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**“A COMPARITIVE STUDY ON CUSTOMER SATISFACTION TOWARDS RETAIL
OUTLETS OF BPCL WITH RESPECT TO ADHI AND SOWMYA GAS AGENCY”**

A PROJECT REPORT
submitted by

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In partial fulfillment of the requirements
for the award of the degree

of

MASTER OF BUSINESS ADMINISTRATION

April, 2009

KCT Business School
Department of Management Studies
Kumaraguru College of Technology
(An autonomous institution affiliated to Anna University, Coimbatore)
Coimbatore-641 006



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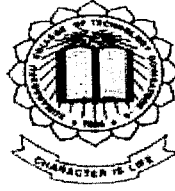
This is to certify that Miss. Sanmuga Priya. V, Roll No 07MBA37 a student of KCT Business School, Kumaraguru College of Technology, Coimbatore has successfully completed her project entitled "A COMPARITIVE STUDY ON CUSTOMER SATISFACTION TOWARDS RETAIL OUTLETS OF BPCL WITH RESPECT TO ADHI AND SOWMYA GAS AGENCY" from 18th Jan 2009 to 18th April 2009 in partial fulfilment of the requirement for the award of the MBA

During her stay, she was exposed to the various functioning of Marketing Department. Her character and conduct was found to be good.

We wish her all the best in her future endeavours.


Radha Krishnan

Regional Manager – Marketing division



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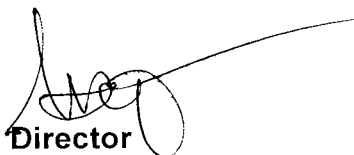
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Certified that this project titled “A COMPARITIVE STUDY ON CUSTOMER SATISFACTION TOWARDS RETAIL OUTLETS OF BPCL WITH RESPECT TO ADHI AND SOWMYA GAS AGENCY” is a bonafide work of Miss. V. SANMUGAPRIYA who carried out this project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not from part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.


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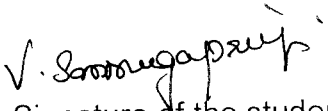
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DECLARATION

I hereby declare that the dissertation entitled "A COMPARITIVE STUDY ON CUSTOMER SATISFACTION TOWARDS RETAIL OUTLETS OF BPCL" submitted for the MASTER OF BUSINESS ADMINISTRATION degree is my original work and the dissertation has not formed the basis for the reward of any Degree, Associateship, Fellowship or any other similar titles.


Signature of the student

With Date

EXECUTIVE SUMMARY

Customer satisfaction refers to how satisfied customers are with the products or services they receive from a particular agency. The level of satisfaction is determined not only by the quality and type of customer experience but also by the customer's expectations. The process for measuring customer satisfaction and obtaining feedback on organisational performance are valuable tools for quality and continuous service improvement.

Every industry goes through narrow phases like introduction, growth, maturity and decline. These stages will vary from place to place based on interceptions and interpretations. It is really necessary for every organisation to perform a self appraisal to study themselves and to know how far they have reached the customer and what the customer thinks about the service to promote business and this has led to the study on customer satisfaction.

The scope of study is confined to customers of the two retail outlets of Bharat Petroleum Corporation of India, and the study also compares the level of customer satisfaction between those two retail outlets where one of them is selling only IPG products and the other is selling other retail outlet services along with the IPG products.

The project also analyses that to what extent the additional business affects the level of customer satisfaction.

ACKNOWLEDGEMENT

It is inevitable that thoughts and ideas of other people tend to drift into the subconscious when one feels to acknowledge helping derived from others. I acknowledge to all those who have helped me in the preparation of this project work.

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CHAPTER – 1

INTRODUCTION

1. INTRODUCTION TO THE INDUSTRY

INDUSTRY PROFILE

LIQUEFIED PETROLEUM GAS (LPG) INDUSTRY

LPG was introduced as a domestic fuel in 1960s. Until the economic reform programs were put into operation, state-owned companies handled the entire production and marketing of LPG. The three sources of supplies were refineries, fractionation of associated gas from oil fields and imports. As of early 2000s, about half of domestic LPG production is based on crude oil and the other half comes from natural gas. The imports constitute more than 20% of the supplies.

The demand for LPG has grown from less than 200,000 tons in 1970-71 to about 5 MT in 2000. The average growth rate in demand has been around 12% annually. There are around 40 million LPG customers. Some 15 million have been on the waiting list (only in urban areas). LPG consumption by industry is split as follows: 89% domestic, 1% refinery, 1% transport, 8% industry and 1% agriculture. In the 1990s, LPG demand was estimated at 7.5 to 9.0 million tons (MT) by 2001-02 and 10.0 to 12.0 MT by 2006-07. The projected supply was only about 4 to 5 MT by 2001-02, leaving a gap of about 3 MT. Until recently, the Administered Price Mechanism (APM) had governed hydrocarbons in India. The APM was introduced in 1976, and the Oil

Coordination Committee (OCC) was created to implement the mechanism. The APM was based on a retention pricing system, which compensated oil companies for their costs and assured a 12% return on net worth. It comprised a complex system of more than 100 pool accounts with the major ones being the crude oil price equalization, product pool and the freight surcharge pool accounts. The OPA (oil pool account) was maintained to provide uniform and stable prices by balancing high and low input costs. The rationale for the APM arose from the need to subsidize certain consumer sectors, to overcome locational disadvantages and to provide a fair return on investments. As such, LPG and kerosene have enjoyed large subsidies whereas products such as gasoline have attracted enormous surcharges. The introduction of differential subsidies and taxes on various products led to a misutilisation of selected petroleum products and a burgeoning demand for subsidized petroleum products, which had to be met increasingly through imports. The large subsidy on LPG combined with that on kerosene and the historical subsidy burden contributed by diesel together with infrequent adjustments to pooled prices and a mismanagement of the pool account built up a deficit of \$4.42 billion (Rs 184.4 billion) by 1997-98, \$6.5 billion in 1998-99 and almost \$14 billion in 2000. If the APM system had worked efficiently, a deficit of this magnitude would not have built up although the cost of inefficiencies in the system would still have been passed on to the consumers through the cost-plus pricing system. This huge deficit translated into an inability on the part of the oil industry to affect major investments in either oil exploration or refining capacity. As a result, the pressure to attract private capital increased. One of the significant reform packages under implementation is a dismantling of the APM and a move towards a system of market-determined, tariff-based prices.

This dismantling of the APM is part of a larger reform program that encourages competition in both the upstream and downstream oil sectors and encourages the import of crude oil and petroleum products.

In April 2002, the government announced that subsidies for all petroleum based products would be phased out except for LPG and kerosene which the government pledged would see their subsidies phased out within a 3 to 5 year period. LPG and kerosene are used as domestic cooking fuels by a large portion of the population. Also concurrently in 2002, LPG subsidies will be paid out of the government funds as opposed to APM pools and subsidies were revised upwards by Rs 67.75 per cylinder. The issue is not resolved because subsidies will have to be removed by a future government which may not have the will to undertake that action. There are several issues of great concern for any government in India: the implication of higher petroleum prices in states far from the coast; the market's ability to ensure adequate inventories and timely supplies to remote areas; and the protection of consumers from the effects of fluctuating prices.

Private Sector Involvement

Private players, also called the parallel marketers, have about 21 working units with a total installed capacity of 1 MT per annum and the potential to release 1.5 to 2 million connections per year, according to the data provided by the Confederation of Indian LPG Industry (CILI). In 1993, more than 35 companies were interested in this market. But by 1999, private marketers were only able to sign up about one million customers while the public sector companies signed up over 14 million customers. Private LPG

turned out to be too expensive for the price-sensitive Indian market. LPG distributed by public oil companies retails for \$5.09 (Rs 241) a cylinder (of 14.2 kg) in Delhi while a 12 kg cylinder from a private company costs \$8.44 (Rs 400). (Private companies may only sell LPG in 12 and 17 kg cylinders.) As long as the government subsidizes the public companies and private companies pay import duties as high as 23%, the private LPG players cannot establish themselves in the market. Currently, only about 30% of private LPG capacity is being utilized. Private investment will add another 2 MT of LPG annually to the 2.3 MT produced in India once the Jamnagar refinery starts production. Many private LPG companies now are cutting costs or changing tack altogether. Mumbai-based Bharat Shell a joint venture between UK-based Shell International and Bharat Petroleum, has decided to focus on its 15,000+ residential customers rather than bulk clients. Anjani and Shri Shakti are focusing on the rural market while SHV has shifted from the domestic to the industrial market. Shell Gas has no approved plans for LPG in India.

In December 2002, the Indian government announced the sale of majority stakes in two of the largest state-owned downstream oil companies, Hindustan Petroleum (HPCL) and Bharat Petroleum (BPCL). HPCL is slated to be sold off to a "strategic" buyer - another major oil company. BPCL's shares will be offered through a public stock offering. The Indian federal government currently owns 51% of HPCL and 66% of BPCL. But so far, no significant progress has been made and opposition from some politicians and bureaucrats as well as some employees remains strong.

Also, the recent failure of Essar, a fairly new entrant into the downstream sector, to import refined products to sell through its own retail outlets shows the difficulty of private participation in this sector. The

government denied Essar import authority on the grounds that all products had to be imported through the Indian Oil Corporation (owned by the state). CIL also sought a reduction in the customs duty on LPG along with the continuation of the process of reducing the subsidy on domestic LPG provided by state companies. The confederation had called upon the government to carry out the phased program of reducing the subsidy over a three-year period without bringing about any changes into the program. This move, the association believes, would help restore the anomalous situation currently being witnessed by the industry.

Public Sector Participation

As with any subsidized commodity, the public and, as a result, the politicians have been concerned about the removal of subsidies. Accordingly, the media (through a variety of publications, TV, radio and the internet) followed the discussions closely, reporting regularly on price adjustments as well as reform policies. Research centres' such as Tata Energy and Resources Institute (TERI) provided for outreach and analysis. The government also disseminated information through its officials. As a part of the government's response to the oil crisis of the early seventies, the Petroleum Conservation Research Association (PCRA) was set up in 1976. PCRA sponsors R&D activities for the development of fuel-efficient equipment. Along with oil marketing companies, PCRA also organizes multi-media campaigns for creating mass awareness for the conservation of petroleum products through various media such as TV, Radio, Press, printed literature, outdoor publicity. Publicity vans of the Government Field Publicity Department of the

states are used extensively to reach consumers in the semi-urban and rural areas.

The success of the first Oil Conservation Week organized in January, 1991 has led to its continuance in subsequent years and an extension to Oil Conservation Fortnights since 1997. These are organized by the entire oil sector in close coordination with the concerned Ministries and Departments of the Union and State Governments, Public Sector Undertakings, Chambers of Commerce etc., with PCRA acting as the coordinating agency.

CHAPTER – 2

ORGANISATION PROFILE

History

Bharat Petroleum Corporation (BPCL) traces its history to 1928 when the Burma Shell Oil Storage & Distribution Company of India was incorporated in England to enter the petroleum products business in India. The business of the Company grew substantially given the international backing of Shell and it achieved the leadership position in India. In 1952, Shell and Burma Oil Company set up Burma Shell Refineries to set up a refinery in Mumbai. The entire operations of Burma Shell in India were nationalised in 1976 and the Refinery and Marketing Companies were merged to form BPCL.

BPCL is India's second largest oil company in terms of market share and processes about 9 million metric tons of crude per year. Today the company produces a diverse range of products, from Petrochemicals and Solvents to aircraft fuel and speciality lubricants. It manufactures petroleum and petroleum products, asphalt, bituminous substances, carbon, carbon black, hydrocarbons, mineral substances and the products/by-products derived there from.

The organisation structure of BPCL was revamped and six new Strategic Business Units (SBU's) have been created. They are Refinery, Retail, Industrial & Commercial, Lubricants, Aviation LPG. The new structure is based on business processes, is flexible, more responsive to external

changes, has fewer layers, and above all, ensures a much higher customer focus.

During 2000-01 the company issued bonus shares in the ratio of 1:1, thereby enhancing its equity capital to Rs 300 crores. Currently BPC holds 54.81% in KRL and 62.96% in NRL. Government has a 66% stake in the company, which it plans to divest in due course of time. The contenders for the same include MNCs like Shell along with domestic companies like Reliance Industries. A possible cross holding between BCPL and HPCL is also proposed.

Refinery Modernization Project is being implemented at a cost of Rs.18, 310 million. This project besides improve distillate yield and energy efficiency, will enhance the crude oil capacity to 12 MMTPA. The project is expected to be commissioned October, 2009. Gas Turbine and Heat Recovery Steam Generator project was commissioned during 2001-02 at a cost of Rs.1750 million. The long term plan of setting up a 7 MMTPA capacity grassroots refinery project in Allahabad District of UP is under final stage of approval. The forestland of 450 acres has been approved and the estimated cost of the Refinery project amounts to 61,800 million. This project is planned in such a way it should be mechanically completed within 48 months from the date of receipt of all statutory approvals.

Product

This elite Fortune 500 Company's products range from the kerosene used to light a wick in a remote village to the fuel used to power aircrafts. The end products of BPCL touch the lives of all Indians. The company refines and

markets aviation turbine fuel, petrol, diesel, fuel oils, kerosene, greases and lube oil based stock. BPCL's industrial and commercial businesses provide benzene, toluene, furnace oil, hexane, mineral turpentine oil and bitumen that keep the wheels of industrial progress turning. The company's twin retail offerings – Speed, its premium petrol and Hi-speed, its diesel have become brand ambassadors for its high-end product line. The MAK range of lubricants caters to the automotive and industrial segments. Some 23 million Indian kitchens use Bharatgas; while Bharat metal cutting gas, an industrial cylinder brand, provides efficient and low-cost metal cutting solutions to the construction industry.

Recent Developments

The years 2006/2007 witnessed several milestones for the company. The LOBS(Lube Oil Base Stock) plant was commissioned at the Mumbai refinery and the erstwhile Kochi Refineries Limited (KRL) was merged with BPCL. Post-merger, the online blender was commissioned to blend petrol and diesel to meet BS-II and EURO-III specifications. The Retail SBU made its international debut in Bhutan with the inauguration of a BPCL outlet in August 2007. This opened a fresh chapter in petroleum products marketing with a new partner, Damchem Petroleum, in the scenic town of Paro at Druk-Yul in Bhutan. The LPG SBU is in the process of establishing a storage, bottling and distribution facility in Nairobi, Kenya. When fully operational, it will offer BPCL the opportunity to cater more extensively to the African market and extend its expertise in the international arena. In India, the company's refinery modernisation project is being implemented at a cost of Rs.1831 crore (US\$ 457.75 million). Besides improving distillate yield and energy efficiency, the

project will enhance its crude oil refining capacity from 9 million metric tonnes to 12 million metric tonnes per annum. In October 2006, with the incorporation of Bharat Petro Resources Limited, BPCL diversified into crude oil exploration and production. This step bridged an important gap by offering both, an opportunity for product security and cost-advantage to the company.

PROMOTION

BPCL communicates with its customers through a series of above-the-line activities using television, outdoor and the internet. In addition, it participates in exhibitions, offers sponsorships at relevant forums and creates market promotions to enhance brand visibility. Bharat Petroleum pioneered the concept of petrol-station located convenience stores in the country. Called In & Out, these stores go a long way in meeting customers' convenience needs on the road. The fact that they remain open late into the night, when most other stores are closed, is significant help. The product mix at these outlets extends from light snacks and a can of an aerated beverage for the hungry traveller, to breads, milk and personal care products. Some of the stores vend frozen foods, greeting cards, music and gift items. The company also introduced the concept of a co-branded credit card. Today over 1500 Bharat Petroleum pumps provide card facilities. In addition to this, selective outlets also offer a waiver of the fuel surcharge on cards issued by several banks including HDFC, SBI, Standard Chartered and HSBC. To reach out to audiences, BPCL has tapped into the popularity of two young and dynamic brand ambassadors – cricketer Mahendra Singh Dhoni and Formula One speedster Narain Karthikeyan to endorse BPCL brands – MAK and Speed.

BRAND VALUES

The three cornerstones of BPCL's success have been innovation, care and reliability. These have been ingrained in every aspect of the company's offerings. The company treats its customers with respect and humility. At its gas and service stations smartly turned out attendants greet patrons with a warm smile. The courtesy brings many back over and over again. Indeed, for several clients it is BPCL – or nothing.

VISION

- Make BPCL a great place to work
- Effective boundary management
- Fulfill social responsibilities
- Apply the best technologies
- Be an ethical company
- Strong and dynamic system
- Sound business performance and operational efficiency
- Develop cohesive corporate strategy
- Establish first class brand and corporate image
- Have excellent customer caring and customer service
- To be the best

CHAPTER 3

MACRO AND MICRO ECONOMIC ANALYSIS

At introduction, India's domestic oil production was just 250,000 tones per annum. The entire production was from one state-Assam. Most foreign experts had written off Indian as far as discovery of new petroleum reserves was concerned. The government announced, under Industrial policy resolution, 1954, that petroleum would be the core sector industry.

Petroleum exploration & production was controlled by the Government-owned National Oil Companies(NOCs), ONGC and OIL, in pursuance of the Industrial policy resolution, 1954. In early 70s, they supplied nearly 70% of the domestic requirement. However, by the end of the 80s, they has reached the stage of diminishing returns. Oil production had begun to decline whereas there was a steady increase in consumption and today the two NOCs are able to meet only about 35% of the domestic requirement. This was further compounded by the resource crunch in the beginning of the 90s. The government had no money (FE) to give to the NOCs for the development of some of the then newly discovered fields. While some of these fields could be developed by ONGC (Gandhar, Neelam, Bombay High, heera, Geleki, etc.) , for others there was no money available for indigenously developing the fields. The problem had elements such as the administered oil price, non-availability of appropriate technology, logistics, etc.

FOREIGN COMPANIES IN EXPLORATION IN INDIA

Foreign companies entered the Indian E&P scene since early fifties (Indo Stanvac Project- A Joint Venture between Government of India and Standard Vacuum oil Company for West Bengal onland in early fifties, Carlsboms Natomas for Bengal offshore in early seventies, Assamerc for Cauvery offshore and Reading and bates for Kutch offshore also in early seventies and later since the first round in 1980; Shell for Kerala offshore and Chevronn- Texaco in Krishna - Godavery Offshore). This was certainly not as much as elsewhere in the world.

Petroleum Sector Reforms, 1990

The Government launched the Petroleum Sector Reforms (PSR) in 1990. Till then, three rounds of exploration bidding had been gone through with no success in finding new oil/gas deposits by the foreign companies who only were allowed to bid. Under the PSR, the Fourth, Fifth, Sixth, Seventh and Eighth Rounds of exploration bidding were announced between 1991 and 1994. For the first time Indian companies with or without previous experience in E&P activities were permitted to bid starting with the Fourth Round.

The Government then announced the Joint Venture Exploration Program in 1995. The exploration blocks were in those areas for which the Petroleum Exploration License was with the NOCs and they were required to have a 25% to 40% Participating Interest from day one.

Opening of the Oil/Gas Fields for Development by Private Companies

The Indian oil/gas fields discovered by the two NOCs, were first offered in 1992 under the First Offer. The second such offer was made in 1993. Development of fields is characterized by a comparative lack of business risk but is a cost intensive venture. Only those companies who have previous experience of field development can undertake such ventures. Unlike the Exploration blocks, field development contracts have upfront payments to be made to the NOCs for past costs as well as in the form of signature bonus. At the stage of oil/gas production, companies are also required to make production bonus payments. Lack of previous experience forces the Indian companies to seek foreign partners not only to work as Operator but also to share costs. It would help Indian cause if the government were to introduce the practice of Pure Service Contract like in some of the other producing countries.

Today 74 Exploration Contracts and 28 Development Contracts are in operation. There are a total of 103 PSCs in operation. This is a sizable number but unfortunately this is not made known to a large number of people/enterprises. The Development Contracts are likely to add about 150,000 barrels of oil per day (or about 7.5 MMT per year) and about 7 million cubic meters per day of gas production. In terms of money about 4 billion dollars are expected to be pumped into these ventures over the next 10 to 15 years.

Major players

ONGC

It is a public sector petroleum company in India, contributing 77% of India's crude oil production.

Revenue (2008): \$ 10.5 billion

Employees: 41000

- India's ONGC lags in global oil race. ONGC's setbacks in acquiring major oil resources are made worse by the Indian government's order to help shoulder the burden of subsidised fuels earlier this year, which pushed the country's biggest refiners into the red.
- ONGC has gained junior shares in a host of projects, from Russia's Sakhalin-1, Iran's Yadavaran Field and Sudanese properties abandoned by Western investors.
- But it has yet to take a lead role that would give it more say and a bigger share of future production. The race is gaining urgency both for India and ONGC as Chinese and other Asian competitors snap up plum properties in the face of stagnating domestic production.
- The 50-year-old firm has acquired interests in 16 overseas projects since it started looking abroad in 2001.
- ONGC has not met the most basic measure of an explorer's success: finding more oil than it pumps out. For three years in a row, the firm has failed to replace the reserves it produced. Its last major oil discovery was in 1974.
- Government officials say ONGC must boost its reserve-to-production ratio - the number of years its reserves will last with the current level of output - by improving its drilling technology and management practices. ONGC's ratio is 22 years. In some onland areas the ratio is 57 years.

- ONGC lost a major offshore platform at Bombay High, India's largest oilfield, reducing the company's output by 123,000 barrels per day (bpd) after an errant rig crashed into the facility during the monsoon, setting it on fire. It has since restored half that production.

BPCL

Bharat Petroleum Corporation Limited (BPCL) is a modern refining and distribution company. It vies with Hindustan Petroleum for the #2 slot behind Indian Oil. The company processes petroleum and petroleum products; its refinery in Mumbai processes 260,000 barrels of crude per day. It also controls refineries in Kochi and Numaligarh. BPCL sells engine oils and gasoline's, liquefied petroleum gas (LPG), and kerosene. It has more than 6,550 gas stations, more than 1,000 kerosene dealers, and a national network of LPG distributors. The Indian government owns 55% of the firm, although it plans to sell this stake as part of industry wide deregulation.

CHAPTER-4

MAIN THEME OF THE PROJECT

1. NEED FOR THE STUDY

Every industry goes through narrow phases like introduction, growth, maturity and decline. These stages will vary from place to place based in interception s and interpretations.

It is a tough competition to maintain the reputation of an organization and this is possible only by means of dedicated service and self-appraisal.

In this current situation it is really necessary for every organization to perform a self-appraisal to study themselves and to know how far they have reached the customer and what the customer thinks about the service to promote business and this has led to the study on customer satisfaction on LPG services in the retail outlets of BPCL.

2. SCOPE OF THE STUDY

The scope of the study is confined to customers of two of the retail outlets located in Chennai. The study primarily aims at finding out the customer's satisfaction and also comparing the result of two retail outlets, one of which is selling all the LPG as well as non-LPG products and one of which is selling only LPG product.

3. STATEMENT OF THE PROBLEM

This area of research is confined to make a detailed study on customers' satisfaction towards the services offered by the retail outlets of BPCL.

4. OBJECTIVES OF THE STUDY

- To identify Customer satisfaction about the LPG services
- To compare the customer satisfaction between the retail outlets
- To identify that what extent the additional business affects the customer satisfaction

5. REVIEW OF LITERATURE

Söderlund, Magnus¹ had said in their research that if the service worker's physical attractiveness has an impact on customer satisfaction in the moment of truth. The results show that a high level as opposed to a low level of physical attractiveness of the service worker produced a higher level of customer satisfaction. In addition, the results indicate that exposure to an attractive service worker set in motion a process in which an attractiveness appraisal affected the attitude toward the service worker, which in turn had a positive impact on customer satisfaction

In the book of **Industrial Marketing Management**² states that Organizational downsizing has become commonplace in today's competitive environments. Over the past 10 years in the U.S. alone over 10 million positions have been eliminated. Recently, questions related to the holistic benefits of downsizing have emerged. One of these questions suggests that downsized companies may find it more difficult to fully satisfy their customers; especially if there have been significant cuts in key contact personnel. In view of this question, the work presented here examines whether downsized

¹ Söderlund, Magnus "Journal of Retailing & Consumer Services" May2009, Vol. 16 Issue 3, p216-226, 11p.

² Industrial Marketing Management," Business customers' satisfaction", Apr2009, Vol. 38 Issue 3, p283-299, 17p.

suppliers, as compared to non-downsized suppliers, enjoy higher (or lower) levels of customer satisfaction and loyalty among their business customers. Based on a sample of 560 purchasing professionals, this study indicates that contrary to popular managerial schema ([Lewin, J. E. (2003). An empirical investigation of the effects of downsizing on buyer–seller relationships. *Journal of Business Research*, 56(4), 283–293]; [McKinley, W., Zhao, J., & Rust, K. (2000). A socio-cognitive interpretation of organizational downsizing. *Academy of Management Review*, 25(1), 227–243]), downsized suppliers do a significantly worse job in delivering quality and value to their business customers. As a result, their customers are less satisfied and less loyal

In an article³ which has subject terms of customer satisfaction, it discusses various reports published within the issue, including customer retention, tips on improving customer satisfaction, and mobile security.

In the article quality progress⁴ The article reviews the book "Measuring Customer Satisfaction and Loyalty," by Bob E. Hayes.

HARTLEY, DEANNA⁵ says that the efforts of the American Family Insurance company to improve customer service by changing its internal training program. Insurance agents for the company go through a rigorous training program, the article states. Other topics include the creation of a more

³ CRN, "Getting Serious About Customer Satisfaction", Mar2009 Channel Advisor, p6-6, 2/3p.

⁴ Quality Progress, "Measuring Customer Satisfaction and Loyalty", Mar2009, Vol. 42 Issue 3, p64-65, 2p.

⁵ HARTLEY, DEANNA, "Customer Satisfaction through training", Chief Learning Officer; Feb2009, Vol. 8 Issue 2, p44-45, 2p

practical professional experience as well as creating simulated, realistic working conditions.

In the journal of services marketing⁶ their purpose is to reassess the properties of the hierarchical service quality model (HSQM) a previously introduced service quality assessment tool. The HSQM views service quality as a three-tiered concept with interaction quality, outcome quality and physical environment quality as initial sub-dimensions. The study aims to apply HSQM to two new service contexts and to further investigate the relationship between service quality, as measured by this instrument, and satisfaction and customer loyalty. To this end, five hypotheses are to be submitted to empirical tests.

Design/methodology/approach The data for empirically re-assessing the scale's properties and for testing the proposed hypotheses were collected from convenience samples of 250 customers of hairdresser/barber services and 300 customers of local phone service subscribers. The measurement model of the HSQM was re-assessed using confirmatory factor analysis. The hypotheses were tested using structural equation modeling.

Findings The results confirm the HSQM as predictor of satisfaction and loyalty. However, the results suggest that the significance of various service quality dimensions differs depending on the type of service.

Practical implications From a managerial perspective, the HSQM is useful for assessing service quality at various levels. It allows firms to recognize problems in their delivered interaction quality, outcome quality, or the physical service environment.

Originality/value The paper provides further evidence for the validity and reliability of the HSQM service quality measure.

⁶ Journal of Services Marketing, "Linking the hierarchical service quality model to customer satisfaction and loyalty", 2009, Vol. 23 Issue 1, p42-50, 9p, 3 charts

Becker, Hal⁷ in his study offers tips to maintain customer satisfaction even during a global recession. One way to protect the customer base and ensure that customers are satisfied is to get in touch with them personally. It is the job of salespeople to visit existing customers and check their level of satisfaction. The author urges readers to quit whining and worrying, and go be the Tiger Woods of sales or customer service.

Simon, Daniel⁸ in his study states that Using store-level panel data for a major supermarket company, they investigate the linkages between employee attitudes, customer satisfaction, and sales performance, while controlling for observed and unobserved differences across stores. We find that employee attitudes positively affect customer satisfaction with service but do not affect customer satisfaction with quality or value. Additionally, we find that customer satisfaction with service positively affects sales performance. Our results suggest that employee attitudes affect sales performance through their impact on customer service

Ndubisi, Nelson Oly⁹ study theoretically and empirically analyze relationship marketing (RM), customer satisfaction, and customer loyalty from an Asian perspective. A field survey of bank customers in Malaysia was conducted using a questionnaire. The data were factor-analyzed to determine the key dimensions of RM. The resulting dimensions were applied in the subsequent hierarchical multiple regression analysis conducted to determine the relationship between the relationship marketing dimensions (competence, communication and conflict handling), customer satisfaction, and customer

⁷ Becker, Hal, "Maintaining customer satisfaction takes a lot of hard work", Business First of Buffalo; 1/23/2009, Vol. 25 Issue 18, p27-27, 1/3p.

⁸ Simon, Daniel, " Managerial & Decision Economics", Jan2009, Vol. 30 Issue 1, p27-41, 15p

⁹ Ndubisi, Nelson Oly, " Journal of International Consumer Marketing", 2009, Vol. 21 Issue 1, p5-16, 12p

loyalty.

RESEARCH METHODOLOGY

The study on customer satisfaction towards retail outlets of BPCL is descriptive and analytical in nature. It is based on primary and secondary data. Primary data was collected through questionnaire and unstructured interview. The secondary data was obtained from publications, magazines and websites.

Discussions were held with employees of BPCL to make a thorough study on the activities and with the customers to have a better understanding of the customer satisfaction towards the services offered by the retail outlets.

SAMPLE DESIGN

The researcher has taken around total sample of 1172 for the present study. The sample size from Adhi gas agency is 566 and from the Sowmya gas agency is 606.

STATISTICAL TOOLS USED

The statistical tools used are chi-square test and simple percentage analysis.

LIMITATIONS

The study is confined to specific geographical location and thus the results cannot be generalised.

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

This chapter deals with analysis and interpretation of data collected through questionnaire.

Here the data collected are to compare two of the retail outlets, Adhi gas agency and Sowmya gas agency. In this Adhi gas agency is selling non-LPG products and Sowmya gas agency is selling only LPG products alone.

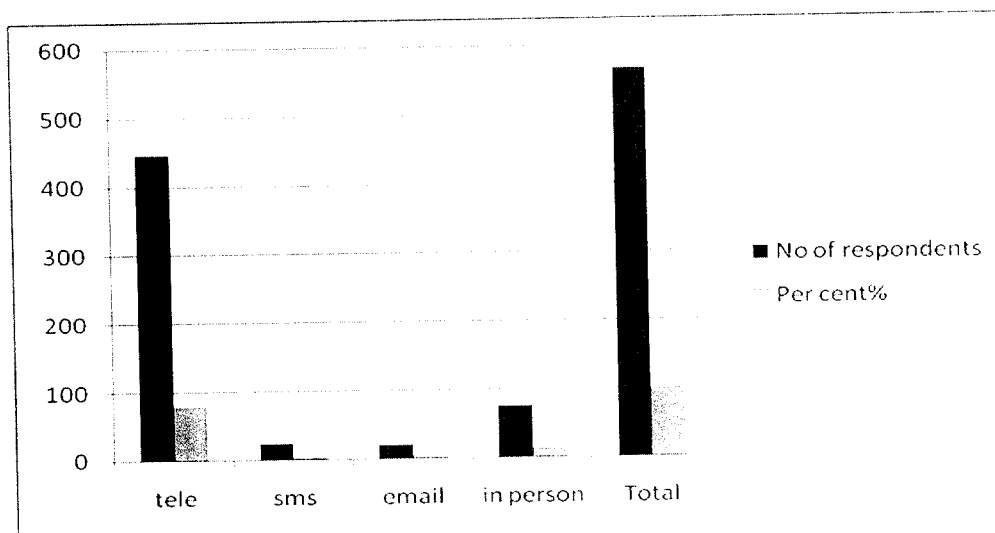
ANALYSIS FOR SOWMYA GAS AGENCY:

Table-1: Table showing the percentage distribution of respondents on the basis of mode of booking

Mode of booking	No. of respondents	Per cent%
Telephone	447	78.9
Sms	23	4.06
Email	20	3.54
In person	76	13.41
Total	566	100

From the above table it can be seen that from the total of 566 respondents 78.9(447) per cent of respondents are using telephone as the mode of booking, and 13.42(76) per cent of respondents are going in person for booking.

CHART 1: Chart showing the percentage distribution of respondents on the basis of mode of booking



Thus from this chart we can clearly interpret that majority of respondents are using telephone as the mode for booking.

Table 2 – Table showing the observed relationship between the two variables showing the satisfactory level and mode of booking.

observed bivariate table					
	Tel	Sms	email	in person	
satisfied	15	4	2	22	43
neutral	234	9	15	27	285
dissatisfied	198	10	3	27	238
	447	23	20	76	566

Table 3- Table showing the expected value between the two variables showing the satisfactory level and mode of booking.

Expected bivariate table				
	Tel	sms	Email	in person
satisfied	33.9594	1.74735	1.51943	5.77385
Neutral	225.08	11.5813	10.0707	38.2686
dissatisfied	187.961	9.67138	8.40989	31.9576

Table 4 – Table showing the chi square values

chi square table				
	Tel	Sms	Email	in person
Satisfied	21.1699	5.80815	0.30399	91.2001
Neutral	0.70709	1.15064	4.82555	6.63627
Dissatisfied	1.07234	0.02233	6.96012	1.53815

Hypothesis

Null hypothesis: Satisfactory level does not depend on mode of booking.

Here the table shows the chi square values for 6 degrees of freedom is 1.64

Table 5:

chi square table				
	Tel	sms	Email	in person
Satisfied	Reject	Reject	Accept	Reject
Neutral	Accept	Accept	Reject	Reject
Dissatisfied	Accept	Accept	Accept	Accept

From the above chi square table it can be seen clearly that in most of the cases the hypothesis is Accepted.

Thus we can conclude that the satisfactory level does not depend on the mode of booking.

Below calculation shows tables to find out the chi square values to identify the delay dependency and mode of booking.

Table 6: Table showing the observed values to identify the delay depends on mode of booking

Observed bivariate table					
Delayed days/mode of booking	Tel	Sms	Email	in person	
3days	260	15	10	31	316
4 to 7 days	149	7	9	21	186
8 to 11 days	22	1	1	15	39
11 to 15 days	10	0	0	7	17
>15 days	6	0	0	2	8
	447	23	20	76	566

Table 7: Table showing the expected values to identify the delay dependency on mode of booking

Expected bivariate table					
Delayed days / mode of booking	Tel	Sms	email	in person	
3days	249.562	12.841	11.1661	42.4311	316
4 to 7 days	146.894	7.5583	6.57244	24.9753	186
8 to 11 days	30.8004	1.58481	1.37809	5.23675	39
11 to 15 days	13.4258	0.69081	0.60071	2.28269	17
>15 days	6.31802	0.32509	0.28269	1.0742	8
	447	23	20	76	566

Table 8: Table showing the chi square values

Chi square values				
Delayed days/ mode of booking	Tel	Sms	Email	in person
3days	0.87317	0.72601	0.24355	6.15916
4 to 7 days	0.06039	0.08248	1.79326	1.26547
8 to 11 days	5.02892	0.4316	0.20747	36.4047
11 to 15 days	1.74829	1.38163	1.20141	19.4973
>15 days	0.03202	0.65018	0.56537	1.59578

Table 9: Table showing the acceptance or rejection of hypothesis.

Chi square values				
	Tel	sms	Email	in person
3days	Reject	Reject	Reject	Accept
4 to 7 days	Reject	Reject	Reject	Reject
8 to 11 days	Reject	Reject	Reject	Accept
11 to 15 days	Reject	Reject	Reject	Accept
>15 days	Reject	Reject	Reject	Reject

Hypothesis

Null hypothesis: Delayed number of days does not depend on the mode of booking

The chi square value for 12 degrees of freedom is taken.

From the above table we can see that in most of the cases the hypothesis is rejected thus we can conclude that delayed number of days depends on the mode of booking.

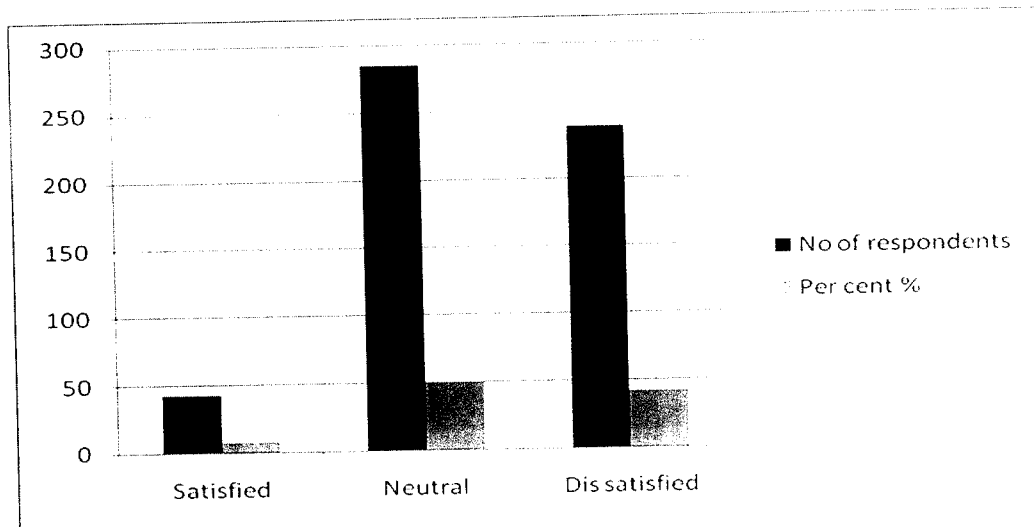
Observed bivariate table								
	Tel	Per cent	sms	Per cent	email	Per cent	in person	Per cent
< 3days	260	58.0357	15	65.2174	10	50	32	50.7937
4 to 7 days	149	33.2589	7	30.4348	9	45	21	33.3333
8 to 11 days	22	4.91071	1	4.34783	1	5	10	15.873
11 to 15 days	10	2.23214	0	0	0	0	0	0
>15 days	7	1.5625	0	0	0	0	0	0

Thus from the above table we can say that delayed percentage is more in case of booking through telephone than in case of booking in person.

Table 10 – Table showing the satisfactory level of the respondents

Satisfactory level	No of respondents	Per cent %
Satisfied	43	7.597173
Neutral	285	50.35336
Dissatisfied	238	42.04947

Chart 2 – chart showing the satisfactory level of the respondents



From the above chart and table we can see the nearly 50 per cent of the respondents marks the satisfactory level as neutral. And 42 per cent of the respondents are dissatisfied of the services provided.

Thus it can be observed that very few people are satisfied.

Table 11 Table showing the frequency distribution between delayed days and mode of booking.

Frequency distribution					
Delayed no of days/Mode of booking	Tel	Sms	Email	in person	
3days	260	15	10	31	316
4 to 7 days	149	7	9	21	186
8 to 11 days	22	1	1	15	39
11 to 15 days	10	0	0	7	17
>15 days	6	0	0	2	8
	447	23	20	76	566

From the above table it can be clearly seen that the cylinder delivery is delayed not more than 3 days in most of the cases.

Table 12: Table showing the frequency distribution between usage duration and delayed days.

Frequency table					
Usage duration/ delayed no. of days	< 15 days	16 to 30 days	31 to 45 days	46 to 60 days	> 60 days
< 3 days	3	20	8	227	58
4 to 7 days	12	15	22	20	117
8 to 11 days	16	5	2	11	5
11 to 15 days	6	0	1	8	2
> 15 days	5	0	0	1	2
Total	42	40	33	267	184

From the above table we can see that the average usage duration of cylinder is 46 to 60 days and also majority people get delayed delivery of not more than 3 days.

Table 13: Table showing the usage of cylinder and number of members in the family.

No of members/ usage of cylinder	< 15 days	16 to 30 days	31 to 45 days	46 to 60 days	above 60 days
1	0	0	0	4	175
2	0	0	0	76	64
3	0	0	0	108	47
4	0	0	0	83	38
5	0	0	31	53	0
6	1	28	3	0	0
7	0	2	0	0	0
8	2	0	0	0	0
9	4	0	0	0	0

From the above table it can be seen that if there are more members in the family then there will be more usage of LPG, thus instantly their visit to the retail outlet will be increasing, thus the service provider has to concentrate more on the people who are having more members.

Table 14: Table showing the frequency distribution between monthly income and mode of booking

Monthly income/ mode of booking	Tel	sms	Email	in person
< 10000	123	7	8	16
10001 – 20000	80	1	7	7
20001 – 30000	203	14	5	31
30001 – 40000	7	0	0	0
> 40000	11	1	0	0

From the above table we can clearly understand that people having high monthly income will not visit the store for booking, they will use only telephone as the mode of booking. Thus mostly middle class people will visit the store for booking purpose, so that the retailer should concentrate on the non LPG products which can be easily attracted by the middle class people.

Findings for Sowmya gas agency:

- ✓ From the total of 566 respondents, 78.9(447) per cent of respondents are using telephone as the mode of booking, and 13.42(76) per cent of respondents are going in person for booking.
- ✓ The satisfactory level does not depend on the mode of booking.
- ✓ The delayed number of days depends on the mode of booking.
- ✓ 58 % of people get delayed delivery of cylinder for less than 3 days in case of booking through telephone, but only 50 % of people gets delayed delivery in case of booking through person.
- ✓ Around 2 % of people get delayed delivery for more than 15 days in case of booking through telephone, but no one is getting late delivery for more than 15 % in case of booking in person.
- ✓ Around 8% of people are satisfied of the service provided.
- ✓ Around 42 % of people are dissatisfied of the service provided.
- ✓ cylinder delivery is delayed not more than 3 days in most of the cases.
- ✓ The average usage duration of cylinder is 46 to 60 days and also majority people get delayed delivery of not more than 3 days.
- ✓ If there are more members in the family then there will be more usage of LPG, thus instantly their visit to the retail outlet will be increasing, thus the service provider has to concentrate more on the people who are having more members.
- ✓ People having high monthly income will not visit the store for booking, they will use only telephone as the mode of booking. Thus mostly middle class people will visit the store for booking purpose, so that the retailer should

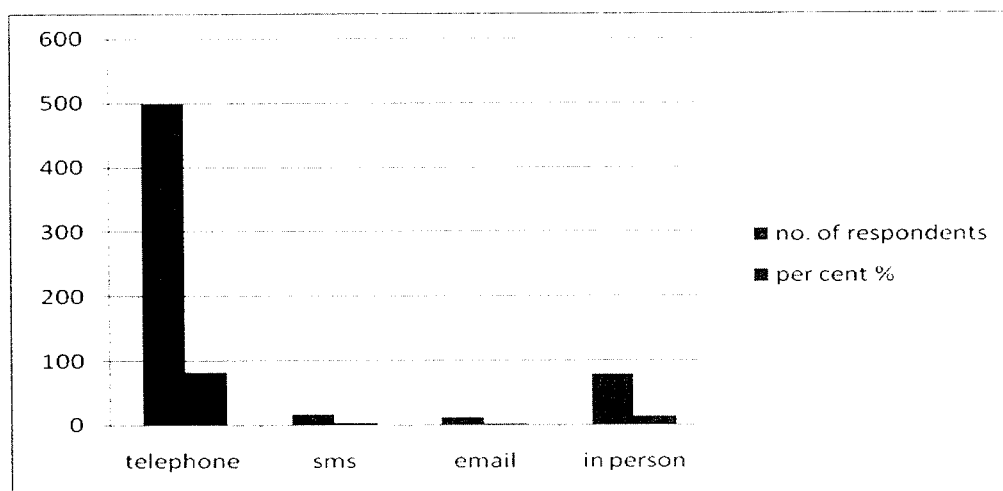
concentrate on the non LPG products which can be easily attracted by the middle class people.

ANALYSIS FOR ADHI GAS AGENCY:

Table-15: Table showing the percentage distribution of respondents on the basis of mode of booking

Mode of booking	No. of respondents	Per cent %
telephone	499	82.34323
Sms	17	2.805281
Email	12	1.980198
in person	78	12.87129

CHART 3: Chart showing the percentage distribution of respondents on the basis of mode of booking



From the above table majority of 82 per cent of the respondents are using telephone as the mode of booking and 12 per cent of the respondents are visiting the store for booking.

Table 16 – table showing the observed relationship between the two variables showing the satisfactory level and mode of booking.

observed frequency				
Satisfactory level/ mode of booking	Tel	sms	email	in person
satisfied	7	0	0	2
Neutral	264	9	2	47
Dissatisfied	228	8	10	29
	499	17	12	78

Table 17- Table showing the expected value between the two variables showing the satisfactory level and mode of booking.

Expected frequency				
Satisfactory level/ mode of booking	Tel	sms	email	in person
satisfied	7.4109	0.2525	0.1782	1.1584
Neutral	265.15	9.033	6.3762	41.446
Dissatisfied	226.44	7.7145	5.4455	35.396

Table 18 – Table showing the chi square values

chi square table				
Satisfactory level/ mode of booking	Tel	Sms	email	in person
satisfied	0.04556	0.50495	0.35644	1.22281
Neutral	0.00989	0.00024	6.00713	1.4888
Dissatisfied	0.02139	0.02113	7.61836	2.31152

Hypothesis

Null hypothesis: Satisfactory level does not depend on mode of booking

Here the table shows the chi square values for 6 degrees of freedom is 1.64

chi square table				
	Tel	sms	email	in person
Satisfied	Accept	Accept	Accept	Accept
Neutral	Accept	Accept	Reject	Accept
Dissatisfied	Accept	Accept	Reject	Reject

From the above chi square table it can be seen clearly that in most of the cases the hypothesis is accepted.

Thus we can conclude that the satisfactory level does not depends on the mode of booking.

Below calculation shows tables to find out the chi square values to identify the delay dependency and mode of booking.

Table 19: Table showing the observed values to identify the delay depends on mode of booking.

observed bivariate table					
Delayed no. of days / mode of booking	Tel	sms	email	in person	
3 days	298	11	9	36	354
4 to 7	171	5	2	26	204
8 to 11	22	1	0	14	37
11 to 15	6	1	0	1	8
above 15	2	0	0	1	3
Total	499	18	11	78	606

Table 20: Table showing the Expected values to identify the delay depends on mode of booking.

Expected bivariate table					
Delayed no. of days / mode of booking	Tel	sms	email	in person	
3 days	291.495	10.5149	6.42574	45.5644	354
4 to 7	167.98	6.05941	3.70297	26.2574	204
8 to 11	30.467	1.09901	0.67162	4.76238	37
11 to 15	6.58746	0.23762	0.14521	1.0297	8
above 15	2.4703	0.08911	0.05446	0.38614	3
Total	499	18	11	78	606

Table 21: Table showing the chi square values

chi square values				
Delayed no. of days / mode of booking	Tel	sms	email	in person
3 days	0.29033	0.04477	2.06258	4.01528
4 to 7	0.10857	0.37045	1.56637	0.00505
8 to 11	4.70608	0.01784	1.34323	35.8366
11 to 15	0.10478	4.89191	0.29043	0.00171
above 15	0.17907	0.17822	0.10891	1.95176

Hypothesis:

Null Hypothesis: Delayed days does not depends on mode of booking.

Table value is taken for 12 degrees of freedom

chi square values				
Delayed no. of days / mode of booking	Tel	Sms	email	in person
3 days	Reject	Reject	Reject	Reject
4 to 7	Reject	Reject	Reject	Reject
8 to 11	Reject	Reject	Reject	Accept
11 to 15	Reject	Reject	Reject	Reject
above 15	Reject	Reject	Reject	Reject

From the above table it can be seen that in most of the cases the null hypothesis is Rejected.

Thus the delayed number of days depends on the mode of booking.

Table showing the percentage.

Observed bivariate table								
	Tel	Per cent	sms	Per cent	Email	Per cent	in person	Per cent
3days	298	59.7194	11	61.1111	9	81.8182	36	47.3684
4 to 7 days	171	34.2685	5	27.7778	2	18.1818	26	34.2105
8 to 11 days	22	4.40882	1	5.55556	0	0	14	18.4211
11 to 15 days	6	1.2024	1	5.55556	0	0	0	0
>15 days	2	0.4008	0	0	0	0	0	0

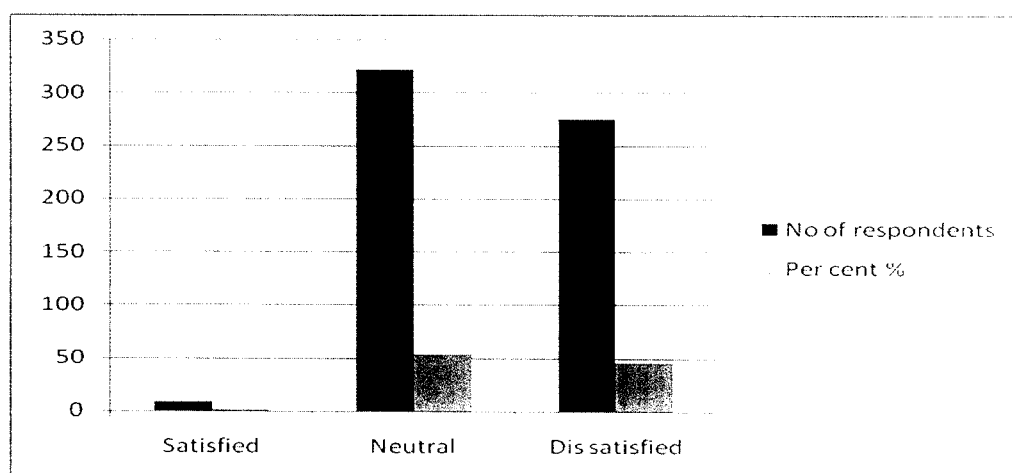
Table

Thus from the above table, we can see that percentage of delay is more in case of booking in telephone than in case of going in person.

Table 22 – Table showing the satisfactory level of the respondents

Satisfactory level	No of respondents	Per cent %
Satisfied	9	1.485149
Neutral	322	53.13531
Dissatisfied	275	45.37954

Chart 4 – chart showing the satisfactory level of the respondents



From the above chart and table we can see the nearly 53 per cent of the respondents marks the satisfactory level as neutral. And 45 per cent of the respondents are dissatisfied of the services provided.

Thus it can be observed that very few people are satisfied.

Table 23: Table showing the frequency distribution between delayed days and mode of booking

Frequency Table					
Delayed no of days/Mode of booking	Tel	sms	Email	in person	
< 3days	298	11	9	36	354
4 to 7 days	171	5	2	26	204
8 to 11 days	22	1	0	14	37
11 to 15 days	6	1	0	1	8
>15 days	2	0	0	1	3
	499	18	11	78	606

From the above table it can be clearly seen that the cylinder delivery is delayed not more than 3 days in most of the cases.

Table 24: Table showing the frequency distribution between usage duration and delayed number of days.

Frequency distribution table					
Usage duration/ delayed no. of days	< 15 days	16 to 30 days	31 to 45 days	46 to 60 days	> 60 days
< 3 days	5	26	32	265	26
4 to 7 days	6	21	47	40	90
8 to 11 days	9	5	4	17	2
11 to 15 days	3	0	0	4	1

> 15 days	2	0	0	0	1
Total	5	26	32	265	26

From the above table we can see that the average usage duration of cylinder is 46 to 60 days and also majority people get delayed delivery of not more than 3 days.

Table 25: Table showing the frequency distribution between number of members and usage of cylinder

No of members/ usage of cylinder	< 15 days	16 to 30 days	31 to 45 days	46 to 60 days	above 60 days
1	0	0	0	3	40
2	0	0	0	59	27
3	0	0	0	125	59
4	0	0	25	105	1
5	0	19	48	31	0
6	1	26	10	0	0
7	2	0	0	0	0
8	1	1	0	0	0
9	2	2	0	0	0

From the above table it can be seen that if there are more members in the family then there will be more usage of LPG, thus instantly their visit to the retail outlet will be increasing, thus the service provider has to concentrate more on the people who are having more members.

Table 26: Table showing the frequency distribution between the monthly income and mode of booking

Monthly income/ mode of booking	Tel	Sms	email	in person
< 10000	123	7	8	16
10001 – 20000	80	1	7	7
20001 – 30000	203	14	5	31
30001 – 40000	7	0	0	0
> 40000	11	1	0	0

From the above table we can clearly understand that people having high monthly income will not visit the store for booking, they will use only telephone as the mode of booking. Thus mostly middle class people will visit the store for booking purpose, so that the retailer should concentrate on the non LPG products which can be easily attracted by the middle class people.

Findings for Adhi gas agency

- ✓ Majority of 82 per cent of the respondents are using telephone as the mode of booking and 12 per cent of the respondents are visiting the store for booking.

The satisfactory level does not depends on the mode of booking.

- ✓ The delayed number of days depends on the mode of booking.
- ✓ Around 60 per cent of people are getting delayed delivery of less than 3 days in case of booking through telephone, but only 47 per cent of people are getting delayed delivery due to booking in person.
- ✓ Around .5 per cent of people are getting delayed delivery incase of booking through telephone but no one is getting delayed delivery not more than 7 days in case of booking in person.
- ✓ Around 46 per cent of people are dissatisfied of the service provided.
- ✓ The average usage duration of cylinder is 46 to 60 days and also majority people get delayed delivery of not more than 3 days.
- ✓ If there are more members in the family then there will be more usage of LPG, thus instantly their visit to the retail outlet will be increasing. thus the service provider has to concentrate more on the people who are having more members.

Overall Findings

- ✓ Majority of people are using telephone as the mode of booking.
- ✓ The satisfactory level does not depend on the mode of booking.
- ✓ The delayed number of days depends on mode of booking.
- ✓ Majority of people are getting delayed delivery of cylinders due to booking through telephone, but people who are booking in person are not getting too much of delay in their delivery.
- ✓ In case of Adhi gas agency the satisfied percent of respondents is only 2 percent but in case of Sowmya gas agency the satisfied percentage is 7%.
- ✓ In case of Sowmya gas agency around 42% of people are dissatisfied but in case of Adhi gas agency 46% of people are dissatisfied.
- ✓ Thus additional business affects negatively the satisfactory level.
- ✓ The average usage duration of cylinder is 46 to 60 days and also majority people get delayed delivery of not more than 3 days.
- ✓ If there are more members in the family then there will be more usage of LPG, thus instantly their visit to the retail outlet will be increasing, thus the service provider has to concentrate more on the people who are having more members.
- ✓ People having high monthly income will not visit the store for booking, they will use only telephone as the mode of booking.

Thus mostly middle class people will visit the store for booking purpose, so that the retailer should concentrate on the non LPG products which can be easily attracted by the middle class people.

Recommendations for consideration:

- Person who are booking through telephone are getting delayed delivery, thus the retailer should appoint a service personnel, in order to properly respond to the customers
- Since the additional business affects the satisfactory level negatively, the retailer should concentrate more in serving the customers when the product line increases.
- The service provider who is delivery additional services should design their advertising channel in such a way to attract big families
- Middle class people's visit is more to the store, thus the retailer should display the products which is more useful to the middle class people.

Survey on Customer Satisfaction on LPG services for Domestic cylinders

1. Name of the customer : _____
2. Address: _____

3. No. of family members: _____
4. No. of earning members: _____
5. Monthly Income: a) below 10,000 Rs b) 10.001-20.000 Rs c) 20.001-30.000

 d) 30,001-40.000 Rs e) 40.001 and above.
6. The average usage duration of a cylinder(14.2kg): a) <15 days

 b) 16-30 days c) 31-45 days d) 46-60 days
 e) above 60 days.
7. If you are a on-tap consumer, your average usage per month in kg: _____
8. Mode of booking: a) telephone b) SMS c) e-mail

 d) In person.
9. Response of the retailer at the time of booking: a) Satisfied b) Neutral

 d) Dissatisfied.

10. If there is waiting, do you get a booking number : a) Yes b) No.

11. Is delivery given in time: a) Yes b) No.

12. If the delivery is delayed, then how many days it get delayed: a) 3 days b)4-7days
c) 8-11days d) 11-15 days e) above 15 days.

13. The response of the delivery boy during the delivery: a) Satisfied b) neutral
c) Dissatisfied.

Thank You.

Survey on Customer Satisfaction on LPG services for commercial cylinders

1. Name of the customer : _____
2. Address: _____

3. The average usage duration of a cylinder(19kg):
a) <15 days
b) 16-30 days c) 31-45 days d) 46-60 days
e) above 60 days.
4. Mode of booking:
a) telephone b) SMS c) e-mail
d) In person.
5. Response of the retailer at the time of booking:
a) Satisfied b) Neutral
d) Dissatisfied.
6. If there is waiting, do you get a booking number : a) Yes b) No.
7. Is delivery given in time: a) Yes b) No.
8. If the delivery is delayed, then how many days it get delayed:
a) 3 days b) 4-7days
c) 8-11days d) 11-15 days e) above 15 days.
9. The response of the delivery boy during the delivery:
a) Satisfied b) neutral
c) Dissatisfied.

Bibliography

www.bharatpetroleum.in

www.eia.doe.gov/emeu.cabs/india.html

www.teriin.org

www.ebscohost.in