An Exploratory Study on Rental Bikes and Cars in Goa

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by

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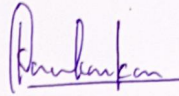Commerce Discipline

GOA UNIVERSITY

Date: April 2024

DECLARATION BY STUDENT

I hereby declare that the data presented in this Dissertation report entitled, **"An Exploratory study on rental bikes and cars in Goa"** is based on the results of investigations carried out by me in the **Commerce discipline** at the **Goa Business School, Goa University** under the Supervision of **Prof. Guntur Anjana Raju** and the same has not been submitted elsewhere for the award of a degree or diploma by me. Further, I understand that Goa University or its authorities will be not be responsible for the correctness of observations or other findings given in the dissertation.

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COMPLETION CERTIFICATE

This is to certify that the dissertation report **"An Exploratory study on rental bikes and cars in Goa"** is a bonafide work carried out by **Mr Kishan Manguesh Kankonkar** under my supervision in partial fulfilment of the requirements for the award of the degree of Master of Commerce in the Discipline Commerce at the Goa Business School, Goa University.

Prof. Guntur Anjana Raju

Date: 30/04/2024

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CONTENTS

Tables

Table no.	Description	Page no.
4.2.1	Demographic profile	16
4.3.1	Measurement model (CA, CR, AVE)	19
4.4.1	Discriminant validity (Fornell Larcker)	21
4.5.1	Path Coefficients, T-values, P values, R^2, Q^2, F^2 & Effect Size	22

Figures

Figure no.	Description	Page no.
1.1	Conceptual Framework	7
4.1	Result of SEM	6

Abbreviations Used

Entity	Abbreviations
Mobility	MOB
Price	PR
Infrastructure	INFR
Trust	TR
Security	SEC
Response	RES
Credibility	CS
Commitment	COM
Communication	COMU
Adoption	ADO
Satisfaction	SAT

ABSTRACT

This exploratory study investigates the dynamics of the rental transportation industry in the vibrant and tourist-centric state of Goa, India. Focusing on both bike and car rentals, the research aims to provide a comprehensive understanding of the factors influencing consumer choices, business operations, and the overall impact on the local economy.

The study employs a mixed-methods approach, combining quantitative surveys and qualitative interviews with rental service providers, tourists, and local residents. Data collected from a diverse sample of users and stakeholders are analyzed to uncover patterns, preferences, and challenges within the rental market.

Keywords: Exploratory Study, Rental Bikes, Rental Cars, Goa, Tourism, Consumer Choices, Business Operations, Quantitative Surveys.

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION TO RENTAL BIKES AND CARS

Goa is an attractive vacation spot with lively beaches. Since most visitors want to see the State at their own speed, renting a bike and car is a popular choice. From October to March, when Goa is most popular, there is a high demand for bike and car rentals.

A common and useful way to see this beautiful beach town is by renting bikes in Goa. You may explore the beautiful roads and beaches at your own speed when you rent a bike. It's a reasonable alternative as compared to other means of transportation, in addition to it makes it easier to see a lot of things to see. Whether you're traveling alone or with friends, hiring a bike in Goa is a wonderful way to immerse yourself in the spectacular landscape and the vibrant culture of the area.

Goa is a tiny state, so traveling by car or bike is straightforward. This is just one of the many reasons to hire a bike and car in Goa. Goa's transportation system is well-developed, making it convenient to get around. Tourists can explore Goa at their own schedule and explore locations that are difficult to reach by public transit by renting a car or bike.

In Goa, rental motorcycles and vehicles are in great demand from October to March, when tourism is at the highest level. During this period, rental bike prices soar, with any bike costing around Rs 1000 per day. However, you can get a considerably better price if you go during the off-season, when daily rates for any bike drop to about Rs 600.

Both men and women can benefit greatly from non-gearing bikes, commonly known as single speed cycles. Without the trouble of shifting gears, these bikes provide a simple and easy riding experience. They are ideal for leisurely bike adventures, short commuting, and casual rides. A straightforward and enjoyable approach to travel around town or see the local area is with a non-gearing bike.

In order to gain a greater understanding this component of the regional public transportation system, this in-depth research investigation focuses exclusively on the Goa rental vehicle market. Goa's extensive road system and variety of attractions make it the perfect place to study the variables affecting the demand for rental automobiles. The objective of this study is to investigate user preferences, potential economic effects, and how rental automobiles help visitors explore the state. By utilizing a combination of data that is quantitative research and qualitative observations, we hope to add insightful viewpoints to the larger conversation on rental accommodations in tourist-oriented areas.

The issue of transportation becomes more pressing during peak hours (morning, afternoon, and evening), as well as on the eve of holidays, and it is always in the city center (Ayedi et al., n.d.).

The local concentration of administrative services and commercial activity is the cause of traffic jams and other issues. Things worsen by the rise in the usage of personal automobiles, the movement of large trucks, the decline in the quality of public transportation, the uncontrolled parking brought on by a shortage of parking spots, and the construction of road infrastructure (Ayadi et al., 2019).

Those who do not own a car can take advantage of the bike rentals. It can be presented in such a way that the number of bikes that can be hired can be predicted (Balachandran et al., n.d.).

The legal paper work needed for a Goa Bike Rental when you hire a bike, the bike dealer will require you to present them with a valid two-wheeler license. A copy can be carried with you while driving. You may also give the dealer an authorized photo ID, such as a passport or PAN card. Be sure to request all bike documentation prior to renting a two-wheeler, as you will be required to provide them in the event that the need arises and will not be exempted due to your status as a tourist.

1.2 BACKGROUND OF RENTAL BIKES AND CAR

Rental bikes and cars become more and more popular options for both visitors and workers in a number of cities due to the growing need for flexible mobility options. These services provide consumers the flexibility to see a city at their own speed by offering practical and reasonably priced substitutes for conventional forms of transportation.

Renting a bike is a simple option for people to go short distances without having to deal with the hassles of owing and maintaining a bike. Rental bikes frequently offered through dockless systems or designated stations.and then return it to any predetermined spot when they are through. However, for longer drives or visits outside of cities, rental cars offer more freedom. Users can borrow cars short periods time- typically by the hour or day

All things considered, rental bikes and cars are now essential parts of urban transportation ecosystems, providing visitors and locals with convenience, affordability and sustainability. In cities all across the world, these services help to lessen traffic, lower emissions, and encourage more sustainable and active means of transportation.

1.3 IMPORTANCE OF THE STUDY

An exploratory study on rental bikes and cars in Goa holds significant importance in understanding the dynamics of tourism mobility and sustainable transportation within the coastal region. This study can provide important insights into promoting sustainable modes of transportation, improving the overall tourism experience in Goa, and optimizing transportation infrastructure by exploring the preferences, usage patterns, and difficulties encountered by both tourists and locals when renting bikes and cars. Additionally, it may help with the sustainable growth and management of Goa's tourism industry by informing decision-makers, urban planners, and rental service providers about areas for service improvement, possible market possibilities, and demand-supply gaps.

1.4 SCOPE OF THE STUDY

This study aims to evaluate the present state of Goa's vehicle and bike rental business. It also understands the requirements and preferences of those who rent cars and bikes. In addition to identifying potential customers for market growth and development, the research evaluates the impact of rental bikes and vehicles on Goa's tourism industry.

1.5 OBJECTIVES OF THE STUDY

1. To examine the factor influencing the adoption of rental bikes and cars in Goa.
2. To evaluate level of satisfaction of the customer adopting rental bikes/ cars in Goa.

1.6 RESEARCH QUESTIONS

1. What are the factors influencing the adoption of rental bikes and cars for tourists in Goa?
2. What are the factors in car and bike rental adoption that lead to satisfaction among tourists in Goa?

1.7 RESEARCH HYPOTHESIS

1. **To examine the factor influencing the adoption of rental bikes and cars**

Ho 1.1: There is no significant influence of Mobility on adoption of rental bikes / cars

Ho 1.2: There is no significant influence of Price on adoption of rental bikes and cars

Ho 1.3: There is no significant influence of Infrastructure on adoption of rental bikes and cars

Ho 1.4: There is no significant influence of Trust on adoption of rental bikes and cars

Ho 1.5: There is no significant influence of Security on adoption of rental bikes and cars

2. To evaluate level of satisfaction of the customer adopting rental bikes/ cars.

Ho 2.1: There is no significant influence of Response on satisfaction of using rental bikes and cars

Ho 2.2: There is no significant influence of Credibility on satisfaction of using rental bikes and cars

Ho 2.3: There is no significant influence of Commitment on satisfaction of using rental bikes and cars

Ho 2.4: There is no significant influence of Communication on satisfaction of using rental bikes and cars

1.8 CHAPTERIZATION SCHEME

Chapter 1: Introduction

This chapter includes the introduction of rental bikes and cars followed by background in Goa. Also, the Research Questions, Objectives and Hypothesis of the current study and the scope of the present study.

Chapter 2: Literature Review

This chapter deals into the theoretical framework and the influence of rental bikes and cars on tourists. Additionally, it reviews existing research on the relationship between satisfaction and intention to recommend. The detail explanation has been provided in this chapter.

Chapter 3: Methodology

This section details the research methodology, including data collection methods such as surveys or interviews. It describes the data analysis techniques intended to be used. It also includes the results and analysis of the data received through primary data.

Chapter 4: Findings, conclusions, suggestions.

This chapter includes the findings of the demographic profile of the respondents and also the findings of the analyzed model. Along, with the conclusion, limitations and suggestion of the present study.

CHAPTER 2: LITRATURE REVIEW

2.1 INTRODUCTION

This section deals with the existing literature by numerous academicians in pertinent areas or domains, such as rental bikes and cars. To identify research gaps and set the study's criteria, a thorough examination was conducted. The constructs are explained in detail in the following chapter. The literature for the current study have been taken from various online sources such as Research Gate, Google Scholar, Emerald etc
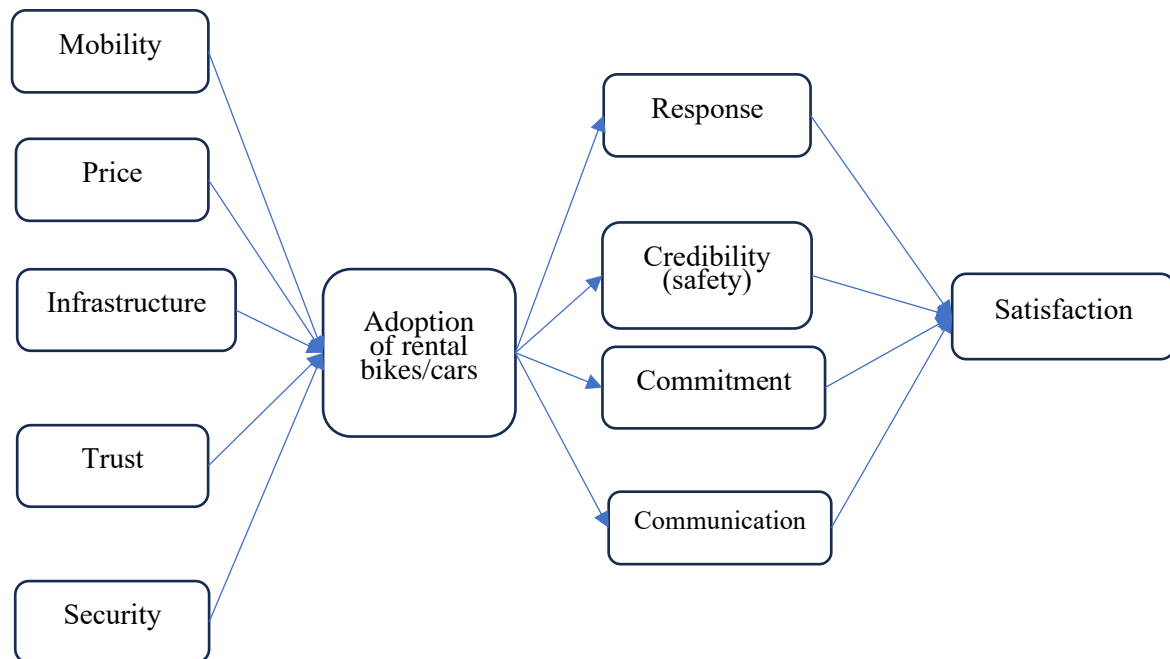

Figure 1.1 Conceptual Framework

2.2 FACTORS AFFECTING RENTAL BIKES AND CAR

2.2.1 Mobility

The adoption of rental bikes and cars is influenced by various factors related to mobility and user behavior (Gulbe & Barisa, 2023)(Apollonio et al., 2021). It refers to the accessibility and convenience of utilizing bikes as a mode of transportation through rental services. Furthermore, customer satisfaction and adoption rates are impacted by the availability and distribution of vehicles in rental systems. Understanding these mobility-related aspects is essential for policymakers, transportation planners, and service providers to enhance the adoption and effectiveness of rental bike and car services.

Ho: There is no significant influence of Mobility on adoption of rental bikes / cars

2.2.2. Price

Price is the amount that is anticipated to be paid for a good or service. (Anutarawaykin et al., 2023)Price is the sum of money that customers have to forfeit in order to obtain the good or service. (Lien et al., 2015)

Ho: There is no significant influence of Cost on adoption of rental bikes and cars

2.2.3 Infrastructure

The infrastructure of rental cars is essential to guaranteeing operational effectiveness and improving the rental experience. In order to enhance user convenience and optimise the renting process, a number of technological innovations have been implemented. For example, cloud-based automobile rental services make it easier to hire idle cars, which eases traffic congestion(Sharma, 2023). Infrastructure for rental cars improves user experience, productivity, sustainability, safety, and efficiency. Smart infrastructure, which is powered by data from sensors, can help make roads safer and more efficient for urban traffic. Regarding vehicle rental services, infrastructure is essential to the expansion and advancement of the

sector. For example, the expansion of bus rental services has been made possible by the construction of toll road infrastructure in Java, Indonesia. Furthermore, the expansion of automobile rental services can be influenced by regional economic conditions and the quality of the transportation system; places with poor public transportation systems may see higher demand for car rentals.

Ho: There is no significant influence of Infrastructure on adoption of rental bikes and cars

2.2.4 Trust

A good perception of someone or something's dependability and trustworthiness is known as trust. When customers have faith in the trustworthiness and honesty of the service provider, trust is created in the service context.(Anutarawaykin et al., 2023) **.**Trust is the belief held by one party, the customer, in the other, the e-vendor, that he will fulfill his duties as anticipated of him (Tam et al., 2022) One of the most important aspects of buyer-seller partnerships is trust. Researchers have been interested in the importance of trust in social exchange relations. A positive opinion regarding the dependability and reliability of a person or an item is referred to as trust. When a customer develops faith in a service provider's dependability and honesty, trust grows (Anutarawaykin et al., 2023).

Ho: *There is no significant influence of Trust on adoption of rental bikes and cars*

2.2.5 Security

The act of controlling and retaining information, including other information that people own in addition to their personal data, is known as privacy. Information, the web, consumer online behavior, privacy concerns, and perceived privacy are among the study areas pertaining to privacy. (Anutarawaykin et al., 2023)**.**Considering the lack of agreement, the meaning of privacy can be particularly unclear. There is potential for many conceptualizations because philosophical, sociological, legal, and personal problems are interconnected (Gauzente, 2004)**.** According to the last perspective, privacy is a type of closeness. This perspective incorporates

interpersonal ties and goes beyond an individualistic understanding of privacy. (Gauzente, 2004)

Ho: *There is no significant influence of Security on adoption of rental bikes and cars*

2.2.6 Adoption

A person's motivation and psychological propensity to act are referred to as their behavioral intention. To provide a more precise assessment of behavioral intention, it is necessary for all interviewees to have prior experience riding shared bikes.

2.2.7 Responses

The ability of staff members to promptly serve clients, deliver services, and listen to and address customer concerns is known as responsiveness. By way of the employees' desires to assist and care for clients, their responsiveness, their capacity to deliver services promptly and accurately, their awareness of each customer's needs, and their readiness to work with customers (Kane et al., 2016)

Ho: There is no significant influence of Response on satisfaction of using rental bikes and cars.

2.2.8 Credibility

Believability is a definition of credibility. Credible individuals are believable individuals, and credible information is believable knowledge. Rather than existing in an item, a person, or a piece of information, credibility is a perceived attribute. Thus, when a computer product's credibility is being discussed, the perception of credibility is always being discussed. (Fogg et al., 2002)

Ho: There is no significant influence of Credibility on satisfaction of using rental bikes and cars.

2.2.9 Commitment

A crucial factor in the study of relationship marketing has been found to be commitment, which is described as the psychological force that ties an individual to the upkeep of a connection with a certain entity. (Palmatier & Grewal, 2006). Generally speaking, commitment is the desire to keep up a meaningful relationship. (Moorman et al., 1992), is acknowledged as one of the fundamental components of relationship marketing. (Palmatier & Grewal, 2006)

Ho: There is no significant influence of Commitment on satisfaction of using rental bikes and cars.

2.2.10 Communication

Among the most crucial management tools a business can use to build teams and produce positive outcomes is communication. (Bucăţa & Rizescu, 2017).The process of conveying knowledge and understanding from one individual to another is known as communication. (Ahyia et al., 2014). It is the production or interchange of ideas, feelings, and comprehension between the person who sends them and the person who receives them. In the workplace, it is essential for creating and maintaining collaborations. Thus, executives ought to create a setting where work-related plans, issues, opinions, thoughts, and ideas can be discussed and resolved in a competent, professional manner through effective and constructive communication.(Kane et al., 2016)

Ho: There is no significant influence of Communication on satisfaction of using rental bikes and cars.

2.2.11 Satisfaction

A customer's level of fulfillment following the service delivery process is referred to as customer satisfaction. The five characteristics of service quality are the basis for this subjective evaluation of the service (Mubarok et al., 2023)**.** The degree of happiness that a consumer feels

after comparing the actual service performance to what they had anticipated is known as customer satisfaction.(Mubarok et al., 2023) Customer satisfaction can be defined as a client's overall evaluation of an offering's performance thus far.(Rasheed et al., 2015)

CHAPTER 3: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on analysing the raw data collected through questionnaire and survey and converts them into meaningful information.

3.2 RESEARCH METHODOLOGY

This quantitative research was conducted through primary source as 35 item questionnaire was prepared and distributed to verify the suggested framework and test the hypothesis, 300 structured questionnaires were distributed through physical form sample technique to the respondents via online as well as offline method of collection and in order to ascertain their intended behaviour. The data collection period was from February to March 2024. The questionnaire was divided into 2 parts the first part consisted of demographic profile and the second part consisted of respondents perception towards rental bikes and cars that consisted of 35 scale items to measure the construct given in the proposed framework derived from (Hanshen, 2015), (Haj Salah et al., 2022). The population of this study includes those customers who rent bikes and cars in Goa, India. The study depends on convenience sampling technique. Further the data was measured on five-point Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree). The framework consisted of 13 constructs namely mobility, cost, infrastructure, habit, trust, security, adoption of rental cars/bikes, tangibility, response, credibility(safety), commitment, communication, satisfaction.

3.3 PROBLEM OF THE STUDY

The tourism industry in Goa, is heavily reliant on convenient transportation options for visitors to explore its diverse attractions. Rental bikes and cars serve as popular modes of transportation, offering flexibility and autonomy to tourists. However, despite their widespread use, there exists a gap in understanding their dynamics, preferences, and challenges associated

with rental services in Goa. This exploratory study aims to investigate the rental bike and car industry in Goa, delving into various facets such as preferences, satisfaction levels, pricing structures, accessibililty and environmental impact. By identifying the key factors influencing rental decisions and uncovering potential areas for improvement, this research seeks to provide valuable insights for rental service providers, policymakers, and stakeholders in the tourism sector. This problem statement outlines the need to explore the rental bike and car industry in Goa comprehensively, highlighting its significance for both tourists and the local tourism ecosystem.

3.4 RESEARCH GAP

Even though they play a major role in the region's tourism sector, Goa's bike and vehicle rental companies have received little attention from academic researchers. A noteworthy knowledge vacuum exists on the dynamics and effects of both rental services on Goa's tourism industry since there has, surprisingly, not been a thorough research that looks at both rental cars and rental bikes together. Closing this gap could help with industry growth and legislation by offering insightful information about the difficulties, prospects, and contributions these rental companies provide to Goa's tourism economy

3.5 POPULATION AND SAMPLE SIZE

The population targeted for this research were the people who rented bikes and cars in Goa. The sample size of the study was 303 respondence

3.6 TOOLS AND TECHNIQUES

Descriptive statistics and structural equation modeling were used to examine the data (SEM)

3.7 VARIABLE OF THE STUDY

The variables that were studied in this research are Adoption, response, credibility (safety), commitment, communication and satisfaction which are dependent variables and mobility, price, infrastructure, trust and security were independent variables

CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The chapter deals with the analysis of the data collected through questionnaire. It also includes the findings, suggestions, conclusions and limitation of the study. The first section provides an indepth analysis of the demographic profile of tourists on rental bikes and cars. The second section offers additional insight. Further mode this chapter explores and analyses the factor influencing the adoption of rental bikes and cars and the level of satisfaction of the customer adopting rental bikes and cars. The data has been collected through structural questionnaire using convenience sampling.

4.2 DEMOGRAPHIC PROFILE OF RESPONDENTS

This chapter focuses on analysing the raw data collected through questionnaire and survey and converts them into meaningful information. The chapter discusses in detail the demographic profile of the respondents, the analysis of the test will be shown in this chapter.

Table 4.2.1. Demographic profile of the respondents

Gender	Frequency	% Total	Cumulative %
Male	225	75.1	99.3
Female	73	24.3	24.3
Non- binary	2	0.7	100
Marital status			
Married	212	70.7	71.0
Unmarried	87	29.0	100
Divorced	1	0.3	0.3
Age			
18-25 years	76	25.2	25.2
25-35 years	117	39.0	64.3
35-45 years	94	31.2	95.7
45-55 years	12	4.0	99.7

Above 55 years	1	0.3	100
Type of tourists			
Indian tourist	257	85.7	100
Foreign tourist	43	14.3	14.3
If Indian, which region			
North	88	34.9	57.5
South	83	32.9	90.5
East	57	22.6	22.6
west	24	9.5	100
If foreign, which continent			
Asia	18	39.1	39.1
Australia (Oceania)	2	4.3	43.5
Europe	11	23.9	67.4
North America	13	28.3	95.7
South America	2	4.3	100
Occupation			
Student	21	7.0	97.0
Government employee	46	15.3	15.3
Private sector employee	146	48.7	66.7
Homemaker	8	2.7	18.0
Self employed	70	23.3	90.0
unemployed	9	3.0	100
Highest level of Education attained			
SSC	5	1.7	100
HSSC	70	23.3	90.0
Diploma	84	28.0	28.0
Graduate	116	38.7	66.7
Post graduate	23	7.7	98.3
Ph.D	2	0.7	90.7
Monthly income			
Below 60,000	139	46.3	47.7
60,000-1,20,000	130	43.3	100.0
120,000-1,80,000	27	9.0	56.7
Above 1.80,000	4	1.3	1.3
Have you ever used rental bike or car?			
yes	298	99.3	100

No	2	0.7	0.7
Which of the following services have you availed?			
Rental bikes	185	61.1	88.3
Rental cars	35	11.7	100
Both	78	26.2	26.2

Source: Primary data

In the above table they give us data about the diverse kind of individuals who were plotted as a tourists

The respondent's demographic profile is displayed in the table below. First, looking at the gender demographics of the visitors, it was seen that males made up a considerable majority of them at 75.1%, with women making up a lower percentage at 24.3% and non-binary people at 0.7%. The gender distribution of tourists is revealed by this distribution. Going on to the age distribution of the tourists, it was discovered that those between the ages of 25 and 35 made up the majority of them, or 39.0% of the total. Those between the ages of 18 and 25 and 35 and 45 closely trailed this. The age data sheds light on how different generations are represented in the group of tourists.

In addition, the visitors' occupations were examined, and it was found that 48.7% of them worked in the private sector, or over half of them. Those who worked for themselves or for the government made up a significant portion of the population—23.3%. An overview of the visitors' job situation is provided by this breakdown of occupations. Finally, data on the visitors' income brackets showed that a sizable portion of them made between Rs 60,000 and Rs 1,20,000 or less a month.

The financial backgrounds of the people who engaged in tourism-related activities are shown by this data item. With 28.0% of visitors having diplomas and 38.7% having graduated, a sizeable fraction of visitors had a high level of education. Some of the guests also had other qualifications, such the Higher Secondary School Certificate (HSSC). When it came to marital

status, the statistics revealed a split: 29.0% of visitors were single, while the majority 70.7% were married.

Regarding the origin of travelers, an astounding 85.7% came from India, with the remainder coming mostly from other Asian countries. In terms of rental options, 99.3% of guests chose to hire either cars or bikes while they were here. It's interesting to note that 61.1% of tourists preferred bike rentals over cars, while 11.7% preferred car rentals. Furthermore, a considerable percentage of tourists, or 26.2%, made use of both rental services, suggesting that travelers had a variety of transportation choices.

4.3 RESULTS OF MEASUREMENT MODEL

Table 4.3.1 Factor loading, CA, CR, AVE

Variables	Factor loadings	CA	CR	AVE
Ado 1	0.872	0.562	0.819	0.693
Ado 2	0.792			
Com 2	0.923	0.715	0.841	0.639
Com 3	0.754			
Comm 1	0.640	0.670	0.821	0.610
Commit 1	0.791			
Commit 2	0.864			
Commit 3	0.738			
CS 4	0.671	0.683	0.807	0.512
CS 1	0.722			
CS 2	0.715			
CS 3	0.752			
Infra 1	0.786	0.681	0.824	0.613
Infra 2	0.883			
Infra 3	0.664			
Mob 2	0.861	0.698	0.869	0.768
Mob1	0.891			
Pr 1	0.933	0.756	0.888	0.799
Pr 2	0.853			
Res 1	0.673	0.614	0.792	0.566
Res 2	0.910			
Res 3	0.646			
Sat 1	0.902	0.815	0.915	0.843
Sat 2	0.934			
Sec 2	0.559	0.596	0.788	0.561

Sec 3	0.825			
Sec 4	0.831			
Tr 1	0.637			
Tr 2	0.797	0.705	0.818	0.531
Tr 3	0.744			
Tr 4	0.728			

Source: Authors own compilation from Primary data

The factor loadings for the individual variables are displayed in the table under their respective factors. Factor loadings show the degree to which a variable is correlated with a particular factor. Higher factor loadings (nearer to 1) in this instance imply a stronger link.

Due to their relative highness (above 0.6), the factor loadings for most variables demonstrate a substantial connection with their match factors. In "Factor 1" (perhaps CA), for example, "adoption 1" has a factor loading of 0.872. This suggests that there is a strong relationship between "adoption 1" and this trait. Lower factor loadings are seen in "Security 2" (0.559) and "Comm 1" (0.640), "Credibility 4" (0.671), "Infra 3" (0.664), "Response 1" (0.673), "Response 3" (0.646), "Security 2" (0.559), and "Trust 1"(0.637). This might mean that further study is required or that the correlation between these factors and the associated components is not as strong.

The Cronbach's Alpha values for Adoption, Commitment, Credibility, Infrastructure, Mobility, Response, and Security are all below the 0.7 threshold, as can be seen in the table. All variables have CR values greater than the 0.7 criterion. It is also evident that all variable values for AVE are more than the 0.5 criterion.

4.4 DISCRIMINANT VALIDITY

Table 4.4.1 Discriminant validity (Fornell-Larker)

Variable	ADO	COM	COMU	CS	INF	MO	PR	RES	SAT	SEC	TR
ADO	**0.833**										
COM	0.413	**0.799**									
COMU	0.523	0.703	**0.781**								
CS	0.626	0.569	0.658	**0.716**							
INF	0.193	0.155	0.182	0.562	**0.783**						
MO	0.567	0.58	0.5	0.543	0.397	**0.876**					
PR	0.531	0.382	0.528	0.526	0.451	0.529	**0.894**				
RES	0.411	0.61	0.619	0.557	0.406	0.533	0.502	**0.752**			
SAT	0.491	0.701	0.669	0.659	0.234	0.493	0.325	0.54	**0.918**		
SEC	0.598	0.457	0.506	0.551	0.387	0.578	0.44	0.54	0.462	**0.749**	
TR	0.503	0.506	0.494	0.601	0.455	0.553	0.622	0.366	0.587	0.367	**0.729**

Source: Authors own compilation from Primary data

The discriminant validity is displayed in the table. Discriminant validity is the measure of how much one measure varies from another. Here, it seems to be assessing if the variables in the research are measuring different constructs. The values in the table display each pair of variables' correlation. Perfect positive correlation occurs when the correlation coefficient is 1, perfect negative correlation occurs when it is -1, and no correlation occurs when it is 0.

4.5 PATH COEFFICIENT OF STRUCTURAL MODEL

Table 4.5.1 Path Coefficient

Variables	B	T	P	Hypothesis	R^2	Q^2	F^2	Effect Size
ADO-> COM	0.413	3.631	0.000	Supported	0.170	0.261	0.206	L
ADO-> COMU	0.523	6.070	0.000	Supported	0.273	0.346	0.376	L
ADO-> CS	0.626	10.063	0.000	Supported	0.392	0.338	0.644	L
ADO-> RES	0.411	3.857	0.000	Supported	0.169	0.233	0.204	L
COM-> SAT	0.385	5.796	0.000	Supported	0.606	0.267	0.169	M
COMU-> SAT	0.183	2.345	0.019	Supported			0.033	S
CS-> SAT	0.309	5.328	0.000	Supported			0.126	M
INF-> ADO	-0.238	2.755	0.006	Supported			0.086	S
MO-> ADO	0.190	3.479	0.001	Supported			0.040	S
PR-> ADO	0.225	4.289	0.000	Supported			0.057	S
RES-> SAT	0.019	0.370	0.711	Not supported			0.001	S
SEC-> ADO	0.401	6.543	0.000	Supported			0.213	L
TR-> ADO	0.219	3.683	0.000	Supported	0.531	0.523	0.053	S

Source: Primary data   **Significant: 0.05*

Based on the presented data, it can be concluded that commitment has a statistically significant effect on adoption (p-value < 0.05). Furthermore, communication has a significant influence on adoption because the p-value is less than 0.05. Credibility has a significant effect on adoption since the p-value is less than 0.05. Response has a significant influence on adoption since the p-value is less than 0.05. Given that the p-value is less than 0.05, commitment is significantly impacted by satisfaction. Communication is significantly impacted by pleasure, as evidenced by the p-value of less than 0.05. Since the p-value is less than 0.05, credibility is significantly impacted by satisfaction. Adoption has a significant influence on infrastructure since the p-value is less than 0.05. Since the p-value is less than 0.05, adoption significantly affects mobility. As the p-value is less than 0.05, adoption significantly affects pricing. In contrast, the association between response and satisfaction was found to be negligible,

indicating that the hypothesis is not supported. Because the p-value is smaller than 0.05, adoption significantly affects trust, and thus significantly affects security.

R^2, which stands for dependability power of the model, is 60% for the model under consideration. Adoption to commitment has an R^2 of a week (R^2=0.170). Adoption -> communication was shown to have a poor R^2 (R^2=0.273). Credibility's R^2 of adoption to date is shown to be quite modest (0.392). Week (0.169) is the R2 of adoption -> reaction, and strong (0.606) is the R^2 of commitment -> satisfaction.

Q^2 the model's prediction strength, indicates that the commitment metric from adoption is one week (Q2=0.261). Q^2 adoption -> communication was discovered to be quite modest (Q^2=0346). Adoption -> Q^2: Credibility is determined to be quite moderate (Q^2 =0.338). Week (Q^2 =0.233) is shown to be the answer for adoption, while week (0.267) is found to be the response for commitment.

The effect size is denoted by F^2, and there are three effect sizes above it: small (0.02), medium (0.15), and big (0.35). The majority model in this case has a S effect size.

4.6 FINDINGS

The Goa study on cars and bike rentals produced some interesting results. According to the demographic profile of tourists, there were significantly more men (75.1%) than women (24.3%), and a sizable proportion of married people (70.7%) were found among them. A look at the age breakdown revealed that 39.0% of visitors were between the ages of 25 and 35. It was shown that adoption-related factors including commitment, trust, and security had a big impact on satisfaction levels. The study filled a significant knowledge vacuum about the dynamics of rental services in Goa's tourism sector and provided guidance for future legislation and business expansion. From a methodological standpoint, a solid analysis framework was produced through a quantitative approach that employed structural equation Modelling (SEM)

and a 3535-item questionnaire. These results highlight the importance of customer happiness, adoption factors, and demographic traits when it comes to renting cars and bikes in Goa.

4.7 CONCLUSION

In conclusion, the research on Goa's bike and car rentals offers insightful information to the travel and tourism sector. The research clarifies the dynamics of rental services in the area by looking at the demographic profile of tourists, adoption-influencing factors, and customer satisfaction levels. The results highlight the significance of trust, security, and dedication in determining consumer experiences and contentment. This study fills the lack of information on the influence of rental services on Goa's tourism sector and lays the groundwork for future business expansion and policy decisions. The paper provides a thorough framework for analyzing the difficulties of rental bikes and cars in the context of Goa's tourism industry through a quantitative method and structural equation Modelling. These results provide a road map for industry participants, legislators, and stakeholders to improve the level of service and availability of rental services, hence enhancing the Goan tourist experience in its whole.

4.8 MANAGERIAL IMPLICATION

They can capitalize on this trend by allocating resources towards expanding bike rental fleets and enhancing related services such as maintenance and safety gear provision. Additionally, the study reveals specific preferences of tourists regarding bike models, pricing structures, and rental duration, providing actionable data for managers to optimize their offerings and pricing strategies. Furthermore, the study underscores the importance of location and accessibility of rental outlets, suggesting the need for strategic placement of rental stations in high-traffic tourist areas. Overall, these insights empower rental businesses in Goa to adapt their operations

and offerings to better meet the evolving needs and preferences of tourists, thereby enhancing customer satisfaction and driving business growth.

4.9 SUGGESTIONS

In order to give a deeper knowledge of industry dynamics and consumer preferences, it is advised that the research be expanded in the future to include a comparative examination of rental bikes and vehicles in other popular tourist locations. Further insights into the elements impacting uptake and satisfaction may be obtained by qualitatively interviewing tourists and rental service providers. The industry's long-term profitability might be improved by investigating the environmental effect of rental services and implementing sustainability initiatives. Furthermore, rules for ethical and sustainable rental practices may be developed in conjunction with industry players and local authorities, which would benefit Goa's tourist ecosystem as a whole. Adopting new technologies may enhance consumer convenience and operational effectiveness. Examples of this include smartphone applications for rental booking and tracking. Future studies can improve visitor experiences in Goa by implementing these recommendations, which will deepen our knowledge of rental services in the tourism industry.

4.10 LIMITATION AND FUTURE SCOPE

The relatively small sample size of 300 respondents is one weakness of the study on rental bikes and vehicles in Goa, which may limit the generalizability of the findings to a wider population of visitors. A bigger and more varied sample size might be advantageous for future research in order to improve the representativeness of the study findings. Furthermore, the study's primary focus was on quantitative data gathered through standardized questionnaires, which may have obscured qualitative insights that may have offered a better understanding of Goa rental service users' opinions and experiences. Including qualitative techniques like focus

groups and interviews in subsequent studies might provide a more thorough examination of the variables affecting rental decisions and customer satisfaction.

Looking ahead, there is a bright future ahead of us for developing the research to investigate how technology innovations, such digital rental booking platforms and consumer feedback systems, affect the Goan rental services sector. Given the rising significance of environmental consciousness in the tourist sector, examining the influence of sustainable practices and eco-friendly efforts in rental operations might potentially be a relevant field for future research. In addition, investigating the impact of cultural elements and regional laws on visitor choices and actions related to rental services may yield important information for industry participants and decision-makers. The research on rental bikes and vehicles in Goa can advance and add to a better knowledge of the factors influencing the region's tourism economy by solving these shortcomings and exploring these potential directions for future study.

References

Ahyia, A., Oppong, A.-, Ahyia Adu-Oppong, A., & Agyin-Birikorang, E. (2014). Communication in the Workplace: Guidelines for Improving Effectiveness. *Global Journal of Commerce and Management Perspective*, *3*(5), 208–213.

Anutarawaykin, T., Joysa, J., Li, C., & Nuangjamnong, C. (2023). *Factors Influencing Online Hotel Booking Intention of Individual Tourists in Bangkok*. *3*(2), 80–101.

Apollonio, C., Petroselli, A., Pelorosso, R., Grimaldi, S., Frontuto, C. L., Russo, G., Di Modugno, M., Miroballo, C., & Muciaccia, M. (2021). The Use of Lamination Basins for Mitigation of the Urban Flooding Risk: The Case Study of Peschici. In *Lecture Notes in Civil Engineering* (Vol. 146). https://doi.org/10.1007/978-3-030-68824-0_53

Ayadi, H., Zouari, A., & Hamani, N. (2019). *An exploratory study of the bike rental system*. *August*.

Bucăţa, G., & Rizescu, A. M. (2017). The Role of Communication in Enhancing Work Effectiveness of an Organization. *Land Forces Academy Review*, *22*(1), 49–57. https://doi.org/10.1515/raft-2017-0008

Fogg, B., Kameda, T., Boyd, J., Marshall, J., Sethi, R., Sockol, M., & Trowbridge, T. (2002). Stanford-Makovsky Web Credibility Study 2002 Investigating what makes Web sites credible today. *World Wide Web Internet And Web Information Systems*, *September*, 1–16.

Gauzente, C. (2004). Web merchants' privacy and security statements: How reassuring are they for consumers? A two-sided approach. *Journal of Electronic Commerce Research*, *5*(3), 181–198.

Gulbe, M., & Barisa, A. (2023). Mobility as Service: How Changing Travel use Habits will Affect the Transition of Cities to Climate Neutrality. *CONECT. International Scientific Conference of Environmental and Climate Technologies*, 126. https://doi.org/10.7250/conect.2023.096

Haj Salah, I., Mukku, V. D., Kania, M., Assmann, T., & Zadek, H. (2022). Implications of the Relocation Type and Frequency for Shared Autonomous Bike Service: Comparison between the Inner and Complete City Scenarios for Magdeburg as a Case Study. *Sustainability (Switzerland)*, *14*(10). https://doi.org/10.3390/su14105798

Hanshen, T. N. (2015). *the Impact of Quality of Services in the Car Rental Companies on*. *9*(August).

Kane, S. N., Mishra, A., & Dutta, A. K. (2016). Preface: International Conference on Recent Trends in Physics (ICRTP 2016). *Journal of Physics: Conference Series*, *755*(1). https://doi.org/10.1088/1742-6596/755/1/011001

Lien, C., Wen, M., Huang, L., & Wu, K. (2015). Asia Paci fi c Management Review Online hotel booking : The effects of brand image , price , trust and value on purchase intentions. *Asia Pacific Management Review*, *20*(4), 210–218. https://doi.org/10.1016/j.apmrv.2015.03.005

Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between Providers and Users of Market Research: The Dynamics of Trust within and between Organizations. *Journal of Marketing Research*, *29*(3), 314. https://doi.org/10.2307/3172742

Mubarok, E. S., Subarjo, B., Raihan, R., Wiwin, W., & Bandawaty, E. (2023). Determinants of customer satisfaction and loyalty Waroeng Steak Restaurant in DKI Jakarta. *Cogent Business and Management*, *10*(3). https://doi.org/10.1080/23311975.2023.2282739

Palmatier, R., & Grewal, D. (2006). *Factors Influencing the Effectiveness of Relationship Marketing : A Meta-Analysis*. *May*. https://doi.org/10.1509/jmkg.70.4.136

Rasheed, H. M. W., Khalid, J., Khizar, H. M. U., Sajid, M., Shahid, M. N., Ahmad, M., & Khan, W. A. (2015). Factors affecting Customer Loyalty in Banking Sector: A study on Banks in Bahawalpur (Pakistan). *International Journal of Accounting and Financial Reporting*, *1*(1), 239. https://doi.org/10.5296/ijafr.v5i1.7726

Sharma, A. (2023). Role of Rental Car Market in India: An Empirical Analysis. *PsychologyandEducation*, *55*(1), 710–717. https://doi.org/10.48047/pne.2018.55.1.86

Tam, C., Pereira, F. C., & Oliveira, T. (2022). What influences the purchase intention of online travel consumers? *Tourism and Hospitality Research*. https://doi.org/10.1177/14673584221126468

APPENDIX I: QUESTIONNAIRE

Gender*

- Male
- Female
- Non- binary

Marital Status*

- Married
- Unmarried
- Divorced
- Widowed

Age*

- 18 – 25 years
- 25- 35 years
- 35- 45 years
- 45-55 years
- Above 55 years

Types of tourists*

- Indian tourist
- Foreign tourist

Occupation*

- Student
- Employed Government
- Employed Private
- Self employed
- Unemployed

Higher level of Education*

- SSC
- HSSC
- Diploma
- Graduate
- Post Graduate
- PhD
- Others

Monthly Income*

- Below 60,000
- 60,000- 1,20,000
- 1,20,000- 1,80,000
- Above 1,80,000

Have you ever used any rental bike or car?

- Yes
- No

Which of the following services have you availed?

- Rental cars
- Rental bikes
- Both

The Rental bikes of which company do you prefer the most?

- Activa
- Fascino
- Vespa
- Jupiter
- Access
- Dio
- Other

The rental cars of which company do you prefer the most?

- Baleno
- Creta
- Swift
- Innova
- Ertiga
- Wagon R (Maruthi Suzuki)
- Other

With whom are you travelling for this trip to Goa?

- Solo
- Wife/ husband
- Family
- Friends
- Other

Length of stay in Goa (in days)

- 1 to 5 days
- 6 to 10 days
- 11 to 15 days
- 16 to 30 days
- More than 30 days

What is the frequency of your use of rental bikes/ cars during an average holiday stay in Goa?

- Frequently
- Occasionally
- Rarely
- Never

What factors influenced your decision to hire a rental bikes or cars?

- Cost
- Ease of use
- Accessibility
- Other

How do you usually find and select rental vehicle or bike services?

- Web search
- Referrals from friends and family
- Social media
- Other

Please indicate your level of agreement with each of the following state

Agree (A), Disagree (D), Neutral (N), Strongly Agree (SA), and Strongly Disagree (SD)

Mobility	SD	D	N	A	SA
Fast mobility is one of the advantages of riding rental bikes/ cars.					
I ride rental bikes/ cars to pursue the benefit of fast mobility.					
Price					
Lower riding cost is one point that motivates me to ride rental bikes/ cars.					
Relatively lower cost of using rental bikes/ cars may increase my willingness to use them.					
Infrastructure					
The availability of transport infrastructure (like good roads) can comfort my safety concerns on riding rental bikes/ cars.		**(Ye, 2022)**			
The availability of transport infrastructure can decrease the difficulty of riding rental bikes/ cars.					
I see availability of transport infrastructure as one of aspects of the ease of riding rental bikes/ cars.					
Trust					
What the rental service says about its car/bike is true.					
If the rental service makes a claim about its car/bike, it is true.		**(Lien et al., 2015)**			
I feel I know what to expect from the rental service.					
I believe this rental service would be reliable.					
Security					
Online payment methods provided by the rental service (e.g., credit card, debit card, or Internet banking transfer) that I frequently use are secure.					
Whenever I have payment transactions with the rental service, I do concern about my data protection system with rental booking websites or online travel agencies, etc. (e.g., National ID card number, credit/debit card number, phone number, and address)		**(Anutarawaykin et al., 2023)**			
Before performing an online transaction, I frequently read privacy and security protection evaluations from previous users of the rental service's websites or travel agencies.					
Adoption					
Assuming I have access to rental bikes/cars, I intend to use them.		**(Ye, 2022)**			

|	
If I had access to rental bikes/cars, I predict I would use them.	
Response	
Staff of rental car/bikes owners tell you about the time of completion of service accurately.	
Staff of rental cars/ bikes owners are always willing to assist you.	
Staff of rental cars/ bikes owners are never late to meet your requests.	
Credibility (Safety)	
Staff of rental cars/ bikes owners and their behaviors make you feel confident, comfortable and reassuring.	
With rental cars/ bikes owner, you feel safe and Secure.	
Staff of rental cars/ bikes owners are dealing with customer courteously and gently.	
Staff of rental cars/ bikes owners have the knowledge to answer your questions.	**(Hanshen, 2015)**
Commitment	
Rental cars/ bikes owners provide all your needs.	
Rental cars/ bikes owners put your best desires at the heart of their concerns.	
Rental cars/ bikes owners will be obliged to provide information about their services on an ongoing basis.	
Communication	
Rental cars/ bikes owners are always in touch with their customers.	
The mean of communication with rental cars/ bikes owners to exchange information on an ongoing basis with its customers are excellent.	
rental cars/ bikes owners provide you constantly with information about their services that are of high credibility.	
Satisfaction	
I am satisfied with my decision to adopt rental cars/bikes.	**(Aggarwal & Rahul, 2018)**
My choice to adopt rental cars/bikes was a wise one.	

APPENDIX II: STRUCTURAL MODEL
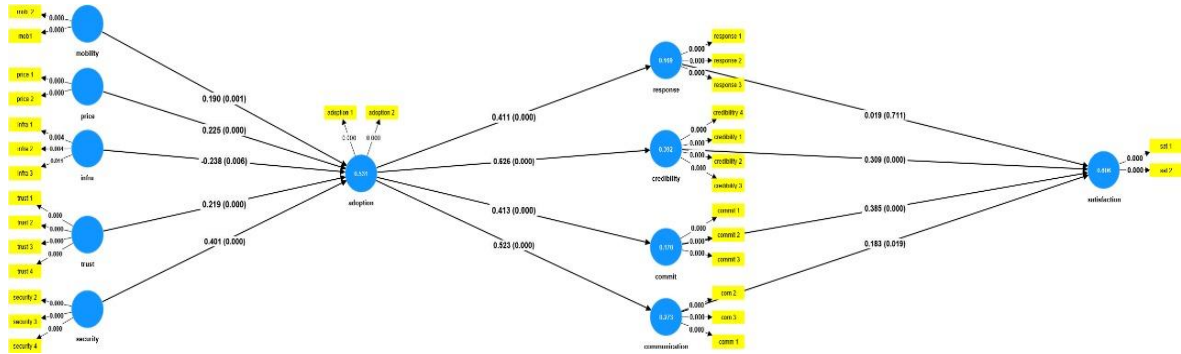
Fig 4.1 Results of Structural Model