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## INTRODUCTION

#### **MARKET:**

A market consists of all potential consumers sharing a particular need or wants who might be willing and able to engage in exchange process thereby creating value to each other by satisfying that need or want. Originally the term market stood for the common place where buyers' and sellers' met and inter-acted. But now as the volume of the transactions have grown exponentially, market have evolved into a general form such as need's market, labor market, money market, donors' market, share market, etc., as its different denomination.

#### **MARKETING:**

The market concept is customer oriented backed by integrated marketing aimed at generating customer satisfaction as the key to satisfy organization goal. In simple terms Marketing means to create an exchange.

Marketing is a social and managerial process by which individual and groups obtain what they need and want through creating offering and exchange product of value with other

Philips Kotler has rightly ear-marked that marketing is analyzing, organizing, planning and control of the firm's customer, as impinging responsibility, policy maker for present development, promoters of entrepreneurial talent, developer of economy, stimulator of customer's interest and increase the standard of living and guardian of price system.

Thus marketing to be specific is a total function, which is concerned with product planning, market research, sales promotion, selling, advertising, after sales services and social

responsibility. There are six competing concept through which an organization conducts its marketing activities. They are

1. Production concept.

5. Customer concept.

2. Product concept.

6. Societal marketing concept.

- 3. Selling concept.
- 4. Marketing concept.

Most organizations make use of any one or more of the last three concepts as the other three concepts are of limited use in today's global business environment.

#### **MARKETING MANAGEMENT:**

Management can be regarded as the art of getting things done through others towards attainment of the overall objective of the organization. Marketing management is a branch of the total management system. It is a process of planning and executing the conception, pricing, promotion and distribution of goods, services and ideas to create exchange with the target groups that satisfies customer and organizational objectives.

It is a continuous process in which we find Analysis, planning, implementation and control that it covers goods, services and ideas that it rests on the notation of the exchange and that the goal is to produce satisfaction for the parties involved.

Marketing management is directly in charge of:

- 1. Setting of marketing goals and objectives.
- 2. Devising marketing plans.
- 3. Organizing marketing functions.
- 4. Implementing the marketing mix.
- 5. To control and monitor the total marketing program.

Marketing Management represents an important functional area of business management efforts for the flow of goods and services from the producer to the consumers. It is responsible for organizing, directing and controlling all marketing activities included in the process of marketing.

#### **MARKETING RESEARCH:**

Marketing research is defined as the systematic and objective search for analysis of information relevant to the identification and solution of any problem in the field of marketing.

According to American Marketing Association (AMA), marketing research is defined as" The systematic gathering, recording and analyzing of data about problems relating to the marketing of goods and services."

Marketing Research is the function, which links the consumer and public to the marketer through information- information used to identify and define marketing opportunity and problems; generate; refine; and evaluate marketing actions; monitor marketing performance; and improves understanding of marketing as a process.

#### **MARKETING RESEARCH PROCESS:**

Marketing research exercises may take many forms but systematic enquiry is features common to all such forms. Being a systematic enquiry, it requires careful planning of the orderly investigation process. Though it is an over simplification to assume that all research process would necessarily follow a given sequence, market research often follow a generalized pattern which can be broken down and studied sequentially.

The following stages involved in the market research process:

- Define the problem.
- Statement of the problem.

- Planning a research design.
- Planning a sample.
- Collecting a data.
- Analyzing the data.
- Formulation of conclusion.
- Prepare and present the report

#### **COSUMER BEHAVOIUR:**

ಔಟಿಜ " ರಾಜಿಮಾಭಿಷಟ" ಜಜಾಜಿಮಿನಾರಾಟಿ ರಾಜಿ ಛಿರಾಟಿಕಾರಾಡಿ ಛಾಡಚಿತಾರಾ , " ನಾನಜ ನಕ್ಕಾರೆ ರಾಜಿ ಹಿಜವಾಜಕಾಚಿಟ, ರಾಹರಾಕ, ರಾಹರಾ ರಾಹರಾಚಿಟಿದಾಚಿನಾರಾಟಿ ಚಿಟಿಜ ನಾನಜ ರಡರಾಭಿಭಾ ನಾನುಮೊ ಕೂಜ ನರಂ ಜಾಟಿಯಾಭಿನ, ಸಾಭಿಕಾರಾಜ, ಕಾಜ ಚಿಟಿಜ ಜಾರಾರಾಜ ರಾಜಿ ರಡರಾಜಕಾಭಿನ, ಸಾಹಿತಾಭಿಭ ಜಾರಾಜಾಪಾಡುವಾಟಿಭಿಭ ರಾಹಿ ಜಜಾಚಿ ನರಂ ಚಿನಾಯಾಭಿ ಟಿಜಾಜಾ ಚಿಟಿಜ ನಾನಜ ಹಾರಾಚಿಳಿನ ನಾನುಚಿನ ನಾನುಜ ರಿಡರಾಭಿಭಾ ನಚಿತಜ ರಾಟಿ ನಾನಜ ಭಿರಾಟಿಕಾರ್ಯಾಡಿ ಚಿಟಿಜ ರಾಭಿಯಾದಾಧಿ". ಮನ ಭಾರಾಹಿಸಿ ಕಾರು ರಾಜಾ ಕೂಡುಚಿಕಾಟ ರಿದಾಮಿನ:

- Behavior occurs either for the individual, or in the context of a group (e.g., friend's influence what kinds of clothes a person wears) or an organization (people on the job make decisions as to which products the firm should use).
- Consumer behavior involves the use and disposal of products as well as the study of how they are purchased. Products use is often of great interest to the marketer, because this may influence how a product is best positioned or how we can encourage increased consumption. Since many environmental problems result from product disposal (e.g., motor oil being sent into sewage systems to save the recycling fee, or garbage pilling up at landfills) this is also an area of interest.
- Consumer behavior involves services and ideas as well as tangible products.
- The impact of consumer behavior on society is also of relevance. For example, aggressive marketing of high fat foods, or aggressive marketing of easy credit, may have serious repercussions for the national health and economy.
- The most obvious application of consumer behavior is for making better marketing campaigns. For example, by understanding that consumers are more receptive to food advertising when they are hungry, we learn to schedule snack advertisements late in the afternoon.
- By understanding that new products are usually initially adopted by a few consumers and only spread later, and then only gradually, to the rest of the population, we learn that:

- (1) Companies that introduce new products must be well financed so that they can stay afloat until their products become a commercial success and
- (2) It is important to please initial customers; since they will in turn influence many subsequent customer's brand choices.

#### NEED TO STUDY CONSUMER BEHAVIOR:

The study of consumers helps firms and organizations improve their marketing strategies by understanding issues such as how:

- The psychology of how consumers think, feel, reason, and select between deferent alternatives (e.g., brands, products)
- The psychology of how the consumers is influenced by his or her environment (e.g., culture, family, media)
- The behavior of consumers while shopping or making other marketing decisions
- Limitations in consumer knowledge or information processing abilities influence decisions and marketing outcome
- How consumer motivation and decision strategies differ between products that differ in their level of importance or interest that they entail for the consumer
- How marketers can adapt and improve their marketing campaigns and marketing strategies to more effectively reach the consumer.

#### A MODEL OF CONSUMER BEHAVIOR:

At one time, marketers could understand consumers through the daily experience of selling to them. But the growth of companies and markets has removed many marketing managers form direct contact with customers. Increasingly, managers have had to rely on the 7 O's framework for consumer research to answer the following key questions about market:

Who constitutes the market? **Occupants** 

What does the market buy? **Objects** 

Why does the market buy? **Objectives** 

Who participates in the buying? **Organizations** 

How does the market buy? **Operations** 

When does the market buy? **Occasions** 

Where does the market buy? **Outlets** 

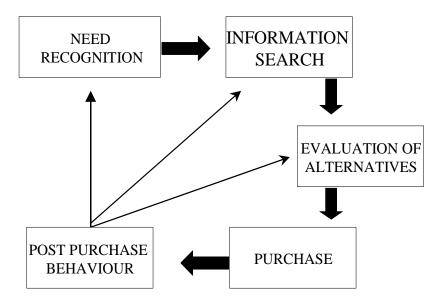
The starting point for understanding buyer behavior is stimulus-response model shown below. Marketing and environmental stimuli enter the buyer's consciousness. The buyer's characteristics and decision process lead to certain purchase decisions. The marker's task is to understand what in the buyer's consciousness between the arrival of outside stimuli and the buyer's purchase decisions.

#### They must answer two questions:

- How do the buyer's characteristics-cultural, social, personal, and psychological-influence buying behavior?
- How does the buyer make purchasing decisions?

Marketing	Other	Buyer's	Buyer's	Buyer's
stimuli	stimuli	characteristi	decision	decision
		cs	making	
			process	
ಕಡಿರಜನಾಭಿಣ.	Economical.	Cultural.	Problem	Product
Price.	Technologica	Social.	recognition.	choice.
Place.	1.	Personal.	Information	Brand choice.
Promotion.	Political.	Psychological	search.	Dealer
	Cultural.		Evaluation.	choice.
			Decision.	Purchase
			Post purchase	Timing.
			behavior.	Purchase
				amount.

#### **CONSUMER DECISION MAKING PROCESS:**



This decision process can be divided into five stages:

#### 1) PROBLEM RECOGNITION:

This occurs when the buyer notices that there is a difference between the desired state and the actual conditions. The consumer gets aware that he has to change some thing to get satisfied. For example, if somebody needs a care to get to work and one day the car stops working. In this situation the person recognizes that there is a difference between the desired state (a working car) and the actual condition (a broken car).

#### 2) INFORMATION SEARCH:

After recognizing the problem, the buyer searches for information about a new product which can solve the problem and also be able to satisfy his needs. Here, we distinguish two aspects to an information search:

In the **internal search**, buyer first checks if they have any information about the needed product in their memory. If they cannot get enough information for their memory for a decision, they are looking for more information in an **external search**. In the external search, the buyer may focus on communication with friends or relatives, to hear about their

experience with special brands. He also can obtain information from public sources like manufacturers, sales persons, or product test organizations.

#### 3) EVALUATION OF ALTERNATIVES:

To evaluate the products of which the buyer got information is looking for criteria to compare the products. These criteria are for example characteristics or features that the buyer wants (or does not want). The buyer also thinks about how important each criterion is; because some features may carry more weight than others. This evaluation of the consumer can be influenced by the marketer by framing the alternatives-that means the manner how the marketer describes the products and its features.

#### 4) PURCHASE:

In this stage the consumer chooses the product or brand, which he wants to buy. This selection is based on the result of the previous evaluation stage. There is also a set of criterions, which must be taken into account:

One of the most important criterions is the *product availability*, which may influence which brand is purchased. If the favorite brand is not available at the moment the consumer may choose the brand that is ranked second. Other criterions that also could be important for the consumer are for example the price, delivery, guarantees, maintenance agreements, and installation and credit agreements.

#### 5) POST PURCHASE EVALUATION:

After the purchase, the buyer begins to check the product with actual performance meet the expected level. In this stage many of criteria used in the evaluating alternatives stage are used again. The result is either satisfaction or dissatisfaction.

## **VALUE, COST AND SATISFACTION:**

When a consumer wants to buy a product for satisfying his needs, he assesses various products and forms an estimate of the capacity of each product to satisfy his set of needs. The guiding concept is consumer value. Therefore value is the consumer's estimate of the products over all capacity to satisfy his needs.

Cost is an important factor, which comes into picture when the consumer has made his product depending upon which product satisfies his needs most. After choosing the ideal product he has to determine whether the satisfaction he derives from the product is worth the cost he plays. The following definition explains this view:

"Marketing is the total system of interacting business activities designed to plan, price, promote and distribute want satisfying products and services to present potential customer". **William J Stanton.** 

**CUSTOMER SATISFACTION:** It is a business term, which is a measure of how products and services supplied by a company meet or surpass customer expectation. It is seen as a key performance indicator within business and is part of the four perspectives of a Balanced Scorecard.

In a competitive marketplace where businesses compete for customers, customer satisfaction is seen as a key differentiator and increasingly has become a key element of business strategy.

#### BENEFITS OF CUSTOMER SATISFACTION:

There is a substantial body of empirical literature that establishes the benefits of customer satisfaction for firms.

- Customer Satisfaction Research identifies how well an organisation is performing from the customer's viewpoint. It allows any organisation to understand how their customers are with the level of service they are providing at any point in time, and to track how satisfaction levels change over time. It does not investigate the reasons or reality behind the Customer Satisfaction, unlike Service Evaluation research but still provides extremely valuable information such as highlighting an area where service needs improving.
- Tracking satisfaction levels can be particularly powerful when it concentrates on identifying levels of satisfaction against the specific elements of service that most matter to customers and which the organisation can change; and where possible, compare satisfaction levels across competing organisations. This can also be used to highlight differences between customer segments, potentially identifying segments at greatest risk.
- Customer Satisfaction research is often used as part of a wider project designed to help an
  organisation or company improve its service provision, customer satisfaction and customer
  interaction.
- A variety of techniques can be used depending on the aims of the project, the nature of the organisation and the extent of the customer base but would typically incorporate a customer survey and may include depth interviews or focus groups in order to more fully understand the service elements which most matter to customers,

Customer Satisfaction, by nature, is dependent on an individual's expectations and previous experience of service.

In order to get the most out of the research for your organisation, it is best for a Customer Satisfaction research project to link to your organisation's service standards (whether formal or informal). For example, there may be a service standard which states that all customers should be given an appointment within two weeks of making a request. It would be relatively

easy to ascertain whether this standard was being met in practice. But customers' satisfaction with how quickly they receive an appointment would need to be tested through direct research with customers.

## **CUSTOMER SATISFACTION IN 7 STEPS:**

- 1. Encourage Face-to-Face Dealings
- 2. Respond to Messages Promptly & Keep Your Clients Informed
- 3. Be Friendly and Approachable
- 4. Have a Clearly-Defined Customer Service Policy
- 5. Attention to Detail (also known as 'The Little Niceties')
- 6. Anticipate Your Client's Needs & Go Out Of Your Way to Help Them Out
- 7. Honor Your Promises

## **INDUSTRY PROFILE**

### TRANSPORTATION:

- "Carrying or movement of people and goods from one place to another is known as transport".

Transport on roads can be roughly grouped into two categories: transportation of goods and transportation of people. In many countries licensing requirements and safety regulations ensure a separation of the two industries.

The nature of road transportation of goods depends, apart from the degree of development of the local infrastructure, on the distance the goods are transported by road, the weight and volume of the individual shipment and the type of goods transported. For short distances and light, small shipments a van or pickup truck may be used. For large shipments even if less

than a full truckload (Less than truckload) a truck is more appropriate.. In some countries cargo is transported by road in horse-drawn carriages, donkey carts or other non-motorized mode (see animal-powered transport). Delivery services are sometimes considered a separate category from cargo transport. In many places fast food is transported on roads by various types of vehicles. For inner city delivery of small packages and documents bike couriers are quite common.

People (Passengers) are transported on roads either in individual cars or automobiles or in mass transit/public transport by bus / Coach (vehicle). Special modes of individual transport by road like rikshas or velotaxis may also be locally available.

#### **HISTORY:**

The first forms of road transport were horses, oxen or even humans carrying goods over dirt tracks that often followed game trails. As commerce increased, the tracks were often flattened or widened to accommodate the activities. Later, the travois, a frame used to drag loads, was developed. The wheel came still later, probably preceded by the use of logs as rollers.

With the advent of the Roman Empire, there was a need for armies to be able to travel quickly from one area to another, and the roads that existed were often muddy, which greatly delayed the movement of large masses of troops. To resolve this issue, the Romans built great roads. The Roman roads used deep roadbeds of crushed stone as an underlying layer to ensure that they kept dry, as the water would flow out from the crushed stone, instead of becoming mud in clay soils.

During the Industrial Revolution, and because of the increased commerce that came with it, improved roadways became imperative. The problem was rain combined with dirt roads created commerce-miring mud. John Loudon McAdam (1756-1836) designed the first modern highways. He developed an inexpensive paving material of soil and stone aggregate (known as macadam), and he embanked roads a few feet higher than the surrounding terrain to cause water to drain away from the surface. At the same time, Thomas Telford made substantial advances in the engineering of new roads and the construction of bridges, particularly, the London to Holyhead road.

Various systems had been developed over centuries to reduce bogging and dust in cities, including cobblestones and wooden paving. Tar-bound macadam (tarmac) was applied to macadam roads towards the end of the 19th century in cities such as Paris. In the early 20th century tarmac and concrete paving were extended into the countryside.

#### **DEVELOPMENT:**

It was 1898 that the 1<sup>st</sup> motor vehicle appealed in India. In its early days it was expensive, Luxury confined only to the wealthy class that could afford it not very long after the vehicle were seen the stage flags on the roads of states.

The bus has found a very prominent place in Transport system in state. It has seemed to open most areas, which were to very inadequate served by railways, now bus service operated in every city and towns a s well as in rural areas. The bus service operated in every useful utilized in city transport for carrying employees to offices and factories, children to schools, housewife to distant markets and visitors for sightseeing and the picnic spots. The bus in a

sense has become a party of urban life as well as a very indispensable link between cities and
villages.
RESEARCH DESIGN
DESIGN OF THE STUDY:
This chapter briefly describes the design of the study, beginning from the title of the study a
goes on to explain the objective, scope of the study, methodology, sampling, field work, analy and finally the limitation of the study.
MEANING OF THE RESEARCH DESIGN:

Research design is a logical and systematic plan prepared for directing a research study. It specifies the objectives of the study, the methodology and the techniques to be adopted for achieving the objectives.

#### NATURE OF RESEARCH DESIGN:

A research design is indispensable for a research project unlike the building plan, which is precise and specific. Research design is a "tentative plan" with a series of guideposts to keep one going on in a right direction. It undergoes modifications, as circumstances demand when the study progresses. New aspects, new conditions and new relationships come to light when the study deepens.

A research is purely and simply the framework or plan for a study that guides the collection and analysis of the data. It is a blue print that is followed in completing a study.

- The study must be relevant to the problem.
- The study must employ economical procedures.

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In this research firstly, exploratory research was done by visiting BMTC to gather the preliminary data. Secondly, descriptive research was done. Questionnaire is prepared to collect the primary data.

#### STATEMENT OF THE PROBLEM:

"A Study on Customer satisfaction towards the Services rendered by BMTC, Bangalore"

There is a considerable increase in the demand for a better transportation facility in cities which leads to constant changes and improvements in its services. This study aims at studying the level of customer satisfaction of services offered by B.M.T.C. and giving suggestions to the company to improve its service.

#### **OBJECTIVES OF THE STUDY:**

- To study the level of customer satisfaction towards services rendered by B.M.T.C.
- To study the present scenario of service rendered by B.M.T.C.
- To study the problems faced by the customers of B.M.T.C.
- To generate suggestions from customers for service improvement and make B.M.T.C more acceptable with respect to its customers.

#### **SCOPE OF THE STUDY:**

The study was exclusively conducted for B.M.T.C. (Bangalore Metropolitan Transport Corporation) to find the level of customer satisfaction of its services. The study is limited to Bangalore City only. With this study we can get some suggestions from the customers for service improvements in terms of quality and what he/she is expecting from the B.M.T.C. We can also identify the causes for customer dissatisfaction towards the services of B.M.T.C.

#### **SAMPLING:**

Sampling may be defined as the selection of some part of an aggregate or totality, on the basis of which judgment about the aggregate or totality is made. In other words, it is the process of obtaining information about an entire population by only examining only a part of it. For the purpose of the study 100 samples are surveyed to collect the primary data.

The marketing research must design the sample plan, which calls for three decisions:

**1. SAMPLE UNIT:** In this study the sample unit is the people who use the services of B.M.T.C.

- **2. SAMPLE SIZE:** This answers how many people should be surveyed. The sample of the project is 100.
- **3. SAMPLE PROCEDURE:** This answers how the respondents should be chosen. In this survey the respondent were chosen on the basis of random sampling.

#### **METHODOLOGY OF THE STUDY:**

Research was undertaken to collect the data required for the study. It is a systematic approach to study the customer satisfaction towards services rendered by BMTC.

#### METHODS OF DATA COLLECTION:

- **PRIMARY DATA:** The primary data was collected on the basis of Questionnaire from the sample group. The data collected from the respondents was coded, tabulated and analyzed into logical statements using simple Statistical methods like Percentage Analysis, Pie Charts, Bar Charts, etc. The Questionnaire method was used for its versatility speed and cost benefits.
- **SECONDARY DATA:** The secondary data was obtained from Newspaper journals, Company reports, Standard textbooks and Internet.

#### **PLAN OF ANALYSIS:**

The collected data from the respondents is analyzed with the help of statistical tools. The data is presented through tables, percentage, pie charts, bar charts and diagrams so as to make the data presentable in a meaningful way.

## LIMITATION OF THE STUDY:

- The information executed by the respondents may or may not be true because in some cases the respondents may not be serious, however, all possible care will be taken to collect the information as authentic as possible.
- Customer's preference and taste fluctuate due to circumstances, which then invalidate the report.
- A student with lack of experience prepares this report.

## **COMPANY PROFILE**

## **HISTORY:**

**Bangalore Metropolitan Transport Corporation (BMTC)** has its origin in a private company called **Bangalore Transport Company** (BTC) Limited founded in 1940 catering to the entire city with just 98 buses. The then Government of Mysore took over the city

transport from the private company by an act in 1956, calling it Bangalore Transport Service [BTS] and ran buses within 10 mile radius of the city.

- 1961: Mysore State Road Transport Corporation- MSRTC ('Mysore' was replaced by 'Karnataka' later because of the renaming of the State BMTC) is formed by a special act, with BTS as one of its divisions.
- 1993: BTS gets recognition as a Unit under Director. Functions as two divisions, North and South.
- **August 15, 1997:** Bangalore Metropolitan Transport Corporation (BMTC) is incorporated as a separate entity having been bifurcated from its parent body KSRTC.

As the Bangalore city was growing at a faster speed and was among the fifth largest growing city in the world government felt that a separate transport corporation is needed to take care the immediate needs of rapidly growing city, hence on 15<sup>th</sup> August, 1997, a separate corporation was formed bifurcating the existing KSRTC and was named **Bangalore Metropolitan Transport Corporation.** 

The BMTC vehicles were red in color and Corporation was also red (making huge losses with a tune of 30-32 Crores per year). The success of BMTC is rated as one of the revolutionary, outstanding, miraculous turn around in urban transport not only in India but in the whole world. It is very interesting to that BMTC along with Hong Kong City Road Transport are only those which are running profits.

The success of BMTC is very phenomenal for the reason that there is a common and general notion under the control of Government/ Semi-Government are known for its Efficiency and Profit making.

Today, BMTC is the only Operational Profit making Urban Sector Public Transport Corporation in India. BMTC is providing transport services to all the areas situated within a radius of 35 Kms from the outer limits of Bruhat Bangalore Mahanagara Palike.

BMTC has become the first public sector city transport carrier in India to introduce Air Conditioned 'Vajra' Volvo buses. Now recently, BMTC has introduced Bangalore International Airport Dedicated Volvo bus service namely Vayu Vajra Volvo A/c and Suvarna Non-A/c which operates from important areas of the Bangalore Metropolis to

International Airport. BMTC is operating a sightseeing bus 'Bangalore Rounds' in the lines of the Curitoba model.

As BTS under KSRTC, it had not concentrated on improving infrastructural facility to fulfill the needs of the travelling public in the same pace. On becoming a separate Corporation as BMTC, it had added 19 Depots raising the total to 32 depots.

As on 1<sup>st</sup> August 2008, BMTC having a fleet strength of 4903 buses and operates 4910 schedules, covering 11.60 Lakh kms with 70,000 trips, carrying approximately 38 Lakh passengers per day.

The Corporation is having staff strength of 25,336 and it has 32 depots under its administrative jurisdiction spread across Bangalore from which the traffic operations are conducted and the same are monitored from the Corporate Office situated at K.H Road, Bangalore.

The 4 major Bus Stations are:

- 1. Kempegowda Bus Station.
- 2. K.R.Market Bus Station.
- 3. Shivaji Nagar Bus Station.
- 4. Shanti Nagar Bus Station.

## **BOUQUET OF SERVICES:**

BMTC is providing public transport through a mix of services tailored to suite different travel requirements of all sections of the society. They fall under different categories depending on different parameters of bifurcation such as:

#### **RANGE WISE BIFURCATION:**

- **a. CITY** (**BLACK BOARD**): Operated with in the BMP limits sporting Black Destination boards.
- **b. SUB-URBAN (RED BOARD):** Operated from city up to a permissible limit of 25 KMs beyond the BMP limits.
- c. MOFUSSIL SERVICES: Limited number services introduced on public demand to some important destinations beyond the 25 Kms limit on a KSRTC fare. Their number is negligible compare to the City & Sub-urban services which form 99% of the total volume of BMTC's traffic operation.

#### TAILOR-MADE SERVICES TO SUIT COMMUTER NEEDS:

- **1. ORDINARY SERVICE**: These are services operated by deployment of Ordinary and Parisaravahini vehicles. These services are operated at ordinary passenger fare. At present there are 3426 ordinary services operating in city and sub-urban areas.
- **2. PUSHPAK/JANAPRIYA VAHINI SERVICE**: These services are operated by deploying buses which have special features such as better upholstered seats with head rest, more leg space, different colour scheme etc. The comfort level compare to ordinary buses is of a higher order. It is operated on a higher fare than the ordinary services. At present 299 such services are in operation. These services are especially popular for Chartered Service, Casual Contract etc.
- **3. MINI AIR-CONDITIONED SERVICE**: BMTC has 7 Mini Air-conditioned buses (Swaraj Mazda) operated between Kempegowda Bus Station and Airport road. As the name represents by being Air-conditioned they are more comfortable, also they shutoff noise and they are free of noise and air-pollution. They are operated on a fare higher than Pushpak service.
- **4. VAJRA (VOLVO) SERVICE**: These services are the latest to be added to the types of services operated by BMTC. Air-conditioned, Euro-II conforming, City type Volvo buses

are deployed for this service. They offer most comfortable, pollution and noise free ambiance and hence considered the best among all kinds of services operated by BMTC. Features like kneeling mechanism, collapsible exit floor and room for wheel-chair make them physically challenged friendly buses. These are operated at a fare higher than Pushpak services. At present 48 services are in operation particularly concentrated in IT corridor.

**5. BIAL DEDICATED VAYU VAJRA & SUVARNA SERVICES :** BMTC introduced the Airport dedicated Vayu Vajra Volvo Services and intends to take another quantum leap by offering a total Transport solution to the users of newly commissioned Bangalore International Airport at Devanahalli.

The air-conditioned, specially configured 46 Vayu Vajra Services provided with room for accompanied luggage of the travelers & safety, security of their belongings to so as to ensure a comfortable & a carefree journey between the Airport & the City and complimented by equally high quality, high comfort but 22 Non AC Suvarna Services in a suitable mix to meet the travel requirement of a cross section of commuters depending on their affordability.

#### **BRANDING OF SERVICES:**

■ **METRO/GRID**: Branded buses plying on 25 routes providing direct connectivity between diagonally opposite destinations on the city periphery. 173 Number of services are in operation and the target is 250.

- PASS SPECIALS: Branded services for the exclusive use of the pass holding commuters who constitute a major chunk of the commuters. 143 services in operation, more in the offing. Only Day passes are sold on-board to the total exclusion of tickets.
- LADIES SPECIAL: Branded services operating for the exclusive use of women commuters and children of both sexes below the age of 12 years. 12 services are in operation between the city and important destinations around the city.
- HOSPITAL SPECIAL: Branded and specially equipped Mini services connecting all the important Medicare centers and hospitals both Government and Private with the city center. Presently 3 services are in operation.
- MALL SPECIAL: Exclusive service connecting prominent commercial centers, high profile Malls and business hubs in the city.
- **BANGALORE ROUNDS**: Three specially equipped buses, one A/C and two non-A/C operate sight seeing trips on a daily basis from the city center for the benefit of tourists and those interested in exploring Bangalore.
- OTHER SERVICES: These are services operating in specific areas tailored to meet specific travel needs of particular areas such as Outer Ring Road City extensions, Suburban destinations, Peak hour, Feeder, Night Service etc as detailed:
  - **a. RING ROAD SERVICES:** Approximately 220 services are operated exclusively on the outer Ring Road providing direct connectivity between locations on the city periphery abutting the ORR bypassing the city. They have helped in reducing congestion in the city by avoiding travel through city. More services are planned.
  - **b. TRUNK SERVICES:** Provide direct connectivity between different areas of the city by bypassing the major Bus Stations to avoid the congestion and the resultant delays.
  - c. PEAK HOUR SERVICES: These are additional services operated during morning and evening Peak Hrs, between the city center, the administrative complex around the

Vidhan Soudha and different localities in and around the city. The timing of the operation is tuned to the needs of the office goers in particular.

- **d. NIGHT SERVICES:** BMTC operates nearly 100 such services for the benefit of late night travelers specially those departing or arriving in to the city late through buses and trains who were otherwise left at the mercy of others less secure and prohibitive modes of travel. They are operated from all most all important extensions and localities to the Kempegowda Bus Station. up to 2400 hrs and from 0400 hrs in the early morning. The ticket rate is one and half the normal.
- **e. FEEDER SERVICES:** To provide direct connectivity between adjacent localities with high travel potential BMTC has introduced the concept of Feeder Services. They are being operated in selected areas to test their viability of their replication in other areas. At present 40 services are in operation.

#### **DETAILS OF SERVICES WITH SCHEDULES:**

SL	TYPE OF SERVICE	NO. OF SCHEDULES
NO.	TIPE OF SERVICE	NO. OF SCHEDULES

1	Ordinary Services	3426
2	Volvo Services	93
3	Ladies Special	12
4	Pass Special	143
5	Hospital Special	3
6	Mall Special	1
7	Bangalore Rounds	2
8	Pushpak	135
9	Suvarna	87
10	Janapriyavahini	164
11	Metro/Grid Services	173
12	Trunk Services	57
13	Mofussil Services	47
14	Night Services	88
15	Late Night Services	25
16	Mini/MiniAC	141
17	Feeder Services	40
18	Outer Ring Road Services	220
19	Chartered Services	53
	Total	4910

**Table no: 3.1** The Details of type wise Services.

## **SPECIAL SERVICES:**

BMTC apart from normal services operates some services specially on specific demands from Private entities such as Factories, IT concerns, Educational Institutions, Corporate

Offices etc., to provide transport to their employees or Students. Also such demands come for special occasions such as marriages, social, political or religious gatherings etc. These are as detailed below:

- **CHARTERED SERVICES:** BMTC provides ordinary/ Pushpak/ Janapriyavahini /Pushpak+ buses on chartered basis to industries, Education institutions and other public or private establishments who require special travel facilities on a regular basis. These services are provided on mutual agreement on competitive fares on chartered basis.
- CASUAL CONTRACTS: BMTC provides buses on casual contract to public on demand for excursions, tours, marriages and for other occasions that requires providing transport to a certain group of passenger's intent on visiting predetermined places. These services are offered on hourly and daily basis.

## **BMTC BUS FLEET:**

BMTC has a composite fleet of buses of different make, varying carrying capacity and offering different levels of comfort to suit specific demands of commuters. They are:

- **1. LEYLAND/TATA** ordinary buses with a seating capacity of 44 and provision for 10 standing passengers. There are 1881 of these buses in operation.
- 2. LEYLAND / TATA / EICHER PARISARA VAHINIS: (seating capacity 46/44/48) These are specially configured buses conforming to environment and anti pollution norms with Euro-2 & Euro-3 engines and are more passenger friendly too as they are better upholstered, more roomy and airy. At present there are 1933 such buses in BMTC Fleet all future inductions will be these only.
- **3. LEYLAND ARTICULATED (VESTIBULES) BUSES:** These buses with a trailer attached have a seating capacity of 65 and a standing capacity for 20, are deployed on high traffic potential routes to meet high demand for transport. There are 106 vestibules in operation with BMTC mostly deployed on the ORR and Long routes with good roads.
- **4. LEYLAND/TATA PUSHPAK/PUSHPAK +:** These buses offer comfort that is a notch or two higher as the seats, the upholstery and the interior are designed to make travel by them a more comfortable and relaxing experience than the ordinary buses. These are mostly deployed for charted services to reputed institutions for their daily travel requirement. Some are also operated on selected routes in the city on a higher fare than the ordinary.
- **5. SWARAJ MAZDA/MINI BUSES:** BMTC has 134 such mini buses for deployment on low traffic potential routes and on roads that are not roomy enough to allow free maneuvering of normal capacity buses.
- **6. VOLVO CITY BUSES:** BMTC has the unique distinction of operating 49 world renowned, A/C, city type Volvo buses considered the ultimate in quality in a city traffic scenario. BMTC considers them as its mascot.

#### **PASSENGER AMENITIES:**

BMTC offers a variety of basic amenities to the commuters mostly at its Bus Stations, as they are the transport hubs and hence frequented by commuters. These are the centers from where transport services are provided to the public. There are four major Bus Stations viz.

- Kempegowda Bus Station.
- K.R. Market. Bus Station.
- Shivajinagar Bus Station.
- Shantinagar Bus Station.

Also there are 32 minor Bus Stations Spread across the city and each provided with the basic and other passenger amenities in commensuration with the status of the Bus Station, Public Demand, volume of traffic and its location. These include simple & Clear passenger friendly Signage to guide passengers to the facilities available at the station, Clean and hygienically maintained toilets drinking water points, Suitable public seating arrangement especially for the infirm, Physically Challenged and the Old. Shelter from rain and sunshine, Public enquiry& Complaint recording, Service information Display of Time Table, Public Address system, Modest canteen facilities, Public telephones, Medical and stationery shop & Public telephones Wheel Chairs and related facilities friendly to physically challenged persons.

## **COMMUTER PASS SYSTEM:**

BMTC has one of the best and well-patronized Commuter pass system. A variety of passes tailored to suit the travel requirements of different sections of society are made available to the public. The system is very popular Owing to services offered at modest rates to these pass users, it accounts for more than half of the traffic revenue earnings of BMTC. They include:

- a. DAY PASS.
- b. WEEKLY PASS.
- c. MONTHLY COMMUTER PASSES.
- d. MONTHLY DEDICATED PASSES.

SL NO.	TYPE OF PASSES	FACILITIES	RATE
		It allows the holder limitless travel throughout a	
1	DAY PASSES:	calendar Day (0000 hrs to 2400 hrs) in all services	Rs. 30/-
1	(w.e.f. September 2003)	except A.C Volvo and Moffusil services throughout	Ks. 50/-
		BMTC's jurisdiction.	
	WEEKLY PASSES:	It allows the holder limitless travel throughout a week	Rs.
2	(w.e.f. September 2003)	(7 days) in all services except A.C Volvo and Moffusil	180/-
	(w.c.i. September 2003)	services throughout BMTC's jurisdiction	180/-
3	MONTHLY COMMUTER		
	PASSES:		Rs.
	(Brought into effect from 1998)		KS.
	a) City Passes	Unlimited Travel in all city- services for a calendar	420/-
	a) City I asses	month.	
	b) Sub-urban Passes	Unlimited Travel in city & Sub-urban services for a	565/-
	o) Sub aroun russes	calendar month.	303/
	c) Pushpak Passes	Unlimited Travel in city, Sub-urb and Pushpak services	600/-
	c) I ushpak I usses	for a calendar month.	
	d) Identity Card	Valid for 3 year	100/-
		This has been introduced to facilitate the office goers	
		and employees of Factories/Companies through	
4.	MONTHLY DEDICATED	operation of dedicated exclusive trips. Special	
	PASSES	provision is made to allow travel in any of the buses	
		operated by BMTC on 24x7x365 basis. These passes	
		are specially patronized by the IT Industries.	

**Table no 3.2:** The rate, facilities offered, validity period and level of patronage etc is as detailed.

## **DETAILS OF DEPOT LOCATIONS:**

SL NO.	DEPOT NO.	LOCATION
1	2	Shanthinagar
2	3	Shanthinagar
3	4	Jayanagar
4	5	Vijayanagar
5	6	Indiranagar
6	7	Subhash Nagar
7	8	Yeshwanthpura
8	9	Peenya II stage
9	10	Hennur Road
10	11	Yelahanka
11	12	Kengeri
12	13	Kathriguppe
13	14	R T Nagar
14	15	Koramangala
15	16	Deepanjali Nagar
16	17	Chandra Layout
17	18	White field (ITPL)
18	19	Electornicity
19	20	Banashankari
20	21	Rajarajeshwari Nagar
21	22	Peenya II Stage
22	23	Kalyana Nagar
23	24	ITI Dooravani Nagar
24	25	HSR Layout
25	26	Yeshwanthpura
26	27	Jigani
27	28	Hebbal
28	29	K.R.Puram
29	30	Yelahanka
30	31	Srigandadakaval
31	32	Suryacity-Hosur road

 Table no 3.3: Details of Depot Locations.

## **DETAILS OF TRAVELLERS:**

Number of Passenger carried per day: 38 lakhs (approximately)

a) People per bus ratio: 1415

b) Passenger /bus ratio: 770

SERVICE	FREQUENCY
Number of Ladies special trips	12
Number of PHS schedules	25
No. of Exclusive trips operated to Vidhana Soudha	315
No. of passing services via Vidhana soudha	216

**Table No. 3.4:** Frequency of the Special Services.

#### **ROUTE LENGTH:**

## **Average Route length:**

a) City: 12.99 kmsb) Sub-urban: 23.73 kms

- a) Sub-urban maximum route length -117.0 kms Rt No. 600 (Banashankari to Banashankari)
- b) Sub-urban minimum route length 6.4 Rt No. 220G (FCI colony to K.R.Market)
- c) City maximum route length –29.5 Rt. 201 (Srinagar to Domlur)
- d) City minimum route length 3.2 Rt. 55 (K.R.Market to Jagjeevanbhimanagar)

#### **BUS STOPS AND SHELTERS:**

Total Bus Stops (BBMP Area)	
Bus stops with shelters (BBMP, BMTC, MP Lad and others)	983
Bus stops without shelters	2387

**Table no: 3.5:** Details of Bus Stops.

#### **AREA OF LAND:**

a) Kempegowda Bus Station and Depot No. 7: 10.0 Acres

b) Shivajinagar Bus Station: 2.0 Acres

c) K.R.Market Bus Station (In front of Chandrabhavan): 30 guntas

d) Shanthinagar Bus Terminus: 7.15Acres

### NO. OF PASSENGERS HANDLED PER DAY:

a) Kempegowda Bus Station and Depot No. 7: About 7.0 lakhs
 b) Shivajinagar Bus Station: About 3.50 Lakhs
 c) K.R.Market Bus Station: About 5.5 Lakhs
 d) Shanthinagar Bus Terminus: About 70,000

# Ticket Denomination in use for City and Sub-urban Services:

3.00, 4.00, 5.00, 6.00, 7.00, 8.00, 9.00, 10.00, 11.00, 12.00, 14.00, 15.00, 17.00, 18.00, 20.00 (15 Denominations)

# **Ticket Denomination in use for Pushpak Services:**

3.00,5.00,6.00,7.00,8.00,9.00,11.00, 12.00,14.00,15.00,17.00,18.00(12 Denominations)

### **Ticket Denomination in use for Ring Road Services:**

2.00,3.00,4.00,5.00,6.00,7.00,8.00,9.00,10.00,11.00,12.00,13.00,14.00,15.00,16.00, 17.00,18.00,19.00,20.00,21.00,22.00,23.00,24.00,25.00,26.00,27.00 (26 Denominations)

#### **Ticket Denomination for Air-conditioned buses:**

Rs.15 upto 10 kms, Rs.20 upto 15 kms and Rs.25 upto 20 kms.

## **AVERAGE SCHEDULES SPEEDS:**

a) City : 3.5 Minutes/Km. 17.1 Km/Hr

b) Sub urban : 3.1 Minuts/Km. 19.3Km/Hr

# **SEATING CAPACITY:**

a) Leyland
b) TATA
c) Ordinary
d) Minibus
38+1
e) Volvo
42+1

# STATEMENT SHOWING 6 YEARS REPORTED ACCIDENTS:

FROM 1.4.1999 TO 31.3.2008

Year	Fatal	Major	Minor	Total	Death	Injuries	Damages
1999-2000	56	3	386	445	56	403	316
2000-2001	61	7	409	477	62	307	290
2001-2002	58	2	363	423	59	317	257
2002-2003	66	3	343	412	75	324	240
2003-2004	59	2	410	471	63	366	272
2004-2005	72	5	380	457	72	313	260
2005-2006	77	13	376	466	81	441	252
2006-2007	92	16	340	448	93	330	187
2007-08	109	24	459	592	109	358	228
TOTAL	650	75	3466	4191	670	3159	2302

 Table No. 3.6: Details of reported accidents.

Percentage of Accidents				
Year	%			
1999-2000	0.26			
2000-2001	0.26			
2001-2002	0.22			
2002-2003	0.22			
2003-2004	0.23			
2004-2005	0.18			
2005-2006	0.16			
2006-2007	0.14			
2007-2008	0.15			

Table no: 3.7: Percentage of Accidents.

# NEW AUGMENTATION OF SCHEDULES FROM 1999-2008:

Table no. 3.8: Details of Schedules.

В	BANGALORE METROPOLITAN TRANSPORT CORPORATION				
	Augmentation of Schedules for the last 9 years:				
		DETAILS OF SC	HEDULES		
SL	XEAD.	NO. OF	NO OF COUCINODE A CED		
NO.	YEAR	<b>SCHEDULES</b>	NO. OF SCHS INCREASED		
1	1999-00	2121	91		
2	2000-01	2376	255		
3	2001-02	2535	159		
4	2002-03	2932	397		
5	2003-04	3291	359		
6	2004-05	3827	536		
7	2005-06	3957	130		
8	2006-07	4326	369		
9	2007-08	4869	543		
,	(up to May-08)	4007	343		

# **INITIATIVES:**

• DAY PASS VENDING MACHINES:

BMTC has introduced Day Pass Vending machines on an experimental basis to access their viability of their deployment on a larger scale. The special feature of the Day Pass issued by these machines which are semi-automatic is the web camera printed photo of the pass holder. It is hoped that with the introduction of these passes bearing the photo pass holder, the misuse through reissue can be curtailed to a large extent. Two of such machines have been installed in Kempegowda Bus Station on a trial run basis. Similar machines are installed at Shanthinagar Bus Station and Shivajinagar Bus Station on experimental basis in compliance of Board resolution.

#### SUVARNA KARNATAKA STUDENT CONCESSIONAL PASS SMART CARD:

BMTC achieved another first to its long list of achievement through introduction of Smart Card based Student Concessional Passes which are the first of their kind to have been introduced in any of the City Public Transport Corporation's in India. With the introduction of these passes, collection for accurate data regarding the actual use of these passes by the Students and other relevant information becomes easier ones, the reader enabled ETMs are introduced as the sole mode of ticket issue in BMTC.

# • MONTHLY COMMUTER PASS ID CARD (BANGALORE CARD):

BMTC continuing with its IT initiatives has decided to introduce Smart Card based Identification cum Monthly Commuter Passes on the lines of Smart Card based Student Concessional Passes introduced by it in the current year. In view of the multiple uses envisaged for this card by BMTC and other agencies like Metro, KPTCL etc at a later date and to give it a strong brand name it has been christened as *Bangalore Card*. It is proposed to be introduced in February 2008 as ID card at the time of inception.

# **FRESH PROPOSALS:**

#### 1. Core Inner Ring Road Services:

Concept being implemented by BMP it envisages improved connectivity between important commercial, administrative, educational and other land marks within core CBD's (as detailed below) such as Yeshwanthpura, Rajajinagar, Magadi Road, Sirsi circle, Chamarajpet, Minerva circle, Lalbagh, Nimhans, M.G.Road, Trinity circle, Coles Park, J C Nagar, Indian Institute of Science. The proposed corridor which is to come up on the existing roads through induction of additional infrastructure such grade separators, fly over etc. that would ensure unimpeded traffic. The corridor is expected to be 28.0kms long. BMTC has prepared a plan to introduce a core inner ring road service for which enroute bus bays, bus stops have been identified and other related work such as estimates regarding deployment of buses, frequency to be offered etc., has been completed.

# 2. Bangalore International Airport Services:

BMTC after successfully pioneering the operation of World acclaimed Volvo Bus based VAJRA city service operation in Bangalore thus opening new vistas in Public Transport now intends to take another quantum leap by offering a total transport solution to the users of shortly commissioning Bangalore International Airport at Devanahalli.

This scheme when implemented will offer a 'A to Z' package of seamless unhindered & uninterrupted travel between important and high profile areas of the city and the International Airport right upto the departure lounge.

BMTC is making this unique scheme possible by putting in place a well oiled network of Vajra services plied by deploying the State of Art, Air-conditioned & specially configured Volvo buses provided with room for accompanied luggage of the travelers and complimented by equally high quality, high comfort but non-A.C. "Suvarna" services in a suitable mix to meet the travel requirement of a cross section of commuters depending on their affordability.

While those of the services originating in North-Eastern region of the city traverse the shortest available routes to the Airport most of the other services are planned to converge at Hebbal junction where BMTC is planning to construct a modern and Hi-tech multi-utility Traffic Transit point specially for the benefit of air-travelers flying in or out of BIAL.

Keeping in view the general profile of the section of society to whom the service is being offered, BMTC will be taking all the care to fix a tariff that would be very modest in

comparison with the tariff on semi personalized mode of transport like Taxies etc. The right mix of 40 high-end Vajra vehicles and 116 Non-A.C Suvarna vehicles will also offer option to the commuters to choose one of their own choice depending on their paying potential and travel requirements. The Vajra and the Suvarna vehicles deployed on this dedicated service will also carry a special logo as a mark of identification.

### PUBLIC RELATION/ INFORMATION:

- IN OFFICE: Public grievances which are belongs to the operations of the Corporation are heard and attended in the Office of the Chief Traffic Manager (operations) during all the working hours. The other grievances are heard by all the concerned Head of the Departments. Apart from those received at bus stations, control room etc.
- BMTC CALL CENTRE: To facilitate free flow of information regarding the existing facilities and new ones initiated for the benefit of commuters by BMTC, new avenues of information which double up as channels of interaction between BMTC and its patrons-the public are being made available. "Call center " is the latest in this directions. This 0800 hrs to 2000 hrs facility is being made available to the public for recording their grievances, suggestions and complaints pertaining to all aspects of BMTC which has a bearing on the commuters. Two exclusive telephone lines with Nos. 12667 are put on the disposal of the public.
- ENQUIRY COUNTERS, PUBLIC ADDRESS SYSTEM: With the aim of providing information related to BMTC operations and other services offered for the benefit of the public, enquiry counters staffed with qualified traffic personnel and equipped with the latest information pertaining to BMTC routes such as destination details, arrival and departure timings, en-route places, information pertaining to important land marks in the city and other civic facilities such as hospitals, Police stations etc have been established at all major bus stations. Also available for public are complaints and suggestion books. These information centers functions between 0600 to 2200 hrs.
- PUBLIC ADDRESS SYSTEM: To facilitate smooth operations and a means of quick dissemination of information Public Address System has been installed at the major bus stations.

- **E-MAIL:** To facilitate smooth operation and a means of quick action, complaints/suggestions etc can be received through e-mails.
- IVRS: INTERACTIVE VOICE RESPONSE SYSTEM: Interactive Voice Response System will be started which will enable the public to get information about operations through telephone.
- **CITIZEN CHARTER:** Citizen Charter containing the commitments of the Corporation towards the commuters has been published by BMTC with the dual purpose of educating both its personnel and the general public regarding the Corporation's obligations to its patrons and the special commitments towards them. This Charter printed in bilingual posters is exhibited in all its buses as well as bus stations.
- **DOCUMENTARY FILMS:** BMTC has been producing documentary films on subjects related to its day to day functioning, accidents –its repercussions and relief road safety etc as a medium for putting forth the BMTC's point of view and for educating its staff. As off now nearly 20 documentary films on a variety of subjects have produced and screened for the benefit of its staff.
- BANNERS AND HOARDINGS: BMTC displays banners and hoardings to spread information about the facilities offered by BMTC. This is done for the benefit of commuters. Information pertaining to traffic operations, introduction of new schemes, information regarding various passes issued by BMTC and also cautionary information in respect of the use of facilities is provided. These hoardings and banners are exhibited at vantage locations in bus stations and other infrastructural sites.
- **TRANSPORT ADALATS:** BMTC responds to and deputes officials to attend to transport adalats conducted by different RTO's whenever intimated and subjects related to BMTC come up for discussion.

ROAD SAFETY MANAGEMENT FOR EFFECTIVE TRANSPORT MANAGEMENT INITIATIVE:

- Regular In-House training programmes are conducted for the benefit of the conductors and
  drivers to import training on aspects pertaining to road discipline, traffic rules, public
  behavior coats, de-addiction etc. A permanent full time training facility is functional.
  Services of experts from outside are also availed for the conduct of these courses. NGO's
  active in the field are also roped in this programme.
- The Officers and the supervisory staff are also being deputed to CIRT and other training institutions for refresher training.
- The drivers are encouraged for safe driving by awarding Chief Minister's gold medals and silver medals, incentives of increments and cash awards.

#### INNOVATIVE TECHNOLOGY FOR EFFECTIVE TRANSPORT MANAGEMENT

#### IT BASED INITIATIVES:

Bangalore is considered to be the Silicon Valley of India, hence BMTC to do justice to this sobriquet is introducing of latest IT innovations to improve the quality of City Transport through new initiatives such as introduction of Global Positioning System (GPS), Geographical Information System (GIS), Public Information System (PIS), Interactive Voice Response System (IVRS), Light Emitting Diode (LED) display boards etc, with a view to improve the efficiency of BMTC operations and to make it more user friendly thus bringing it on par with international standards.

Apart from this, BMTC has introduced the latest techniques in passenger ticketing and commuter passes wherein handheld ETM's (Electronic Ticking Machine) are being introduced to replace the manual system of ticket issue. Work on introduction of smart cards etc., is also in progress. These steps are being introduced to make travel a pleasure by removing all irritants present in the system.

Thus BMTC is on a path of expansion and modernization through induction of latest technology and public city transport management skills. These are being introduced keeping in view the welfare of the Commuter in mind.

Report on the steps taken in the implementation of the Five Effective Transport Management Initiatives in Bangalore Metropolitan Transport Corporation.

### **VEHICULAR AIR POLLUTION MANAGEMENT INITIATIVE:**

The BMTC is aware of the air pollution in Bangalore City and action is being taken to mitigate the air pollution by taking proper action at depot level. Such as:

- All BMTC vehicles have been subjected for emission check every month and corrective actions have been taken immediately in all the depots. To facilitate this work all depots have been equipped with emission testing units.
- Depot Mechanics have been constantly trained to tune up the vehicles and also to acquire the new methodologies to operate the emission testing machines.

BMTC is the first organization to purchase Euro-I vehicle in the year 2000 and also purchasing the vehicles fitted with Euro-II engines for the last three years. BMTC is using low sulphar diesel (0.05% Sulphur). There are 1510 buses fitted with engines conforming to BS-II norms. There are 5 buses fitted with engines confirming to BS-III norms under trail.

# The year wise smoke check details conducted on BMTC vehicles are as under:

YEAR	NO. OF CHECKS	AVG CHECKS/DAY	NO. OF DEFECTS	PERCENTAGE OF DEFECTS
1997-98	7080	19.40	1102	15.56
1998-99	12298	33.69	1494	12.15
1999-00	21480	58.85	1323	6.16
2000-01	26567	72.79	687	2.59
2001-02	27868	76.35	168	0.60
2002-03	28589	78.33	59	0.21
2003-04	30070	82.38	24	0.10
2004-05	36040	98.74	45	0.12
2005-06 (Up to Dec. 2005)	30642	111.02	59	0.19

Table no. 3.9: Year wise smoke check details.

Action has been taken to control the speed restricting the RPM of the engine, so that the vehicles speed is below 60-65 Kms per hour and made tamper proof by sealing the FIP. It is being crosschecked every month.

**CONTROL OF SUSPENDED PARTICULATE MATTER (SPM):** The BMTC has equipped DPF (Diesel Particulate filter) developed by M/s. BHEL in two of its Leyland buses on trial basis, to trap carbon particulate.

### **ROAD SAFETY MANAGEMENT INITIATIVE:**

- Regular In-House training programme is conducted for the benefit of the conductors and
  drivers to import training on aspects pertaining to road discipline, traffic rules, public
  behavior coats, de-addiction etc. A permanent full time training facility is functional.
  Services of experts from outside are also availed for the conduct of these courses. NGO's
  active in the field are also roped in this programme.
- The Officers and the supervisory staff are also being deputed to CIRT and other training institutions for refresher training.
- The drivers are encouraged for safe driving by awarding Chief Minister's gold medals and silver medals, incentives of increments and cash awards.
- BMTC is first organization, which has recruited drivers following the transparency in recruitment by testing the skill scientifically in the driving track before recruitment to get better quality drivers.

COMPUTERIZATION OF EMISSION TESTING: The inspection of vehicles to issue PUC certificate to BMTC buses is out sourced to KSRTC to adopt the concept of third party inspection. These computerized emission testing equipments will record the vehicle number by using Web camera and the readings are taken at recommended sump oil temperature (engine oil sump) and RPM of the engine.

The year wise drivers trained in BMTC Training Center as shown under:

YEAR

NO. OF DRIVERS

1997-98	7080
1998-99	12298
1999-00	21480
2000-01	26567
2001-02	27868
2002-03	28589
2003-04	30070
2004-05	36040
2005-06 (Up to Dec. 2005)	30642

**Table no. 3.10:** Year wise Drivers trained.

All the BMTC vehicles have been fitted with electrical horn and shrill air horns have been totally removed from all its fleet to give fillip for road safety.

BMTC has been continuously imparting training in a phased manner at different levels organized by the chassis manufacturers, involving experts in the field of automobile engineering. The detail furnished below indicates the training provided to Mechanical Officers and Mechanical staff duly deputing them for training outside the state/In-house to acquire the new technology:

Vear	Year Ashol		Tata	a Motors	Mico	CIRTPUNE	In-
1 cui	Officer	Mech. Staff	Officer	Mech. Staff	Mech. Staff		House
1998-99	3	6	-	16	-	-	-
1999-00	4	52	4	32	-	-	-
2000-01	4	62	6	22	-	-	290
2001-02	3	69	-	20	-	-	101
2002-03	-	16	2	55	-	15	188
2003-04	-	52	2	51	-	13	-
2004-05	-	32	-	33	43	10	300
2005-06 (Up to Dec. 2005)	-	34	-	62	4	-	446

**Table no. 3.11:** Details of training provided to the staff.

# SPECIAL COMMUTER PASSES FOR THE BENEFIT OF THE AIRPORT COMMUTERS:

Table no. 3.12: Special Commuter Passes.

# SPECIAL MONTHLY COMMUTER PASSES FOR THE BENEFIT OF THE AIRPORT COMMUTERS (AVAILABLE AT KEMPEGOWDA BUS STATION)

			Unlimited travel in		
			all City, Sub-urban		
			and Trumpet	7 benefits	
1	Suburban-cum-	Rs.700/-	services operated	under	
1	Trumpet	KS. / UU/ -	between Trumpet	*Rainbow	
			and Airport	Scheme.	
			Terminal for one		
			calendar month.		
			Unlimited travel in		
			all City, Sub-urban,	7 benefits under *Rainbow	
	2 Special Suvarna Rs.1200/		Pushpak, Suvarna		
2		Rs.1200/-	Peak Hour & BIAL		
			Suvarna services	Scheme.	
			for one calendar	Scheme.	
			month.		
		Rs. 2,550/-	Unlimited travel in		
		Promotional	all A/c & Non-A/c		
		rate per Pass	services operated		
3	Vayu Vajra	Rs.2,400/- for	by BMTC	**Twin	
3	Gold	Group	including BIAL	Benefits	
		purchase of 50	Vayu Vajra &		
		& above	Suvarna for one		
		passes.	calendar month.		

A smart card based Monthly Commuter Pass ID having a validity period of 3 years and priced Rs. 100/- has to be obtained compulsorily for availing any Monthly Commuter Pass facility extended by BMTC.

# **SPECIAL RAINBOW BENEFITS:**

As an incentive to the Monthly commuter Pass Holders Rainbow Benefits Scheme has been introduced, this includes the following benefits to the commuters holding the Monthly Pass:

- 1) 24 HOURS INSURANCE COVERAGE: Every valid monthly commuter pass holder is provided with insurance cover to the tune of Rs.1.00 Lakh is being increased to Rs.2.00 Lakh if he/she meets with an accident/incident resulting in loss of life or total incapacitation anytime/anywhere during the validity of the pass.
- 2) **MEDICAL REIMBURSEMENT:** Every valid Monthly Commuter pass holder is provided with a Medical reimbursement facility upto a maximum of Rs. 20,000/- is being increased to **Rs. 30,000/-** towards in-patient medical expenses in case of injury from vehicular accidents. The payment will be made to the commuter on production of the necessary bills/vouchers, after due verification.
- 3) THREE MONTHS FREE MONTHLY COMMUTER PASSES TO 50 MONTHLY PASS HOLDERS: All valid monthly commuter pass holders are entitled for inclusion in the monthly draw for the respective month. Every month lucky draws will be held on 25<sup>th</sup> and 50 lucky pass no. will be drawn among monthly pass commuters who will be given free monthly commuter passes for three months.
- **4) DISCOUNT ON PARKING CHARGES:** 50% discount will be given to all valid monthly pass holders on parking charges if two-wheelers belonging to the monthly pass holders are parked under "PARK AND RIDE" scheme at the BMTC notified places.
- **5) MONTHLY CASH AWARD:** Every month cash award of Rs. 100/- will be given to 250 valid monthly commuter pass holders on the basis of a lucky draw which will be held on 25<sup>th</sup> of every month.
- **6) FREE TOUR PACKAGES:** Free tour package to 10 monthly valid commuters pass holders in KSTDC buses or Rs.1500/- will be given based on a lucky draw.
- 7) YEARLY BUMPER PRIZE.

# TWIN BENEFITS:

utomatic Accident Insurance Coverage to the tune of **Rs.10 Lakh** in case of death or permanent incapacitation resulting from any vehicular accident.

A

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2) M edical Re-imbursement up to a maximum of Rs. 50,000/- in case of Accidental injuries necessitating inpatient treatment.

### Twin Benefit scheme to Student Concessional Pass Holders:

- 1) 24 Hours Insurance Coverage: Every valid Student pass holder is provided with insurance cover to the tune of **Rs. 50,000** if he/she meets with an accident/incident resulting in loss of life or total incapacitation anytime/anywhere during the validity of the pass.
- edical Reimbursement: Every valid Student Pass Holder is provided with a Medical reimbursement facility upto a maximum of Rs. 10,000/- towards in-patient medical expenses in case of injury from vehicular accidents. The payment will be made to the commuter on production of the necessary bills/vouchers, after due verification.

# **REWARDS AND RECOGNITIONS:**

# AWARDS FOR BMTC AFTER BIFURCATION:

YEAR	AWARDS		
1007.00	Second best performance for National Productivity Council Award		
1997-98	1997-98 by ASRTU		
1999-00	Road Safety Award 2000 by ASRTU		
1000 00	Maximum improvement in Engine Oil KMPL Award 2000 by		
1999-00	ASRTU		
1999-00	Minimum Operational Cost Award 2000 by ASRTU		
2000 01	Oil Conservation fortnight 2001 Runner up Trophy for maximum		
2000-01	improvement in KMPL Award 2000-2001		
2000-01	Award for Minimum Operational Cost (City Service)		
2000-01	Transport Minister Award for Road Safety (City Service)		
2001-02	Road Safety Award 2001 by ASRTU		
2001-02	Minimum Operational Cost Award 2001 by ASRTU		
2002 03	UITP Asia Pacific Award for outstanding achievements in the field		
2002-03	of affordable public transport.		
2002-03	Transport Road Safety Award (City Service)		
2002-03	Award for Fuel Efficiency (City & Hill Service)		
2002-03	Award for Minimum Operational Cost		
2002-03	Award for Performance of Lubricant Oil		
2003-04	Award for Lowest Operational Cost (Urban)- Winner		
	Transport Minister Trophy for the State Road Transport		
2003-04	Undertakings with Lowest Accident Record for the period 1999-		
	2002		
Vehicle Productivity Award for maximum imp			
2003-0 <del>4</del>	City Services)		
2003-04	Tyre Performance Award for Highest Performance (Winner-City		
2003-0 <del>4</del>	Services)		
2005.06	Golden Peacock special commendation certificate for the year		
2003-00	2005		
	1997-98 1999-00 1999-00 1999-00 2000-01 2000-01 2001-02 2001-02 2002-03 2002-03 2002-03 2002-03 2002-03		

20	2005-06	Transport Minister Trophy for the State Road Transport Undertakings with Lowest Accident Rate for the period 2003-
		04(Winner-Urban category)
21	2005-06	Vehicle Productivity Award for maximum improvement (Winner-
		City Services) for the year 2003-04
22	2005.06	Tyre Performance Award for Highest Performance (Winner-City
22	2005-06	Services) for the year 2003-04
		Transport Minister Trophy for the State Road Transport
23	2006-07	Undertakings with Lowest Accident Rate for the period 2004-
		05(Winner-Urban category)
24	2006.07	Tyre Performance Award for Highest Performance (Winner-City
24 2006-07		Services) for the year 2004-05
25	2007.09	Award for vehicle productivity (Urban Services) for the year 2005-
25   2007-08		06
26	2007-08	Award for Fuel Efficiency (Urban Services) for the year 2005-06
27	2007.00	Citizen Extraordinaire Award-2007 to Managing Director, BMTC,
27	2007-08	by Rotary Midtown Bangalore
	•	

**Table no. 3.13:** Details of Awards for BMTC.

# **QUALITY POLICY:**

We at BMTC are committed to continually improve our services to achieve consistent quality of our products & processes with zero defects, to meet our customer's satisfaction, in order to become a global leader.

We shall adopt ISO 9001:2000 Quality Management System and strive continually to improve the system, with continual training.

## **ENVIRONMENT POLICY:**

BMTC is one among the first corporations to have developed a concern for safeguarding the environment through various steps such as

- Adherence to international emission standards through induction of EURO-II engines in its buses.
- Compulsory monthly emission tests and remedial action for all its vehicles.
- Tree planting campaigns: At all its Depots, Corporate offices etc.,
- Installation of water recycling plants at depots.

### OCCUPATION HEALTY AND SAFETY POLICY:

The Health & Safety policy statement outlines the general requirement in force throughout BMTC for ensuring a Safe and Health working environment. It is made available to every employee, both permanent and temporary and to those on contracts Manual. This Policy will comply to requirement to which BMTC subscribes for the next Five years.

The safety Policy establishes a proactive programme ensures that all employees are accounted for safety and assist in continuous monitoring of the system

# **ORGANIZATION STRUCTURE:**

# **BMTC BOARD OF DIRECTORS**

SL NO	NAME (SRIYUTHS)	DESIGNATION
1.	R. ASHOKA	CHAIRMAN
2.	SYED ZAMEER PASHA	MANAGING DIRECTOR
3.	D. THANGARAJ	DIRECTOR
4.	GAURAV GUPTA	DIRECTOR
5.	VENKATESHWAR RAO	DIRECTOR
6.	K.JOTIRAMALINGAM	DIRECTOR
7.	Dr. UPENDRA TRIPATHY	DIRECTOR
8.	D.S SUBRAMANYA	DIRECTOR
9.	ANIL KUMAR JHA	DIRECTOR
10.	PADAM KUMAR GARG	DIRECTOR
11.	P.S SANDHU	DIRECTOR
12.	G.M.HAYATH	DIRECTOR
13.	C. SHIKHA	DIRECTOR
14.	SHANKAR PATIL	DIRECTOR
15.	HEMRAJU	DIRECTOR

Table no. 3.14: BMTC Board of Directors.

# DATA ANALYSIS AND INTERRETATION

# **INTRODUCTION TO ANALYSIS:**

After tabulating, the data must be analyzed; researcher often uses statistical interpretation, which concentrates on what is average or what deviates from an average. Statistical interpretation, shows how widely the response vary and how they are distributed in relation to the variable, being measured, statistical market rely on estimates of expected errors or deviation from the two values of population. The analysis and interpretation of data may lead the researcher to accept or reject the hypothesis being selected.

#### TABLE 1:

# TABLE SHOWING THE SEX GROUP OF RESPONDENTS:

SEX	NO. OF RESPONDENTS	PERCENTAGE
MALE	67	67%
FEMALE	33	33%
TOTAL	100	100%

**Table No. 4.1:** Table showing the sex group of respondents.

### **ANALYSIS:**

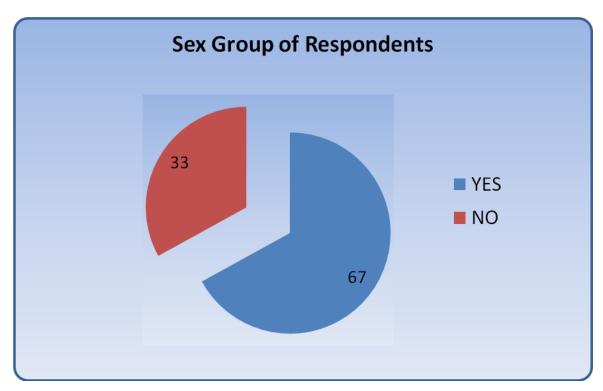
From the above table it is observed that 67% of the respondents belong to the male category and 33% of the respondents belong to the female category.

#### **INFERENCE:**

From the above table it is inferred that majority of the respondents are of the male category. So the company has to give more preference to its potential female customers so as to increase the number of female travelers.

# **GRAPH 1:**

# GRAPH SHOWING THE SEX GROUP OF RESPONDENTS:



**Graph No. 4.1:** Graph showing the sex group of respondents.

#### TABLE 2:

# TABLE SHOWING THE AGE GROUP OF RESPONDENTS:

YEARS	NO. OF RESPONDENTS	PERCENTAGE
20 - 30	38	38%
30 - 45	29	29%
45 - 60	21	21%
ABOVE 60	12	12%
TOTAL	100	100%

**Table No. 4.2:** Table showing the age group of respondents.

### **ANALYSIS:**

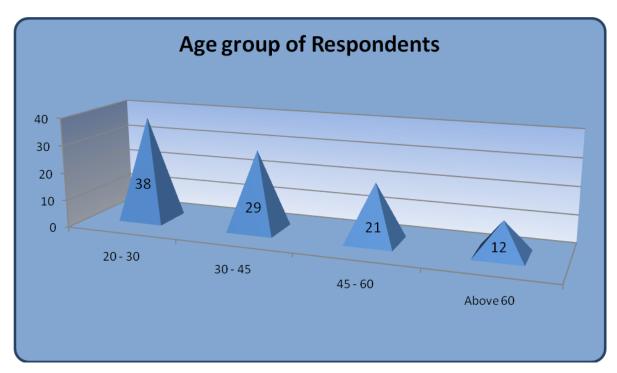
This table shows that majority of respondents belong to the age group between 20 & 30 i.e., 38%, 29% are of the age group of 30 - 45, 21% are of the age group between 45 & 60 and the rest 12% are of the age group above 60.

#### **INFERENCE:**

From the above table it is inferred that majority of the respondents are of the age group of 20-30 years. This shows that this age group people are the potential customers of BMTC.

# **GRAPH 2:**

# GRAPH SHOWING THE AGE GROUP OF RESPONDENTS:



**Graph No. 4.2:** Graph showing the age group of respondents.

### **TABLE 3:**

# TABLE SHOWING THE OCCUPATION OF THE RESPONDENTS:

OCCUPATION	NO. OF RESPONDENTS	PERCENTAGE
SELF EMPLOYED	15	15%
EMPLOYEES	38	38%
STUDENTS	25	25%
OTHERS	22	22%
TOTAL	100	100%

**Table No. 4.3:** Table showing the occupation of the respondents.

### **ANALYSIS:**

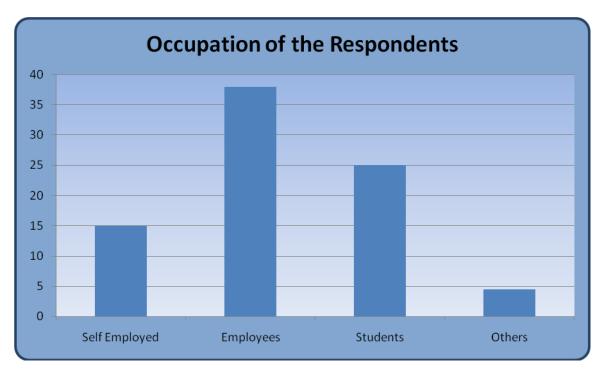
From the above table, majority of respondents were employees i.e., 38%, 25% were students, 15% were self employed and the rest were 22%.

# **INFERENCE:**

From the above table it is inferred that majority of the respondents are Employees followed by students. This shows the occupation of the potential customers of BMTC.

# **GRAPH 3:**

# GRAPH SHOWING THE OCCUPATION OF THE RESPONDENTS:



**Graph No. 4.3:** Graph showing the occupation of the respondents.

### **TABLE 4:**

# TABLE SHOWING THE INCOME GROUP OF THE RESPONDENTS:

INCOME	NO. OF RESPONDENTS	PERCENTAGE
BELOW 5000	45	45%
5000 - 10,000	33	33%
ABOVE 10,000	22	22%
TOTAL	100	100%

**Table No. 4.4:** Table showing the income group of the respondents.

### **ANALYSIS:**

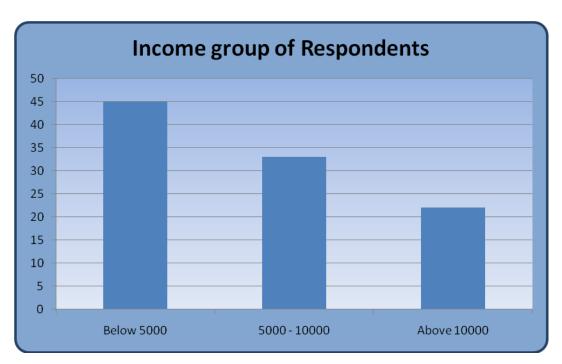
Majority of respondent's lies in the income level below 5000 i.e., 45%, 33% between 5,000 & 10,000 and the rest 22% lies above 10,000.

### **INFERENCE:**

From the above table it is inferred that majority of the respondents belong to the income group of below 5000. This shows that the ticket price is affordable by all the sectors of the society.

# **GRAPH 4:**

# GRAPH SHOWING THE INCOME GROUP OF THE RESPONDENTS:



**Graph No. 4.4:** Graph showing the income group of the respondents.

#### **TABLE 5:**

# TABLE SHOWING THE RESPONDENT'S PREFERNCE OF BUS SERVICES OF BMTC FOR TRAVELLING:

BUS	NO. OF RESPONDENTS	PERCENTAGE
ORDINARY BUS	57	57%
PUSHPAK/ JANAPRIYA VAHINI	23	23%
VAJRA (VOLVO) BUS	14	14%
BIG10	6	6%
TOTAL	100	100%

**Table No. 4.5:** Table showing the respondent's preference of bus service for travelling.

# **ANALYSIS:**

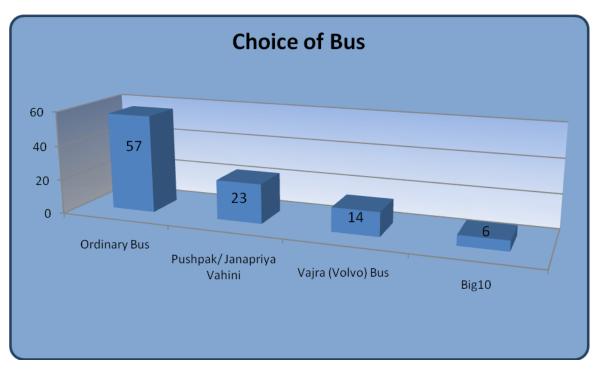
From the above table it is clear that majority of the respondents travel by Ordinary bus i.e., 57%, 23% travel by Pushpak, 14% travel by Volvo bus and 6% travel by Big10 which was released in Bangalore city very recently.

### **INFERENCE:**

From the above table it is inferred that majority of the respondents travel in the Ordinary buses of BMTC as it is cost effective. The company should adjust the ticket prices of its other buses so as to increase their travelers.

# **GRAPH 5:**

# GRAPH SHOWING THE RESPONDENT'S PREFERNCE OF BUS SERVICES OF BMTC FOR TRAVELLING



**Graph No. 4.5:** Graph showing the respondent's preference of bus service for travelling.

#### TABLE 6:

# TABLE SHOWING THE FEELING OF THE RESPONDENTS TOWARDS THE TICKET PRICE OF THE BUS SERVICE:

FEELING	NO. OF RESPONDENTS	PERCENTAGE
EXPENSIVE	9	9%
NOMINAL	30	30%
ECONOMICAL	61	61%
TOTAL	100	100%

**Table No. 4.6:** Table showing the feeling of the respondents towards the ticket price.

# **ANALYSIS:**

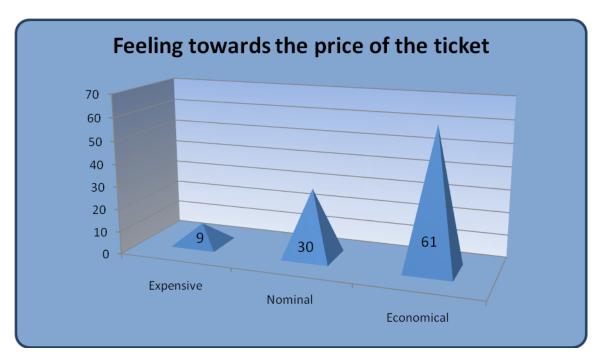
From the above table the researcher found that most of the respondents feel that the ticket price of the bus service is very Economical i.e., 61%, 30% of the respondents feel that the price is Nominal and 9% of the respondents feel that the price is Expensive.

### **INFERENCE:**

From the above table it is inferred that majority of the respondents feel that the ticket prices are Economical which is a very good sign for the company. The company should work towards maintaining this image among the customers in the market.

# **GRAPH 6:**

# GRAPH SHOWING THE FEELING OF THE RESPONDENTS TOWARDS THE TICKET PRICE OF THE BUS SERVICE:



Graph No. 4.6: Graph showing the feeling of the respondents towards the ticket price.

### **TABLE 7:**

# TABLE SHOWING THE RESPONDENT'S RATINGS ON THE TIMING OF BMTC BUSES:

TIME	NO. OF RESPONDENTS	PERCENTAGE
ALWAYS ON TIME	14	14%
MOSTLY ON TIME	55	55%
ALWAYS LATE	19	19%
NOT AT ALL ON TIME	12	12%
TOTAL	100	100%

**Table No. 4.7:** Table showing the respondent's ratings on timing.

### **ANALYSIS:**

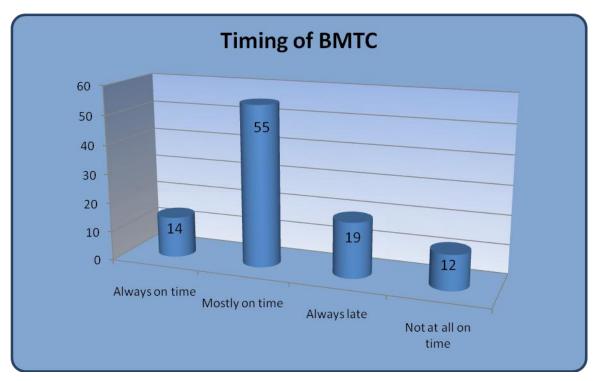
From the above table, the researcher found that most of the respondents i.e., 55% rated the timing of BMTC buses as Mostly on time, 19% rated as Always late, 14% rated as Always on time and 12% rated as Not at all on time.

# **INFERENCE:**

From the above table it is inferred that majority of the respondents feel that the buses are mostly on time on their schedules which is not a good sign for the company. The company should plan the schedules in such a manner that all of them are met with no difficulty.

# **GRAPH 7:**

# GRAPH SHOWING THE RESPONDENT'S RATINGS ON THE TIMING OF BMTC BUSES:



**Graph No. 4.7:** Graph showing the respondent's ratings on timing.

#### **TABLE 8:**

# TABLE SHOWING THE RESPONDENT'S RATINGS ON THE FREQUENCY OF BMTC BUSES:

FREQUENCY	NO. OF RESPONDENTS	PERCENTAGE
MORE FREQUENT	8	8%
FREQUENT	69	69%
LESS FREQUENT	23	23%
TOTAL	100	100%

**Table No. 4.8:** Table showing the respondent's ratings on frequency.

#### **ANALYSIS:**

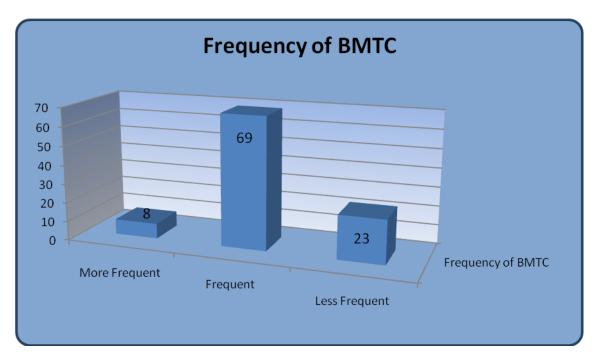
From the above table the researcher found that majority of the respondents i.e., 69% rated the frequency of BMTC buses as Frequent, 23% rated as Less Frequent and 8% rated as More Frequent.

## **INFERENCE:**

From the above table it is inferred that majority of the respondents feel that the buses are Frequent enough to meet the needs of the travelers. This is a positive note for the company, which it has to keep up by constant analyzing the need of additional buses, and meet those needs by supplying the required quantity.

# **GRAPH 8:**

# GRAPH SHOWING THE RESPONDENT'S RATINGS ON THE FREQUENCY OF BMTC BUSES:



**Graph No. 4.8:** Graph showing the respondent's rating on timing.

#### TABLE 9:

# TABLE SHOWING THE BEHAVIOR OF THE DRIVER AND CONDUCTOR WITH THE RESPONDENTS:

BEHAVIOR	NO. OF RESPONDENTS	PERCENTAGE	
POOR	10	10%	
SATISFACTORY	18	18%	
GOOD	65	65%	
EXCELLENT	7	7%	
TOTAL	100	100%	

**Table No. 4.9:** Table showing the behavior of the driver & conductor.

#### **ANALYSIS:**

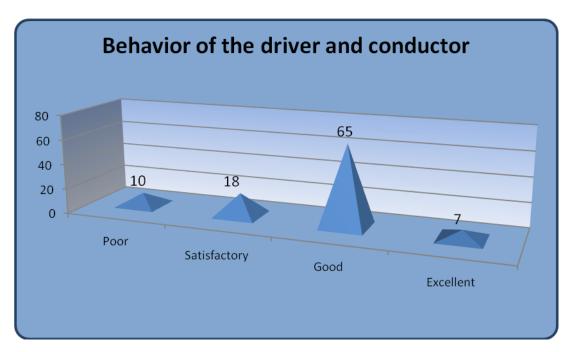
From the above table, we can find out that majority of the respondents i.e., 65% felt that the behavior of the driver and conductor was Good, 18% felt that it was Satisfactory, 10% felt that it was Poor and 7% felt that it was Excellent.

#### **INFERENCE:**

From the above table it is inferred that majority of the respondents are satisfied with the behavior of the conductors & drivers and have rated as Good. The company must encourage the drivers & the conductors to behave politely with the travelers and take serious actions against those who are rude with the travelers.

#### **GRAPH 9:**

# GRAPH SHOWING THE BEHAVIOR OF THE DRIVER AND CONDUCTOR WITH THE RESPONDENTS:



**Graph No. 4.9:** Graph showing the behavior of the driver & conductor.

#### **TABLE 10:**

# TABLE SHOWING THE RESPONDENT'S RATINGS ON THE AIRPORT DEDICATED SERVICES OF BMTC:

RATINGS	NO. OF RESPONDENTS	PERCENTAGE
POOR	POOR 6	
SATISFACTORY	12	18%
GOOD	37	57%
EXCELLENT	10	16%
TOTAL	65	100%

**Table No. 4.10:** Table showing the respondent's rating on the airport dedicated services.

#### **ANALYSIS:**

From the above table, we can see that among the 65 respondents, 57% of them rated the Airport dedicated services as Good, 18% rated as Satisfactory, 16% rated as Excellent and the rest 9% rated as Poor.

#### **INFERENCE:**

From the above analysis, we can infer that majority of the respondents were satisfied with the Airport dedicated services and rated as Good. But the services must still have to improve as only 16% have voted these services as Excellent.

#### **GRAPH 10:**

# GRAPH SHOWING THE RESPONDENT'S RATINGS ON THE AIRPORT DEDICATED SERVICES OF BMTC:



**Graph No. 4.10:** Graph showing the respondent's rating on the airport dedicated services.

#### **TABLE 11:**

#### TABLE SHOWING THE USAGE OF BUS PASS FACILITY OF BMTC:

USAGE OF PASS	NO. OF RESPONDENTS	PERCENTAGE
YES	63	63%
NO	37	37%
TOTAL	100	100%

**Table No. 4.11:** Table showing the usage of bus pass.

#### **ANALYSIS:**

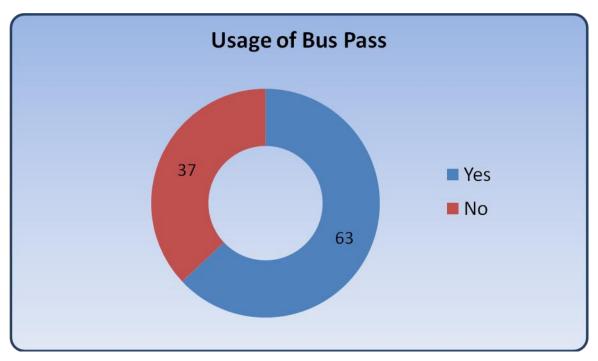
From the above table, the researcher found that majority of the respondents i.e., 63% uses the bus pass facility provided by BMTC and the rest of the respondents i.e., 37% do not use the pass facility.

#### **INFERENCE:**

From the above analysis, we can infer that majority of the respondents travel by BMTC using its pass facility as it would cost cheaper for the pass holder to travel.

#### **GRAPH 11:**

### GRAPH SHOWING THE USAGE OF BUS PASS FACILITY OF BMTC:



**Graph No. 4.11:** Graph showing the usage of bus pass.

#### **TABLE 12:**

# TABLE SHOWING THE RESPONDENTS PREFERENCE ON TRAVELLING IN BMTC IF HE/ SHE OWNED A VEHICLE:

PREFERENCE	NO. OF RESPONDENTS	PERCENTAGE
YES	32	32%
NO	68	68%
TOTAL	100	100

**Table No. 4.12:** Table showing the respondent's preference on travelling in BMTC.

#### **ANALYSIS:**

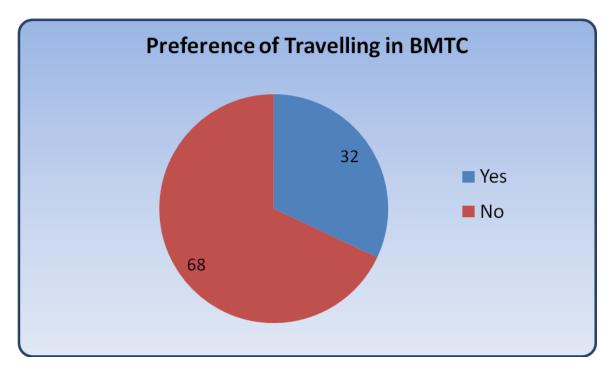
From the above table, the researcher found that majority of the respondents i.e., 68% would prefer not to travel in BMTC if they owned a vehicle and the rest 32% would still prefer to travel in BMTC even if they owned a vehicle.

#### **INFERENCE:**

From the above analysis, we can infer that most of the respondents travel in BMTC due to non availability of other alternative. The company must create more awareness to use the public transport even if they have their own vehicle so as to reduce traffic and pollution.

#### **GRAPH 12:**

# GRAPH SHOWING THE RESPONDENTS PREFERENCE ON TRAVELLING IN BMTC IF HE/ SHE OWNED A VEHICLE:



**Graph No. 4.12:** Graph showing the respondent's preference on travelling in BMTC.

#### **TABLE 13:**

# TABLE SHOWING THE RATING ON AMENITIES PROVIDED AT BUS STATIONS OF BMTC:

RATINGS	NO. OF RESPONDENTS	PERCENTAGE
POOR	6	6%
SATISFACTORY	27	27%
GOOD	55	55%
EXCELLENT	12	12%
TOTAL	100	100%

**Table No. 4.13:** Table showing the rating on amenities provided at bus stations.

#### **ANALYSIS:**

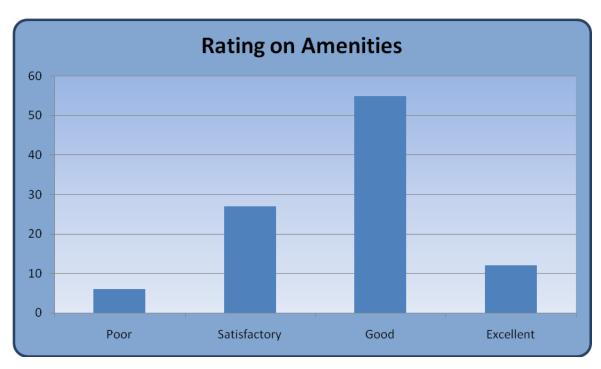
From the above table, the researcher found that majority of the respondents i.e., 55% are satisfied with the amenities provided at the BMTC bus stations and have rated as Good, 27% have rated as Satisfactory, 12% have rated as Excellent and the rest 6% have rated as Poor.

#### **INFERENCE:**

From the above analysis, we can infer that the amenities provided by BMTC are good as majority of the respondents have rated it as Good. But still there has to be more improvements in the amenities as only 12% have voted it as Excellent.

#### **GRAPH 13:**

# GRAPH SHOWING THE RATING ON AMENITIES PROVIDED AT BUS STATIONS OF BMTC:



Graph No. 4.13: Graph showing the rating on amenities provided at bus stations.

#### **TABLE 14:**

#### TABLE SHOWING THE REASONS FOR TRAVELLING IN BMTC:

REASONS	NO. OF RESPONDENTS	PERCENTAGE
AFFORDABILITY	32	32%
EASY AVAILABILITY	20	20%
TRAFFIC	12	12%
NO OTHER ALTERNATIVE	36	36%
TOTAL	100	100%

**Table No. 4.14:** Table showing the reasons for travelling in BMTC.

#### **ANALYSIS:**

From the above table, we can find out that:

36% of the respondents travel in BMTC due to No other alternative.

32% of the respondents travel in BMTC due to its Affordability.

20% of the respondents travel in BMTC due to its Easy Availability.

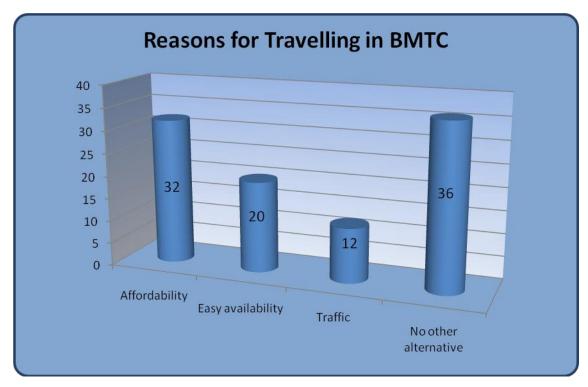
12% of the respondents travel in BMTC due to the Traffic congestion.

#### **INFERENCE:**

From the table it is inferred that the respondents travel in BMTC mainly due to its affordability and non availability of any other alternative.

#### **GRAPH 14:**

#### GRAPH SHOWING THE REASONS FOR TRAVELLING IN BMTC:



**Graph No. 4.14:** Graph showing the reasons for travelling in BMTC.

#### **TABLE 15:**

# TABLE SHOWING THE SATISFACTION OF RESPONDENTS TOWARDS THE BUS SERVICE OF BMTC:

SATISFACTION OF SERVICE	NO. OF RESPONDENTS	PERCENTAGE	
YES	86	86%	
NO	14	14%	
TOTAL	100	100%	

**Table No. 4.15:** Table showing the satisfaction towards bus service.

#### **ANALYSIS:**

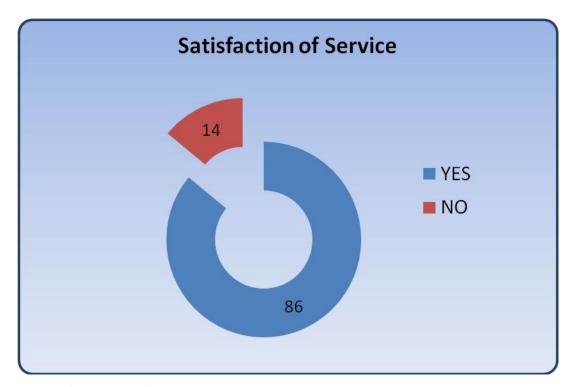
From the above table, the researcher found that 86% of the respondents are satisfied with the bus service of BMTC. Only 14% are not satisfied with the service.

#### **INFERENCE:**

From the above table we can infer that the BMTC is providing a good service to its customers creating a good amount of satisfaction level among the respondents. The company should keep striving to keep up the image of the company.

#### **GRAPH 15:**

# GRAPH SHOWING THE SATISFACTION OF RESPONDENTS TOWARDS THE BUS SERVICE:



**Graph No. 4.15:** Graph showing the satisfaction towards bus service.

#### **TABLE 16:**

# TABLE SHOWING THE RESPONDENT'S RATING ON BUS SERVICES OF BMTC:

RATINGS	NO. OF RESPONDENTS	PERCENTAGE
POOR	9	9%
SATISFACTORY	30	30%
GOOD	45	45%
EXCELLENT	16	16%
TOTAL	100	100%

**Table No. 4.16:** Table showing the respondent's rating on BMTC bus service.

#### **ANALYSIS:**

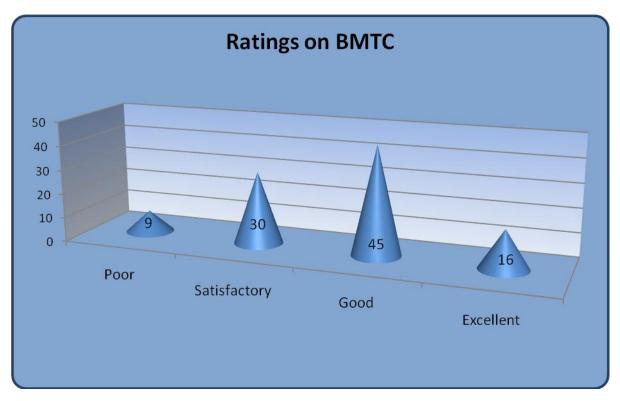
From the above table, the researcher found that majority of the respondents i.e., 45% have rated the bus services of BMTC as Good, 30% have rated as Satisfactory, 16% have rated as Excellent and the rest 9% have rated the services as Poor.

#### **INFERENCE:**

From the table, it can be inferred that BMTC is providing a reasonably good service as most of the respondents have rated for it and only 9 respondents have rated as Poor which is a very good sign for BMTC.

#### **GRAPH 16:**

# GRAPH SHOWING THE RESPONDENT'S RATING ON BUS SERVICES OF BMTC:



Graph No. 4.16: Graph showing the respondent's rating on BMTC bus service.

#### **TABLE 17:**

# TABLE SHOWING THE RESPONDENT'S PREFERENCE ON THE INTRODUCTION OF PRIVATE OPERATORS IN BANGALORE CITY:

PREFERENCE	NO. OF RESPONDENTS	PERCENTAGE
YES	16	86
NO	84	14
TOTAL	100	100

**Table No. 4.17:** Table showing the respondent's introduction of private operators.

#### **ANALYSIS:**

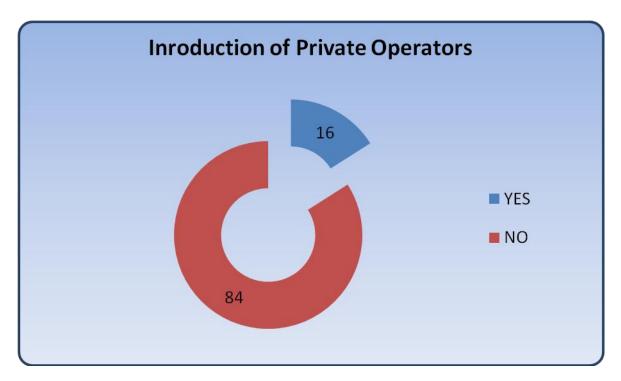
From the above table, the researcher found that majority of the respondents i.e., 84% preferred that private operators should not be allowed to operate within Bangalore city and only 16% preferred that private operators should be allowed to operate within Bangalore city.

#### **INFERENCE:**

From the above table it is inferred that the majority of the respondents feel that the private operators should be allowed to operate within the city. This is a good sign for BMTC which the company has to strive to maintain this image

#### **GRAPH 17:**

# GRAPH SHOWING THE RESPONDENT'S PREFERENCE ON THE INTRODUCTION OF PRIVATE ORGANIZATIONS IN BANGALORE CITY:



**Graph No. 4.17:** Graph showing the respondent's introduction of private operators.

#### **TABLE 18:**

# TABLE SHOWING THE RESPONDENT'S RATING ON THE RESPONSE OF COMPLAINTS/ SUGGESTION DEPARTMENT OF BMTC:

RATINGS	NO. OF RESPONDENTS	PERCENTAGE
POOR	34	34%
SATISFACTORY	36	36%
GOOD	23	23%
EXCELLENT	7	7%
TOTAL	100	100%

**Table No. 4.18:** Table showing the rating on response of complaints/ suggestion department.

#### **ANALYSIS:**

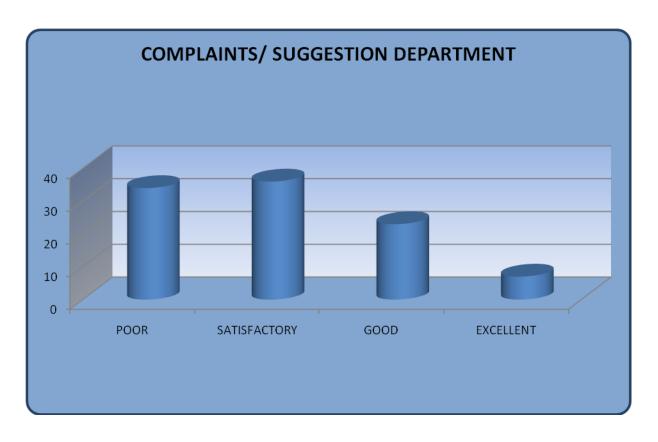
From the above table, we can find that majority of the respondents i.e., 36% have rated Satisfactory, 34% have rated as Poor, 23% have rated as Good & only 7% have rated as Excellent.

#### **INFERENCE:**

From the above it is inferred that the response of the complaints/ suggestion department is not good as the second highest of the respondents have rated as poor. So, the company has to work hard towards

#### **GRAPH 18:**

# GRAPH SHOWING THE RESPONDENT'S RATING ON THE RESPONSE OF COMPLAINTS/ SUGGESTION DEPARTMENT OF BMTC:



**Graph No. 4.18:** Graph showing rating on response of complaints/ suggestion department.

### FINDINGS, SUGGESTIONS AND RECOMMENDATION:

#### **FINDINGS:**

The analysis of the questionnaire administered to 100 respondents has disclosed certain important findings and recommendation has been made for the same.

From this study, it is obvious that BMTC is well accepted and preferred by a large portion of the population. It is mostly preferred because of its frequency, fair price structure, well behavior of driver and conductors, and that it covers 90% of the areas in the city.

However, the customers face problem such as timings of buses, response complaints/ suggestion department, etc. So, the company is required to improve the timings of the buses and also improvise the complaints/ suggestion department to look into the complaints of the customers.

### **SUMMARY OF FINDINGS:**

- 1. It is observed that 67% of the respondents belong to the male category and 33% of the respondents belong to the female category.
- 2. It is observed that majority of respondents belong to the age group between 20 & 30 i.e., 38%, 29% are of the age group of 30 45, 21% are of the age group between 45 & 60 and the rest 12% are of the age group above 60.
- 3. It is observed that majority of respondents were employees i.e., 38%, 25% were students, 15% were self employed and the rest were 22%.
- 4. It is observed that majority of respondents lie in the income level below 5000 i.e., 45%, 33% between 5,000 & 10,000 and the rest 22% lies above 10,000.
- 5. It is observed that majority of the respondents travel by Ordinary bus i.e., 57%, 23% travel by Pushpak, 14% travel by Volvo bus and 6% travel by Big10 which was released in Bangalore city very recently.
- 6. It is observed that most of the respondents feel that the ticket price of the bus service is very Economical i.e., 61%, 30% of the respondents feel that the price is Nominal and 9% of the respondents feel that the price is Expensive.
- 7. It is observed that most of the respondents i.e., 55% rated the timing of BMTC buses as Mostly on time, 19% rated as Always late, 14% rated as Always on time and 12% rated as Not at all on time.
- 8. The researcher found that majority of the respondents i.e., 69% rated the frequency of BMTC buses as Frequent, 23% rated as Less Frequent and 8% rated as More Frequent.
- 9. It is observed that majority of the respondents i.e., 65% felt that the behavior of the driver and conductor was Good, 18% felt that it was Satisfactory, 10% felt that it was Poor and 7% felt that it was Excellent.
- 10. It is observed that among the 65 respondents, 57% of them rated the Airport dedicated services as Good, 18% rated as Satisfactory, 16% rated as Excellent and the rest 9% rated as Poor.
- 11. It is observed that majority of the respondents i.e., 63% uses the bus pass facility provided by BMTC and the rest of the respondents i.e., 37% do not use the pass facility.
- 12. It is observed that majority of the respondents i.e., 68% would prefer not to travel in BMTC if they owned a vehicle and the rest 32% would still prefer to travel in BMTC even if they owned a vehicle.

- 13. The researcher found that majority of the respondents i.e., 55% are satisfied with the amenities provided at the BMTC bus stations and have rated as Good, 27% have rated as Satisfactory, 12% have rated as Excellent and the rest 6% have rated as Poor.
- 14. It is observed that:
  - 36% of the respondents travel in BMTC due to No other alternative.
  - 32% of the respondents travel in BMTC due to its Affordability.
  - 20% of the respondents travel in BMTC due to its Easy Availability.
  - 12% of the respondents travel in BMTC due to the Traffic congestion.
- 15. The researcher found that 86% of the respondents are satisfied with the bus service of BMTC. Only 14% are not satisfied with the service.
- 16. It is observed that majority of the respondents i.e., 45% have rated the bus services of BMTC as Good, 30% have rated as Satisfactory, 16% have rated as Excellent and the rest 9% have rated the services as Poor.
- 17. It is observed that majority of the respondents i.e., 84% preferred that private operators should not be allowed to operate within Bangalore city and only 16% preferred that private operators should be allowed to operate within Bangalore city.
- 18. It is observed that majority of the respondents i.e., 36% have rated Satisfactory, 34% have rated as Poor, 23% have rated as Good & only 7% have rated as Excellent.

#### **SUGGESTIONS:**

Bangalore Metropolitan Transport Corporation (**BMTC**) has been servicing than 47 years. It has created a significant level of goodwill in the city.

However there is still a scope for improvement for perfect transport corporation. The only areas in which "BMTC" lacks is in the timings, frequency of buses compared to other private buses, facilities and other services, for the settlement of the corporation it is very essential to give more emphasis on the quality of the services provided.

#### The suggestions from the Respondent are:

- Increase the No. of buses to long distances.
- To maintain the bus stations cleanly.
- To provide time table of buses in every stops.
- Effective training has to be given to the drivers & conductors to behave properly with the passengers.
- Speed governors have to be installed to prevent rash driving.
- To provide better amenities at the bus stations.
- To maintain the cleanliness of the buses.
- To make special arrangements for the physically challenged people.

#### **CONCLUSION:**

After a detailed analysis presented above, the following conclusion can be made which will enhance the image of corporation:

BMTC already has an extremely high customer image and even loyalty. The customer satisfaction level rating is high with a satisfied level of about 85% and above. So this shows a positive response towards the services provided. To maintain the image all basic actions have to be taken such as providing amenities at the bus stations, training the employees etc.

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Company Profile: Bangalore Metropolitan Transport Corporation

Website: www.bmtc.org

www.bmtc.co.in

## **QUESTIONNAIRE**

# "A STUDY ON CUSTOMER SATISFACTION TOWARDS SERVICES RENDERED BY B.M.T.C (URBAN BANGALORE)"

CONDUCTED BY

### MOHAMMED YASER SHERIEFF,

#### AL-AMEEN INSTITUTE OF MANAGEMENT STUDIES

1.	Name of the responder	11.		
2.	Gender:			
	□ Male	□ <b>I</b>	Female	
3.	Age Group:			
	□ Below 25 yrs	□ 25-30 yr	rs .	
	□ 30-35 yrs	□ Above 3	5 yrs	
4.	Occupation:			
	□ Self-employed	□ Employees	□ Students	□ Others
5.	Monthly income:			
	□ Below 15000	<b>-</b> 1	5000-20000	
	□ 20000-25000		Above 25000	

### SPECIFIC INFORMATION

### 1. Which bus do you usually travel? Please tick

Bus		T	ick	
Ordinary Bus				
Pushpak/ Janapriya	a Vahini			
Vajra (Volvo) Bus				
Big10				
2. What do you feel	about the ticket	price of th	e bus service?	,
□ Expensive	□ Nomin	ıal	□ Economic	cal
3. How would you i	rate BMTC on tir	nings?		
□ Always on time	•	□ Mostl	y on time	
□ Always late		□ Not at	all on time	
4. How would you i  ☐ More frequent	rate BMTC on fr	equency? □ Frequ	ent	□ Less frequent
5. How is the behav	ior of the driver	& conduct	tor of the bus?	
□ Poor	□ Satisfactory	□ Ge	bood	□ Excellent
6. Are you aware o	f the Airport Ded	icated ser	vices of BMTC	<b>C?</b>
□ Yes				
□ No				
7. If Yes, How do y	ou rate the Airpo	rt Dedicat	ed services of	BMTC?
□ Poor	□ Satisfactory	□ Ge	ood	□ Excellent

8. Do you use the	e pass facility provided	d by BMTC?		
□ Yes				
□ No				
9. If Yes, which I	pass do you use?			
□ Day Pass	☐ Monthly Pass	☐ Student Pass		
10. How do you	rate the amenities pro	vided at the BMT	TC bus stations?	
□ Poor	□ Satisfactory	□ Good	□ Excellent	
11. Would you p	refer travelling in BM	ITC buses if you l	had owned a vehicle?	
□ Yes				
□ No				
12. You travel in	BMTC buses due to?	,		
□ Affordal	bility			
□ Easy ava	ailability			
□ Traffic				
□ No other	r alternative			
13. Are you satis	fied with the BMTC b	ous service?		
□ Yes				
□ No				
14. How would y	ou rate the services of	f the bus by whicl	h you travel?	
□ Poor	□ Satisfactory	□ Good	□ Excellent	
15. Would you p	refer the private orga	nizations to enter	into the Transport industry of	•
Bangalore city	?			
□ Yes				
□ No				

-	ontacted the Complain	ts/ Suggestion depa	artment of BMTC for any	y
□ Yes				
□ No				
17. If Yes, Hov	v do you rate the respoi	nse of the Complai	nts/ Suggestion departme	nt of
BMTC?				
□ Poor	□ Satisfactory	□ Good	□ Excellent	
18. Do you hav	e any complaints towa	rds the services of	BMTC?	
□ Yes				
□ No				
If Yes				
19. Any sugges	stions:			
				• • • •

Thank you for sparing your valuable time.