management, Pages Management, Feed back, Newsletter, Email Management, Payment Orders Management, full control of website	Rs 45000	20 days
		Total	Rs 160000	65 days

\*Note: 1. Payment Gateway API Purchase by you

## Feel free for any query!

Quotation prepared by: Web Ray Solution Private Limited

To accept this quotation, sign here and return: \_\_\_\_

Thank you for your business!

### Annexure 2: PAN Card



### **Annexure 3: Registration of Establishment**

FormC Department of Labour Government of National Capital Territory of Delhi <u>5- Shamnath Marg, Delhi-110054</u> Form C **Registration Certificate of Establishment** Certificate No. :2014008283 Date 26/2/2014 Name of the establishment : Fataakship.com Name of the Occupier/Employer : Ankur Mittal S/o Anil Mittal Postal address of the establishment : Z-192, room No. 1, Loha Mandi, Naraina New Delhi Delhi 110028 Registration No. : 2014008283 Category of Establishment : Shop Nature Of Business : ITeS It is hereby certified that the establishment as mentioned herein has been

registered as a Shop under Delhi Shops & Establishment Act, 1954, on this 26 day of February ,2014.

### Disclaimer

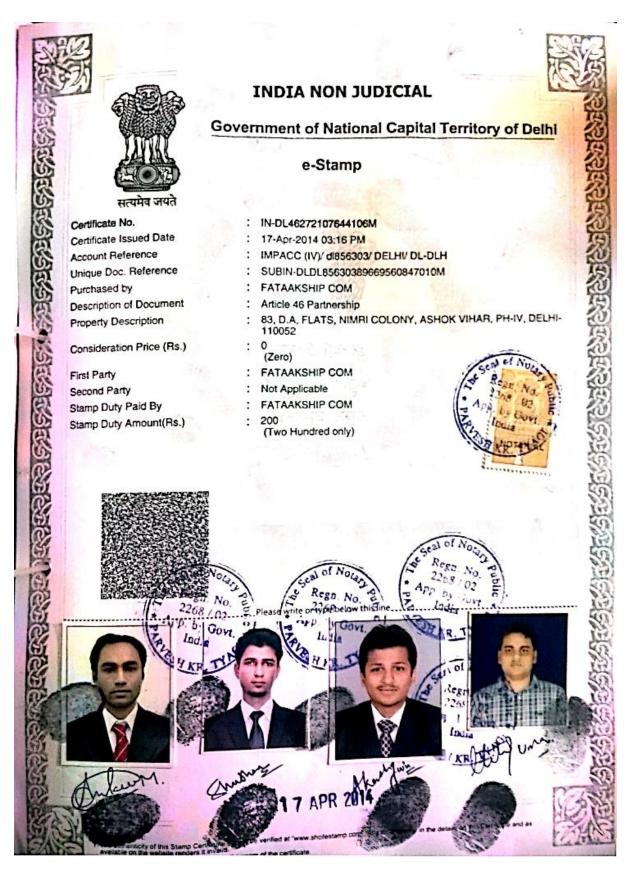
 The Certificate is based on the information provided by the Occupier/ Employer and has not been verified.

### NOTE:

- 1. The Occupier/Employer is required to notify the Chief Inspector of any change in respect of information contained in the form.
- 2. This is computer generated certificate and does not require signature.

Print

### **Annexure 4: Partnership Deed**



PER OUT OF STOCK

D

e-stamp cert.No.IN-DL46272107644106M

### PARTNERSHIP DEED

This Deed of Partnership is made at New Delhi on this : 17th day of April,2014 by and between :

- Shri Ankur Mittal son of Shri Anil Kumar Mittal, aged-27 years, resident of 21/16,Second Floor, East Punjabi Bagh called the FIRST PARTY)
- Shri Shubham Arya son of Shri Somvir Arya, aged- 23 years resident of 83, D.A. Flats, Nimri colony, Ashok Vihar, Phase-IV, Delhi-52 having PAN No.AUJPA-0786G (hereinafter called the SECOND PARTY)
- 3 Shri Akash Jain son of Shri Manoj Kumar Jain, aged- 23 years resident of 23, Pocket A-5, Mianwali Nagar, Paschim Vihar, New Delhi-87, having Voter Card No.UBF-2372109 (hereinafter called the THIRD PARTY)

AND

Shri Nitin Kumar son of Shri Pramod Kumar, aged 25 years, resident of : A-1/35, Second Floor, South City-II, Gurgaon Haryana, having Aadhaar No.9818 5565 9651 (hereinafter called the FOURTH PARTY)

And whereas expression of all the parties which shall includes their legal heirs, nominees, next of kins, successors, administrators etc.

And whereas all the parties have entered into the fold of partnership for carrying the business of I.T.SERVICES under the name and style of M/S FATAAKSHIP.com having its working place/Regd.office at 83, D.A. Flats, Nimri colony, Ashok Vihar, Phase-IV, Delhi-110052 AND Head office at Z-192, Room No.1, Loha Mandi, Naraina, New Delhi-110028.

And whereas all the parties have unanimousally decided to reduce the terms of this PARTNERSHIP DEED to avoid any of Nation, dispute, amongst them and their heirs in future.

Rean No. NOW THE WITNESSETH OF THIS PARTNERSHIP DEED IS AS UNDER: 2268 102 That the partnership of I.T.SERVICES under the name and APP bystyle. of M/S FATAAKSHIP.com having its Head office at Z-192, IndRoom No.1, Loha Mandi, Naraina, New Delhi and working place 83, D.A. Flats, Nimri colony, Ashok Vihar, Phase-IV, Delhi-110052 KW. 1. 17.4.2014 and shall be fully entitled to adopt any other name and style at any time with the mutual consent of all the parties.

ADD

# e-stamp cert.No.IN-DL46272107644106M

: 3 :

That all the parties shall work honestly, sincerely and

That the Profit and Loss of the firm will be divided amongst for all the parties in following sharing ratio :

115

REASU

FIRST PARTY		
	:	25.00%
SECOND PARTY	:	25.00%
THIRD PARTY		23.008
	:	25.00%
FOURTH PARTY	:	25.00%

2.

3.

and the ratio will increase or decrease at any time with the mutual and free consent of all the parties.

- That the partners shall be trustful, faithful to the other 4. partner in all transactions and relating to the partnership and shall at all time be responsible to give to the other partner, trustful & faithful account of the partnership
- That the taxation liabilities whatsoever related to 5. shall be adjusted in the general profit and loss account each year.
- 6. That in case any partner shown his willingness to retire /leaving from the fold of partnership during the course of the firm running in loss or not earning any profit, then he shall have no right to claim any share in the said firm, and his share will be divided amongst the remaining parties in equal sharing ratio., and if any party willing to retire from the firm during/after the course of firm running in Profit, then he shall be entitled to receive his complete share till the date of retirement, but in that both stages, the retiring party will service one month advance notice/intimation to the remaining partners to avoid any inconvenience or litigation amongst them.
- 7. That the partner shall work honestly and diligently to the best interest of the partnership firm and they shall keep apprised each other with day to day business developments.

Reen. No. 2268/02 vr P. by Gove. India TYNG ADD 711

e-stamp cert.No.IN-DL46272107644106M

: 4 :

EROU

IN FARIN

India

..p/5..

That no partner shall be entitled to raise any loan from any one on behalf of the firm without the written consent of 8. other partner. Similarly, the firm shall not be responsible for any loan raised by any of partners in his individual

- That in case of any dispute amongst the partners, they will 9. refer their subject matter of dispute to the arbitrators of op cal of N the choice of the partners, whose decision will be final and binding upon both the partners OR the same shall be referred
- That no partner will be responsible for the discharge of the 10. liabilities of the other partner, who had raised the loan without the consent of the other partner in the name of
- That no party shall have right to transfer his/her share 11. to any other person, without the written consent & knowledge
- 12. That in case of any dispute amongst the partners, they will refer their subject matter of dispute to the arbitrators of the choice of the partners, whose decision will be final and binding upon both the partners OR the same shall be settled By the parties mutaully, and the decision of majority will be final and binding to remaining partner.
- 13. That none of the partners, without written consent of other partners shall:
  - a) assign, mortgage or charge his/her share in the assets of the firm.
- 2
- b) lend money belonging to the firm. or
- except in the ordinary course of the business, dispose of North C) off by pledge, sale or otherwise, any partnership Regn. No. property or profits. 2268/02 \* App. by Gove.

14. That for the partnership shall not be responsible individual debts, loans, advances or liabilities of the <sup>Indi</sup> partners. The partners shall keep the firm indemnified KR against all such loss of liability. 15.

That the Bank account/accounts will be opened in the name of the the Bank account/accounts will be opened in the name of the bank, OR JOINTLY as agreed mutually.,

Strutting APR 2014

e-stamp cert.No.IN-DL46272107644106M



: 5 :

- 16. That all other terms and conditions are same according to Partnership Deed Act, 1932.
- 17. That all the parties shall fully entitle to adopt any other business line/lines with their mutual and free consent.
- 18. That all the parties shall be fully entitled to withdraw the salary/remuneration for their day to day expenses according to the Income Tax bye-laws as agreed mutually.
- 18. That the partners are at liberty to add, amend, delete or modify any of the aforesaid terms and conditions as may be mutually agree upon between from time to time.
- 19 That all the parties have executed and signed on this Partnership Deed with their sound mind, good health and full responsibility.

IN WITNESS WHEREOF THIS DEED OF PARTNERSHIP IS MADE AT DELHI, on the day month and year first above written in the token of their acceptance of all the terms and conditions in the presence of the following witnesses.

NIL MITTAL WITNESSES FIRST PARTY 1. ast Runjabi Bigh Chubberg 21 SECOND PARTY 2. DOMVIRAMO) of Nota Regn. No. 2268 / 02 p. by Govi. India FOURTH PART Entry in Notary Register STEL No. 113/2-14 Notary Public 17 APR 2014 201 Date..... DELHI (INDIA)

## Annexure 5: Developer Payment Receipts

on account of	Received with thanks from the sum of Rupees	e-Com Recrieved Rs lo for website Voucher No	mnexus Med 1000/ from Ar Designing . Project	ia Pvt. L hkul, Nitin, on 13th t	td. Shibom & Ask ub 2014 Dated 13th feb 2014
Ť,	iks from	DEBIT			Rs. AMOUNT P.
				1	
	e-Co			1	and the second s
-36-	house d				
	hexu			TOTAL Rs.	
0		CREDIT			
	Media			The second	
Signatu	Pvt.		K.		
	Ltd		and the second	100	
and .				TOTAL Rs.	1 3 /0
- Ce		Prepared By :	Accountar	nt	Director

High Performance Digital Marketing Solutions Fataakship.Com Invoice	eCommnexus Media A-208 Second Floor, Lajpat Nagar-1, New Del DirectLine : 011-
Date: 20 - 02 - 2014	
	Different Cities and States. More
Site Description: Fataakship.Com is a Portal connecting Transporters to the clients wit Details will be mentioned in Contract.	to want to send the load from Dimension Contraction
Total Quotation: Rs 55,000	
Date	Amount Received
13th February 2014	Rs 10,000
20th February 2014	Rs 10,000
Total Amount Received:	Rs 20,000
Balance:	Rs 35,000
	Armbury
	1 mbrt
	Henry .
	Authorized Signature

### **Annexure 6: Contract**

### Fataakship.com and Ecommnexus Media Pvt. Ltd. Contract

This agreement stands hereon within:

Akash Jain (9899154700)

Ankur Mittal (9873736366)

Nitin Kr. Bhaskar (9871859196)

Shubham Arya (9718168898)

Referred hereafter as Fataakship.com, established in New Delhi (Room No. 1, Z-192, Loha Mandi Naraina, New Delhi)

#### And

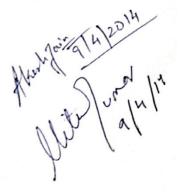
Manish Tahiliani (9811031933)

Referred hereafter as Ecommnexus, established in New Delhi (Ecommnexus Media Pvt. Ltd., A-208, 2<sup>ND</sup> Floor, Lajpat Nagar-1, New Delhi)

Under the mutually agreed terms and conditions between Fataakship.com and Ecommnexus, following are the terms and conditions:

- Ecommnexus has agreed to provide the custom designed Ecommerce Marketplace solution to Fataakship.com for a specified amount of INR 55,000/- (Fifty five thousand rupees only)
- This contract includes the following things:
  - a. Ecommnexus will design and implement the Ecommerce Marketplace Solution for Fataakship.com and any changes to the design recommended by Fataakship.com are bound to be followed and implemented by Ecommnexus.
  - b. This solution includes all the dynamic as well as static pages as discussed by the parties and described in the Annexure Attached herein. The number of pages is not fixed and will depend on the functionality of the modules mentioned in annexure.
  - c. Filters on dashboards, Auction lists, Consignment Postings, Truck Postings etc.
  - d. List of cities and states of India.
  - e. Categories and subcategories types of load list.
  - f. This also includes the design of Logo, Banners and Favicon for Fataakship.com India, which will be a sole propriety of Fataakship.com.
  - . The Database Logic and functionality
  - h. Sitemap
  - Ecommnexus will purchase the Domain names (valid for 1 year) for Fataakship.com(www.Fataakship.com<http://www.Fataakship.com>,
    - www.Fataakship.in<http://www.Fataakship.in>) and these will be in the name of one of the partners of Fataakship.com or transferred (if taken in the name of any employee or Partner of Ecommnexus)before the website being handed over to Fataakship.com after complete testing by Ecommnexus.
  - j. Ecommnexus will maintain the Domain until the Website goes Live.
  - k. Ecommnexus will provide the necessary Hosting and Database for the Website for one year as discussed.
  - Testing of the Product finally developed will be done primarily by Ecommnexus and finally by Fataakship.com. Any Errors and deviations on the website from the desired behavior (as mutually agreed upon) identified by Fataakship.com are bound to be rectified by Ecommnexus.
     Months of Functional Support after the Go Live of the Website.
  - n. 10 Email Addresses, which will be configured once the Domain is purchased

- o. The Charges of the Payment Gateway will be paid by Fataakship.com and the payment gateway is to be integrated by Ecommnexus.
- p. Ecomminexus in no circumstances would share the codes, logo, banner, favicon and any other information on database, server etc. to any other party. This will lead to breach of contract in nonadherence any time in future, hence provision for penalty.
- q. Along with the payment gateway, user account provision for prepaid balance i.e online wallet using tokens (value dynamic assigned to tokens) as discussed.
- r. Website security, Website traffic tracking and analysis system integrated.
- Website operational across all the web browsers including but not limited to IE(version 7,version8),Mozilla firefox, google chrome and along with the mobile platforms of android,Iphone blackberry, windows 8, opera mini browser.
- 3. The Payment procedures will be as follows:
  - Payment of INR 10000/- (Ten thousand only) on 13<sup>th</sup> February 2014, to Ecommnexus before the start of the Project. (Already paid)
  - b. Payment of INR 10000/- (Ten thousand only) on 20<sup>th</sup> February 2014, to Ecommexus. (Already paid)
  - c. Payment of INR 30000/- (Thirty thousand only) by 21" April 2014, to Ecommexus after the handing over of the website (as promised by Ecommexus to be done on 21st April, 2014) on complete testing and domain transfer to Fataakship.com.
  - d. Payment of INR 5000/- (Fifty Five Hundred only) by 30<sup>th</sup> April 2014, to Ecommnexus after successful testing of the Project and after the Go LIVE.
- If Ecommnexus is unable to meet the deadline of 21st April and Fataakship.com doesn't agree to extend the deadline then Ecommnexus and its primary concern are liable to pay back the already paid amount of Rs.20000 and contract would hence terminate thereafter.
- 5. These terms are flexible if mutually approved by both the parties.
- 6. Upon a breach of contract by any of the parties, all matters are subject to Delhi Jurisdiction.
- 7. This Email is to be considered as a Legal Document upon representation in the Court Room if need arises.
- This Contract will be signed by both the Parties in Email itself or in person as mutually agreed upon by Replying to the same Email with a Reply to All Option.



### Annexure

Fataakship is an e- marketplace where the transporters and customers can meet on common platform and generate the business in a cost efficient manner. The website will allow the customers to post the loads which they want to ship and the transporters then can bid for those posts.

Afterwards, the customer can choose the lowest bid and we will then share the contact with both parties. A nominal amount would be charged by Fataakship.com as convenience fee.

There would also be a reverse platform where transporters would post their shortly leaving trucks and try to maximize space utilization by filling up the empty load space.

Broadly Following modules are the part of this project and both Fataakship.com and Ecommnexus agree upon it as discussed. Though these are the broad modules but fataakship.com reserves the right to modify or make minor changes in the requirements as per mutual consent.

### Modules:

- 1) Static modules (Home, about us, how it works, etc.)
- 2) Transporter dashboards and profile page
- 3) Consignment owner dashboard and profile page
- 4) Auction lists and Bidding
- 5) Consignment Postings
- 6) Truck Postings
- 7) Payment gateway
- 8) Mailing system on load acceptance and contact sharing.
- 9) Review, Ratings and Feedback
- 10) C-Panel Designing
- 11) Admin Panel designing, etc.



Fataakship.com

Date: 2014 Place: New Delhi

### Annexure 6: Damage/Loss Certificate by the transporters

## **OKARA TRADE PARCEL CARRIERS**

Head Office : 143, Transport Centre, Rohtak Road, New Delhi-110035

Phone : 28311487, 28311454

## LEAKAGE/SHORTAGE/DAMAGE CERTIFICATE

S. No. 7168	BRANCH	Dated
1. Goods Receipt No		
2. Name of Consignor		
3. Name of Consignee		
4. Place of Booking & Delivery		
5. Nature of Consignment		
Number of Packages		
Description of goods as per recor	d	
6. Details of invoice, if available		
on record		
7. Nature of contract SPECIAL BOC		

8. Delivery C.R. No.....

It is hereby certified that as per the instruction of the consignor/consignee party holding the goods receipt/owner of the goods/as per agreement between Carrier and the said party, delivery/open delivery of the above noted consignment was effected on.....

On inspection the following damage/loss/leakage was noted

This ceritificate being is used at the instance of the party concerned without prejudice to the right of the carrier and on the re-affirmation of the party concerned that the goods were transported subject to special contract and at owner's risk and on the undertaking of the party concerned that on libability for the damage above noted or any other damage in respect of the consignment attaches to the carrier and that the party concerned has received the goods in full and final settlement of the transaction and has no further claim against the Carrier. In taken of the above the party concerned/ authorised agent of the party concerned has appended his / its signature herein below.

Signature of authorised

Officer of the carrier

I/We.....consignors/consignees/owners of the goods affirms and agree

to the above stipulations.

DESTINATION COPY

Signature of the party

### 7. REFERENCES

- (n.d.). Retrieved April 27, 2014, from http://www.fedex.com/us/solutions/downloads/acer.pdf
- (n.d.). Retrieved May 01, 2014, from http://shodhganga.inflibnet.ac.in/bitstream/10603/705/9/09\_chapter%201.pdf: http://shodhganga.inflibnet.ac.in/bitstream/10603/705/9/09\_chapter%201.pdf
- (n.d.). Retrieved april 28, 2014, from planningcommission.nic.in: http://planningcommission.nic.in/aboutus/committee/wrkgrp11/wg11\_roadtpt.pd f
- al, K. e. (2002).
- al., C. e. (1997).
- al., T. e. (1996).
- Council of Logistics Management. (n.d.). 1991.
- Drucker, P. (1998). Profession of Management . In P. Drucker. USA: HBS.
- (November 1, 2005). India Road Transport Efficiency study. World Bank.
- (2010). Investing in Indian transportation and Logistics Industry. Mumbai: KPMG.
- K buzz Sector insights. (June 2012). KPMG- Issue 18.
- Lewis. (1998). Chang.
- (n.d.). Logistics in India PArt 2 . Delhi: KPMG.
- (2005). Proceedings of the Eastern Asia Society for Transportation Studies, Vol. 5. South Australia.
- (n.d.). *Research study of the road transport sector in India*. Delhi: The Ministry Of Corporate Affairs, Govt. of India.
- Reynolds-Feighan. (2001). Logistics sector.
- Road Transport Year Book. ((2007-09)). USA.
- (n.d.). *Transports and Logistics 2030 Volume 3: Emerging Markets*. PriceWaterHouse Coopers.
- Wood, J. a. (1997). Tilanus.