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# Online Truck Rental System Specializing in Hiring Trucks to Customers

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**Abstract**—My goal was to design and build a website that would help rent trucks, where we could simplify car and staff management. This website is user-friendly, built for visitors and registered users such that users will feel very comfortable working on it, before booking a truck customers have to create a new account or they can simply log in to the system with an existing account, registered users have access to truck booking, booking history, profile updates, sending and viewing testimonials and password reset. A manager is a superuser who can manage any information that can be added, edited, or removed from the system, he can view the registered users, complete booking transactions, queries and history in his dashboard.

#### Keywords— Truck, Service, Rent.

#### Introduction

An online truck rental program that specializes in renting trucks to customers. An online system where customers can view available trucks and register themselves to book trucks. A truck rental service is a demanding transportation service provided by different transport operators in a city. Most people use the truck service for their daily goods transportation needs. The Truck Rental service is a web-based platform that allows customers to book their trucks online comfortably work place or office. The platform provides a management interface where we can manage content, and access all bookings and customer details, this is very important as in today's internet age people should be able to rent trucks online without having to pick up the phone, booking is now automated with an automatic booking record that can be used to process the workflow. Truck rental is a system that allows you to rent a truck for a certain amount of money. Provide a delivery service when a customer feels difficulty in moving goods from one place to another. The person wishing to rent a truck must register on the website to check the vehicles available according to the need, At this point, the person must provide certain details such as rental dates, type of truck, basic or premium service all according to the need of goods, customers are free to choose any truck they like during booking.

### **Background and terminology**

The global truck rental industry is projected to reach \$ 204.2 billion by the end of 2030 according to the forecast, Its recent growth could be due to the global economic downturn that has led to the expansion of the transportation sector, which relies heavily on trucks for road transport. In addition, truck rental practices are also estimated to increase in the near future as they help to reduce the risks arising from annual transportation demand and are less expensive than buying trucks. With promising growth in the truck rental industry, launching a truck rental website is a profitable business idea for 2021.

#### Literature review

#### Overview of the market

Truck rental market includes renting or hiring commercial vehicles. Truck rental is a growing market that serves individuals, companies and agencies. Leasing trucks reduces the number of unloaded trucks on the road. Property, industrial and construction management are key to the growth of the truck rental market. In addition, rental owners use cost-effective techniques to offer inexpensive rental trucks. Therefore, the cost of truck travel will be significantly reduced in the future. These are the factors that are driving the global truck rental market in this period.

Renting trucks reduces work hazards. Renting a truck is more economical. In addition, renting trucks removes additional costs such as servicing, maintaining and replacing the vehicle. Today, the revenue from truck rental is 72.58 USD billion. The estimated growth rate of the truck rental market up to 2024 is 9.86%. In addition, the level of truck rental providers is also increasing every year. It is another factor driving the growth of the truck rental market.

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#### **Covid 19 Analysis**

The covid 19 epidemic had a devastating effect on the truck rental market. Truck Rental Market Analysis raises market differences during covid 19. Impacts are significant that disrupt market movements. The three most important outcomes are demand, acquisition, and market capitalization. The decline in truck demand in covid 19 leads to higher levels of goods.

The cost of goods has increased by 30-45 percent affecting the needs of emergency trucks. During covid 19, road trucks are small as there are many limitations. Rental trucks are not allowed in the red and orange areas which ultimately reduces the total demand. According to the 2024 market forecast, the demand for truck rental will increase by 50% from May 2021. In addition, the demand for truck rental market will continue to increase until 2024.

#### **Market Dynamics**

There are many reasons to rent a truck. The automotive industry is facing a major collapse during covid 19. However, automakers are splitting their services by providing car rental and leasing. Their aggressive advertising and unusual offer of hire are the driving elements of the Truck Leasing Industry. In addition to selling their cars, they donated their trucks for rent. It is one of the key factors that strengthens the truck rental market. Growing demand, reasonable operating costs, and service delivery processes are the most important factors. These factors have increased the acceptance of truck hire in various industries.

The cost of repairs and falling fuel prices also increase the need for truck hire. Especially commercial users need a truck for a variety of purposes. Also, housing projects are a major factor in the demand for these rental trucks. Rental trucks are always available. It is easier for most industries to rent trucks than to maintain or own a truck. Other logistic services include mobile truck booking applications. It enables customers or industries to rent rental trucks easily. Availability and low operating costs are the main driving forces in the truck rental market.

#### Methodology

#### **Business model**

**Admin** An administrator is a market owner who enjoys full authority over a website. Can control the activities of other user types in the market. Key administrator responsibilities include approving or rejecting the listing of trucks, managing security deposit, issuing rental fees, and ensuring the proper functioning of the website.

**Renters** Employers in the truck rental market are sellers who rent their trucks. Having registered employers in the market is just as important as having renters as they are both online market buyers. Key employers' responsibilities include loading the truck list, reviewing truck availability, managing inventory, and inspecting trucks upon their return.

**Rentees** Users who rent trucks from the market. They are the last users of the truck rental business. They are important in the market as the increase in their number attracts employers and vice versa. Therefore, helping the market thrive.

#### **Working**

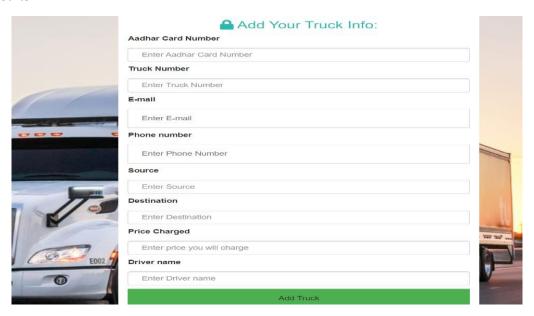
- The employer (truck owner) uploads a list of trucks to the market.
- The manager gives his or her consent or refusal to the list.
- On approval, listings are displayed on the market.
- Participants consider truck listing and can rent a truck by paying rent and security deposit.
- After booking, the manager deducts a commission on rent and transfers the rest to the employer.
- The employer finds the truck in his preferred delivery method.
- After the truck is returned, it is inspected for any vehicle damage.
- In the event of any damage, the employer contacts the supervisor to claim a refund for the security deposit. If no damage is done, the supervisor returns the entire security deposit to the employer.



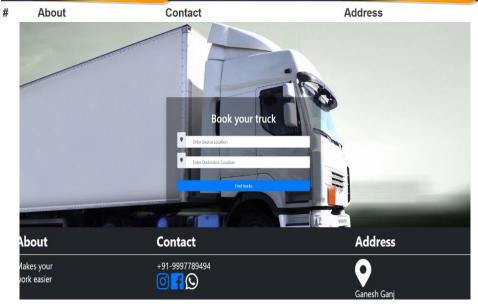
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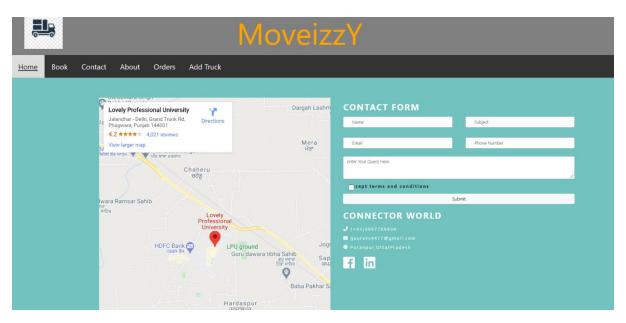
## **Simulation results**







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#### Conclusion

Information Technology plays an important role not only in a particular field, but also in providing a variety of solutions and services to the various problems that exist in many fields. MoveizzY uses information technology in an effective way to provide better transport services. The online booking system helps to solve the daily problems of the great business mans across the world. Covid 19 has created global financial instability. The number of people buying cars is small in the coming years. In particular, due to high truck prices, the number of people with trucks is small in the future. therefore, individuals will rent trucks as they are affordable. According to the demand forecast, the truck rental will reach its peak by 2024. The demand will be high for light and heavy trucks due to the low costs.

#### Limitations

MoveizzY is a Web application and is limited to the limited number of users. In this application, various types of administrators are given access rights and are restricted in their performance, so that data is stored securely and unwanted information is blocked. Since Data is stored on a computer, you need to have a Computer and Network connection to access the application. Here the details of the trucks and drivers, were kept but the accounts of these people were not created.

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