A STUDY ON FEASIBILITY AND IMPACT OF RADIO TAXI AND APP-BASED

VEHICLE MODEL IN MUMBAI & BANGALORE MARKET

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**Abstract** 

India is been a country of a very poor public commuting system all across. Since the government

has not been able to offer smart conveyance, the majority rely on private transport. Situation has

changed for good with the advent of App-based and radio taxi model which has come up only in

the last decade. The business is booming in a huge way in India with versatile private operators

both national and international investing tremendous money in setting up the call centers,

acquiring fleets of new cars, and incorporating latest technologies in their vehicles. It has proved

to be the win-win situation for government, radio cab companies, chauffeurs and the most

importantly passengers.

Change in the people's mindset has been the greatest factor in the growth of radio cab market.

But there are certain other aspects which are acting as the obstacles in widening the radio cab

market such as high fares, Telecom Regulatory Authority of India (TRAI) caps on the SMS and

the unavailability of parking area. Radio taxi companies have to strike a perfect balance between

growth drivers and challenges to move ahead.

I would like to study the changing dynamics of the above market in both southern and western

India and at the same time to find a perfect balance chord in respect of optimum customer

satisfaction and break even for the above taxi segments.

Keywords: Radio taxi; customer satisfaction

**BACKGROUND** 

India is been a country of a very poor public commuting system all across. Since the government

has not been able to offer smart conveyance, the majority rely on private transport. Situation has

changed for good with the advent of App-based and radio taxi model which has come up only in

the last decade. Before that, the comfort of availing the Taxi was also not guaranteed mainly for

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two reasons – refusal of plying to the required destinations and non-Air-conditioned discomfort in the cab.

# LITERATURE REVIEW

Shi & Lian, (2016) studied passenger-taxi double-ended queuing system. They figured out the relationship between the optimal thresholds and the optimal taxi/passenger arrival rates and analyzed the strategies of the government, and derived the conditions whether the government should subsidize or levy the taxi drivers.

Slavulj, et.al, (2016) studied demand for Uber service in Zagreb, to make a price comparison with major taxi companies and to explore the possibilities for improving the legislation regarding the area of taxi service.

A case study approach in London by Skok, & Baird (2005) illustrates how a newcomer to the industry, Delta Cabs, through its innovative use of emerging technologies, was able to break down traditionally high barriers to entry and create a competitive advantage, redefining the competitive nature of the industry in the process.

Peter Abelson (2010) studied regulation, performance and reform of the taxi industry in Sydney which governs entry, industry structure, service quality and prices for the Sydney taxi industry. He finds that few efficiency or social reasons for these regulations is responsible for poor taxi performance.

Neelam Kumari (2012) examined the radio cabs market in Delhi through various interviews with people associated with radio cabs. She finds that even though the charges are higher unlike those of local taxis and public transport, the service delivered by radio cabs is highly reliable.

The implementation of GPS technology has radically changed the traditional approach to taxi fleet management. But reengineering of operations and the training of end-users are vital to the improvement of service quality and the development of sophisticated public transport systems (Liao, Z., 2001).

Consumer research in which participants were asked to respond to questions that would guide the development of a marketing mix, was conducted to explore taxi drivers' views on the driving situation and the determinants of risky driving behaviors as well as to gather their ideas for developing a social marketing program to reduce risky driving behaviors among taxi drivers in Tehran, Iran (Shams, et.al, 2011).

Wang & Liu's (2014) case analysis shows that analysis between supply and demand of taxi passenger provides strong support for government urban passenger management and control and be of great significance on theory and practice to the development of urban passenger transport industry.

# RESEARCH OBJECTIVE OF THE STUDY

The following are some of the proposed research objectives of the study:

- To assess the marketing potential of radio taxi and app based passenger transportation system in metro cities like Mumbai & Bangalore
- To identify key factors which influence the successful implementation of radio taxi and app based model in Mumbai & Bangalore
- To understand the impact of driver behavior on market of radio taxi or app based passenger transportation
- To ascertain the manpower demand with respect to the skill requirements in this sector
- To establish the future training needs in this sector for the operators and drivers
- To also assess competition from the Self-Drive car model on the App-Based and Radio Taxi model in near future

# RESEARCH QUESTIONS FOR THE STUDY:

This study is proposed to answer the following research questions and hypothesis will be based on these questions:

- Is there any direct relationship between marketing potential of radio taxi/app based passenger transportation system and infrastructure development?
- Is there any direct relationship between marketing potential of radio taxi/app based passenger System and skilled manpower planning in this sector?
- Does the driver market community aware of the impending opportunities in this sector?
- Will the understanding of employability demands motivate to enhance skills for the driver market?
- Is there any direct relationship between the skills of the drivers and efficiency in operations in this market?

• What is the most profitable model to sustain this industry for different players not compromising on the serviceability and safety for the passengers?

## RESEARCH METHODOLOGY

This study is descriptive in nature and mainly utilizes qualitative approach. It will be necessary to conduct detailed review on available literature related to radio taxi especially app-based passenger transportation services across world. Primarily questionnaire based survey method will be used to collect data from operators, drivers and passengers. Co- relational studies can be used to describe and understand impact of drivers as well as passenger behaviour on operations of radio taxi/app based passenger transportation system. Endeavor of researcher will be towards systematic observation and record behaviour without interfering natural and real settings. Questionnaire, interviews, surveys will be designed to measure perception.

## SUGGESTED SAMPLE AREA

Radio taxi and App-Based taxi service companies in Mumbai and Bangalore alongwth drivers and passenger utilizing services will be key samples under this study.

Data analysis and interpretation will be done by using latest statistical software such as SPSS.

# EXPECTED OUTCOME OF THE STUDY

The study is expected to come out with a most feasible model to run this business model successfully with service providers, customers and drivers; all achieving their goals not compromising on the decisive factors.

## RADIO TAXI MODEL

The radio Taxi model was the first to come up in India before App-Based model with several private operators such as Meru, Megacabs, Easycabs etc. coming in.

Demand for radio cabs is soaring in the metros and large cities as companies, executives, international tourists and affluent Indians opt for travelling in well maintained and modern taxis. They do not mind paying a slightly higher fare to travel in the comfort of air-conditioned taxis.

The basic differences of these 2 types of Taxis are below:

Radio Taxi	App based taxi
License has to be taken	Not licensed
Operate with CNG vehicles as per the norms laid down by supreme court in 2001	Operate with diesel variant also
Only those drivers who have transport badges issued by the transport department after a mandatory police verification can be hired	Driver verification is not very strict
Panic button is compulsory if someone tries to temper or switch of GPS	No need of it
Need to have 24x7 call centre	No need to have call centre. Run through app
Need to own a cab they operate	It is an aggregator model
GPS in cabs compulsory	GPS not compulsory

# **OPPORTUNITY AREAS**

- (i) Transportation related expenses: On an average 3-5% of total income is spent on public transport facilities. People are also getting conscious about their comfort which also works in favor of taxi cab market.
- (ii) Lack of Public Transport Facilities: Public transport facilities are not sufficient at many places. Moreover luxurious and comfortable transportation facilities are hardly available. Many consumers are ready to pay higher for the comfort which is a booster for radio taxi market.
- (iii) Influx of Tourist: Number of foreign visitors in India is growing resulting in increasing demand and demand rose at the Airport.
- (iv) Demand from Corporate Sector: Existing and upcoming industrial hubs and corporate parks on the outskirts of metro and tier-1 cities such are creating significant growth opportunities for radio taxi operators. Moreover, young working class, in particular, opts for radio taxis due to enhanced convenience and safety. The IT &ITES industry is concerned about pick up and drop facility for which they require a constant supply of cabs at their disposal.
- (v) Change in Consumer Mindset: Customers are increasingly shifting from traditional black & yellow taxis (which are aging) to modern Radio Taxis equipped with AC, GPS, 24×7 customer support, electronic fare meter and other tangible and intangible features.
- (vi) Market Statistics: The fleet size of radio cabs, mainly concentrated in four Indian metros, 3 was about 15,000 in 2011-12. With demand far outstripping supply, the total number of radio cabs was expected to increase at a compound annual growth rate (CAGR) of 25 percent.

- (vii) Price rise of passenger vehicles: The increase in the fare of other passenger vehicles ie; Auto, conventional taxis or even Bus or Metro in bigger cities are increasing the popularity of App- Based Taxis and their innovative pool services.
- (viii) Decline in the fleet size of non-radio taxis due to ageing cabs: High Court has ordered for removing more than 25 years old Cabs form city roads of Mumbai resulting in huge demand and scope for radio taxis.

# CHALLENGES AND PROBLEM AREAS

- (i) Safety & Security: In spite of many marketing commitments from different operators, still the safety and security of passengers is a big challenge to be fulfilled.
- (ii) Less remuneration to drivers as compared to App based taxis: Cab drivers whose incomes had dwindled due to the widespread ban on taxi aggregators in Delhi were also unwilling to join radio taxi companies that cannot match the compensation offered by the venture-funded taxi app firms. The internet companies transfer money in a week and even give incentive per trip.
- (iii) Finding the correct Drivers: It is becoming extremely challenging for radio taxi operators to equal the growing need of drivers because of mounting competition due to rising demand of taxi cabs. Comparatively less remuneration to drivers and compulsory police verification of drivers makes this task even harder. Shortage of suitable and educated drivers, high cab maintenance costs and varying government regulations in every state also hindered growth.
- (iv) Legal boundaries getting tougher: The legal boundaries are also getting tougher for taxi services due to Uber and similar case of Delhi. Local agitations by different taxi unions are also hindrances. The radio cab industry was highly regulated and government regulations were state specific. Red tape, the ceiling on the number of permits that could be held by a radio cab operator, stringent criteria for qualifying to become a radio cab driver, restrictions on size of the radio cab and government regulations regarding fares, were some of the negatives of the regulatory environment in which the radio cab industry operated. Factors such as these contributed to the sub-optimal supply of radio cabs, resulting in high rates of denial of service
- (v) Insufficient supply to match growing demand: 30-50% revenue of radio taxi market comes from airport transfers. Still the availability of cabs to fulfill this demand is not sufficient.

(vi) High fares of Online Cab Services & Surge prices in morning hours: The demand supply mechanism also results in surge of prices in morning office hours especially during morning is also increasing the unhappiness among customers.

## **CONCLUSION**

The business is booming in a huge way in India with versatile private operators both national and international investing tremendous money in setting up the call centers, acquiring fleets of new cars, and incorporating latest technologies in their vehicles. It has proved to be the win-win situation for government, radio cab companies, chauffeurs and the most importantly passengers. Change in the people's mindset has been the greatest factor in the growth of radio cab market. But there are certain other aspects which are acting as the obstacles in widening the radio cab market such as high fares, Telecom Regulatory Authority of India (TRAI) caps on the SMS and the unavailability of parking area. Radio taxi companies have to strike a perfect balance between growth drivers and challenges to move ahead.

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