PERFORMANCE INDICATORS AND CUSTOMER SATISFACTION: WITH SPECIAL REFERENCE TO SELECTED CALL CENTERS OF INDIA

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ABSTRACT
All over the world Call centers are becoming the key channels of communication with the customers. The call center industry is one of the most rapidly growing industries in the world today. Call centers are providing a mix of services like customer support, technical support, sales and telemarketing, administrative support, customer relationship management, financial services, human resource management. Today, Indian call center industry is a huge industry and classified into three major areas, inbound, outbound and web enabled services. More than 330,000 people are employed in Indian call centers and this industry is worth about £3.2 billion a year and growing at a very fast rate of around 25% per annum. Today, more than 500 companies of UK, USA and other developed countries are outsourcing their call center activities to India.

Indian Call Center companies are trying to satisfying customers by reducing the overall cost of transaction and improving the quality of interaction with customers. But it’s become difficult for a call centers to make a balance between quality and efficiency while trying to achieve companies objectives. The aim of the present study is to find out key performance indicators that drive management practices in Indian Call Center Industry and also tries to investigate the relationship between various measures of call centers performance used in call centers in providing customer satisfaction. The present research paper address both qualitative and quantitative performance measures used in call centers and their relevance to customer satisfaction.

Key Words: Call centers, Telemarketing, Performance measures, Customer satisfaction.

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INTRODUCTION

The call center industry is one of the most rapidly growing industries in the developed world today. “The Call Center Association (1999), defines call centers as a physical or virtual operation within an organization in which a managed group of people spend most of their time doing business by telephone, usually working in a computer – automated “environment” (Gilmore, 2001).

A call center is a centralized office meant for the purpose of receiving and transmitting a large volume of information by telephone. Call centers are required for large companies to sell or promote their goods and services as well as for the after sales services and customer queries.

Call Centers Services

Following are the important services of call centers in India:

1. Customer Support Services: It includes answering customer queries through voice e-mail and chat.
2. Technical Support Services: It includes finding and providing solutions for customer problems related to hardware, software, peripherals, and Internet.
3. Sales and Telemarketing Services: It includes interaction with customers, selling or promotion of products or services.
4. Administrative Support: It include various services associated with administration like indexing, form processing, data entry, document conversion, scanning, etc.
5. Customer Relationship Management: It includes services like order taking, customer service, product support services, technical help desk, and market research.
6. Finance and Accounting: It include internal auditing, travel expenses, time and expense management, credit and debt analysis, collections, invoicing, accounts payable, accounts receivable and billing-dispute resolution and various other services related with finance & Accounting.
7. Human Resources Management: It includes services related to management of human resource like recruitment, selection, training & development, attrition/retention, database management, contract-worker management, etc.

Sector Outlook of Call Centers

Global Call Center Market Breakup (Industry Wise):
Call Center Industry in India

Today, Indian call center industry is a huge industry. Indian call centers services are classified into three broad areas, inbound, outbound and web enabled services. India is the world’s leading business processing outsourcing (BPO) hub, part of a global industry worth $ 153bn in revenues last year (According to Nasscom-2011).

Indian Call Centers are providing employment to more than 330,000 people and industry is worth about £3.2 billion a year and growing at a very fast rate of around 25% per annum. Today, more than 500 companies of UK, USA and other European companies are outsourcing their call center activities to India.

Market Share Segmentation of Call Center Service Providers
Large Market Presence (Revenue Greater Than 8 Billion Rupees)
- IBM

Midsize Market Presence (Revenue between 495 Million Rupees and 1.35 Billion Rupees)
- 3i-Infotech
- First source
- Perot Systems
- Site
- Wipro

Small Market Presence (Revenue between 105 Million Rupees and 365 Million Rupees)
- Aditya Birla Minacs
- Alcatel-Lucent
- Amdocs
- ADP
- First Data
- HP
Call Centers are providing the new ways for companies to communicate with their customers and are playing an important role in delivering quality and providing customer satisfaction. The management of performance and customer satisfaction is most important for call centers. This study will explore the key performance measures and their role in providing customer satisfaction. The study also discusses the dominant efficiency measures as well as measures for customer satisfaction and service quality.

OBJECTIVES OF THE STUDY

Following are the main objectives of present research paper:
1. To find out common performance management practices used by Indian Call Centers.
2. To find out key performance indicators used in Indian Call Centers.
3. To find out the relation between key performance indicators used in Indian Call Centers and customer satisfaction.

LITERATURE REVIEW

In India due to a huge growth in IT sector and telecommunication, Indian Call Center Industry is also seen a rapid growth during the last decade. There are huge opportunities in this sector but in order to be successful companies needs to satisfy customers in a better way while lowering down the total cost. According to Bird, due to recent globalization call center industry shows a rapid rate growth in developing countries and worldwide organizations are outsourcing their call centers activities to these lower cost regions. The growth in call centers industry in these regions reflects aspiration of companies to improve access to their business in more efficient ways to achieve customer satisfaction. (Bird, 1998)

The advance development in technologies is forcing the companies to restructure their ways to manage relationships with their customers. Many industries, such as banking, insurance, hospitality etc. are innovatively applying state-of-the-art technology in their customer relationship management through telephone and internet banking. Call Centers are providing organizations valuable information about the performance of their services (Staples et. al, 2001). They allow organizations to understand in a better way, how customers feel about service performance. (Gilmore, 2001)

Metricnet’s research suggest that majority of call centers are using metrics to track and trend their performance and nothing more. Unfortunately, doing this, a call center looses the real value of performance measurement by failing to exploit the diagnostic capabilities of KPIs.

Eric Zbikowski in his studies provides five most important performance metrics for customer support call centers. These are as following:
- Cost occurred per call,
- Customer Satisfaction,
• First contact resolution rate,
• Aggregate call center performance, and
• Agent utilization.

According to Alan Miciak of Calgary University and Mice Dismarais of the service quality measurement group, the majorities of measures used by call centers are operation efficiency measures and have to do with telephone technology in use and adherence of employee standards of practice. In a study done by Radnor & McGuire (2004), they found that the role of call centre manager is more administrative rather than managerial.

A large number of researches were done to investigate the conflicting nature of call centers objectives. According to the studies of Bain & Taylor, 2000, Batt, 1999, Houlihan, 2002, Wallace, Eagles & Walderssee, 2000, the two objectives, efficiency and quality are always contradictory to the call centers.

Audery Gilmore and Lesley Moreland in their study identify the following performance measures:
• Numbers of call answered within past ten minutes,
• Calls waiting to be answered,
• Numbers of agents who are currently taking calls,
• Numbers of agents who are waiting to take calls,
• Numbers of “not ready” agents, and
• Numbers of agents on outgoing calls or on a call to another agent.

Jon Anton of the Prudence University in Indiana in his study claims that the following measures help in tracking quality of call centre services:
• ASA (average speed of answering the calls),
• Queue time (amount of time caller is in the line for answering of his call),
• Percentage of callers who have satisfactory resolution on the first call,
• Abandonment rate (the percentage of callers who hang up or disconnect prior to answer of call),
• Work time after call (time needed to finish necessary paper work, do research after the call itself has been completed),
• Percentage of calls blocked (percentage of callers who receive a busy signal and could not even get in to the queue),
• Time before abandoning (average time caller held on before giving up in queue),
• Inbound calls per TSR eight-hour shift,
• TSR turnover (the number of telephone service representatives who left in a period of time usually annually),
• Total calls received, and
• Service levels (calls answered in less than x seconds divided by number of total calls).

Researchers from the Netherlands identified that following are the expectation of call centre customer from the staff:
• Self Efficacy,
• Adaptability,
Empathy for customers,
Timely reply,
Proper way of communication,
Reliability,
Perception of commitment to service quality & customer satisfaction,
Empowerment,
Proper Staff Attitude,
Explanation of their queries,
Competency in handling complaints,
Maintenance of Security, and
Recognition of the customer.

Empirical test model designed a model of customer expectation dimension for voice to voice service encounters. The model constitutes of following scales:

- Addictiveness,
- Assurance of services,
- Empathy for customers, and
- Authority.

Many researchers suggested that call centers can use this four scale model as the basis for performance measurement, to identify needs for customers.

**ICMI (International Customer Management Institute)** developed seven key matrices with the help of top performing call centers and expert industry stakeholders. The matrix provides seven KPIs for providing better customer satisfaction. Following are the seven key matrices:

1. **First Call Resolution**: According to ICMI no single KPI has a bigger impact on customer satisfaction other than the First Call Resolution (FCR). Customer contact research and consulting firm Service Quality Management (SQM) group finds that for every 1% improvement in FCR result into 1% improvement in customer satisfaction. In a study of more than 150 call centers, SQM found that the call centers who have achieved “world class” customer satisfaction rating had an average FCR of 86%, while centers that were not good in customer satisfaction rating had an average FCR of 67%.

2. **Service Levels & Response Time**: Service levels & Response time are basic fundamentals for effective management of call centers and in providing customer satisfaction. The metrics tell us how a call center is accessible to customers, the numbers of agents needed to provide efficient service to the customers and how your call center service be will compare with other call centers in the industry.

3. **Adherence to Schedule**: Adherence to schedule is comprised of time spent in interacting with customers, as well as time spent in after call works, making necessary outbound calls and waiting for calls to arrive.

4. **Forecasting Accuracy**: It is defined as forecasted contact load vs. actual contact load. It reflects the percentage variance between the number of inbound customer contacts forecasted for a particular period of time and the numbers of said contacts actually received during that time period.
5. **Self-Service Accessibility**: It helps agents to enhance service efficiencies and to cut down the cost.

6. **Contact Quality**: It is one of the most important customer oriented performance metric used in most of the call centers. Contact quality is typically accessed via monitoring of agents interactions with the customers. Common contact quality criteria includes:
   - Use of appropriate greetings and other call scripts,
   - Courtesy and professionalism in dealing,
   - Capturing key customer data,
   - Providing customers with correct and relevant information according to their needs,
   - Try for First-contact resolution,
   - Accuracy in data entry and call coding, and
   - Grammar and spelling accuracy in text communication (email and chat).

7. **Customer Satisfaction**: One of the most important and critical metrics for the success of any call center. All the companies know the importance of gaining high customer satisfaction and focus on high customer centric practices.

Anton, Clevelland and Mayben, developed a model for measurement of performance of call centers. It includes:
- Total no. of calls offered,
- Total no. of calls handled,
- Abandonment rate,
- Total calls blocked,
- Average handling time per call,
- Average speed of answering,
- Average queue length,
- Service levels,
- Occupancy,
- Adherence to schedule,
- First call resolution,
- Quality of calls,
- Staff turnover rate, and
- Customer satisfaction

In a study of Ventana research (Dawson, 2006), it was found out that most call centers still not recognized that the best way how to reduce cost and to identify why customers are calling. Only 23% of call centers have deployed root cause analysis which enables the call centers to identify process changes, manufacturing improvements, marketing and sales messaging or better ways for the call centers to perform. It was found out that most of the call centers problems are related with call duration, average answering time and customer satisfaction. Most call centers are seemed to miss the important link between employee satisfaction, service quality, customer satisfaction and profitability. (Marr & Parry, 2004)
Robinson and Morley (2006) make a case of First Call Resolution (FCR). FCR is defined as percentage of calls that do not require any further contacts to address the customer’s reasons for calling or which are solved in first call. Levin (2007) also supports that FCR has the biggest impact on customer satisfaction.

Feinberg et. Al., (2000) empirically tested the 13 critical operational determinants of call centers excellence, by analyzing the data collected from 514 call centers, and find out that only two out of thirteen determinants, namely “percentage of calls closed in first contact” & “average abandonment rate” have any significant influences on caller satisfaction.

Heinen (2006) relates that high performing call centers typically change the measures of success by letting agents talk as long as necessary to callers that are targeted for retention or additional services.

Reynolds (2006) suggested that conversion rate should be adopted as a key metric for performance measurements. Conversion rate is the percentage of transactions in which sales opportunity is translated into actual sale.

RESEARCH METHODOLOGY

The present research paper is based on primary as well as secondary data. Secondary data was collected and analyzed first to find studies on key performance indicators that drive management practices in Indian Call Center Industry. Primary data was collected with the help of specially designed questionnaire and interview method. The respondents included were senior managers belonging to quality or operation divisions in large call centers in India, major customers, customer care executives and other related persons.

Sample Size: 150
Sample Unit: Call centers employees and customers.
Measuring Instrument: Questionnaire (including both, open handed and close handed)

DATA ANALYSIS

Data collected through questionnaire is analyzed and following results are found out:
Availability of Call Monitoring Systems in Indian Call Centers

Table 1.1: Important Aspects of Call Monitoring in Indian Call Centers

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Items</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Average speed of answer</td>
<td>10.5</td>
</tr>
<tr>
<td>2</td>
<td>Quality of interaction</td>
<td>60.2</td>
</tr>
<tr>
<td>3</td>
<td>Abandonment rate</td>
<td>5.6</td>
</tr>
<tr>
<td>4</td>
<td>Queue Time</td>
<td>15.3</td>
</tr>
<tr>
<td>5</td>
<td>Others</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Table 1.2: Ranking of Items According to their Importance in Measuring Customer Satisfaction

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Items</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality of interaction</td>
<td>60.2</td>
<td>1</td>
</tr>
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<td>2</td>
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<td>5</td>
<td>Others</td>
<td>8.4</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2: Important Aspects of Service Quality Measurement in Indian Call Centers

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Items</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Competence</td>
<td>15.9</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Access</td>
<td>15.5</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Courtesy</td>
<td>15.1</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Reliability</td>
<td>10.7</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Communication</td>
<td>10.3</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Responsiveness</td>
<td>10.1</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>Security</td>
<td>6.2</td>
<td>7</td>
</tr>
<tr>
<td>8</td>
<td>Credibility</td>
<td>5.1</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td>Other</td>
<td>11.1</td>
<td>9</td>
</tr>
</tbody>
</table>
Focus Area of Call Centers

![Bar chart showing focus areas of call centers]

Table 3: Highest Weighted Key Performance Indicators (KPIs)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>KPIs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Qualitative</td>
<td>25.5</td>
</tr>
<tr>
<td>2</td>
<td>Quantitative</td>
<td>17.1</td>
</tr>
<tr>
<td>3</td>
<td>Financial</td>
<td>23.8</td>
</tr>
<tr>
<td>4</td>
<td>Customers Satisfaction</td>
<td>23.1</td>
</tr>
<tr>
<td>5</td>
<td>Level of Services</td>
<td>10.5</td>
</tr>
<tr>
<td>6</td>
<td>Sales</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 4: Effective Measures for the Success of Call Centers in India

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Items</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Customer Satisfaction</td>
<td>25.5</td>
</tr>
<tr>
<td>2</td>
<td>Average Handling Time</td>
<td>3.6</td>
</tr>
<tr>
<td>3</td>
<td>Service Quality</td>
<td>23.8</td>
</tr>
<tr>
<td>4</td>
<td>Technology Effectiveness</td>
<td>15.2</td>
</tr>
<tr>
<td>5</td>
<td>Staff Turn Over Ratio</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>No. of Calls Taken</td>
<td>2.6</td>
</tr>
<tr>
<td>7</td>
<td>Others</td>
<td>19.3</td>
</tr>
</tbody>
</table>

This study uses various items in questionnaire to find out main focus area of measuring performance of Indian call center. The analysis of data shows quality of interaction with customers (60.2%) as the main concept used by Indian call centers in monitoring calls and in assessing customer satisfaction as compared to other efficiency measures, like queue time, average speed of answers and abandonment rate.

RESULT

Measurement of performance and its management is most important for the call centers, especially in delivering customer satisfaction. From this study, the ways organization measure and manage customer’s satisfaction is explored. It was also found that most of the call centers are missing the important link between
employee satisfaction, service quality, customer satisfaction and profitability. The study also identifies important key performance indicators which are typically categorized into service, quality, and efficiency measures.

1. **Service Measures**: There are the measures associated with service delivery in the call centers. It includes:
   - **Accessibility**: Which include blockage, hours of operation, abandons self service availability.
   - **Speed of Service**: It includes service levels, average speed of answer, and longest delay in queue.

**Quality Measures**: Following are the measures associated with quality in the call centers:
   - **Call Handling Process**: It includes telephone etiquette, knowledge and competency, error and rework rate, adherence to protocol.
   - **Resolution**: Includes First call resolution rate and transfer rate.

3. **Efficiency Measures**: Following are the measures associated with efficiency in the call centers:
   - **Contact Handling**: Includes average handle time, after-call work time, on hold time.
   - **Resource Utilization**: Includes agent occupancy, staff shrinkage, schedule efficiency, schedule adherence, availability.
   - **Cost Efficiency**: Includes conversion rate and cost per call.

The study analyze both quantitative measures like schedule adherence, availability, average handle time, average conversion rate, on hold and transfer rates and qualitative measures like telephone etiquette and communication skills, product and service knowledge, completeness of call handling and adherence to pre decided procedures and processes.

This study uses various items in questionnaire to find out main focus area of measuring performance of Indian call center. The result of the study shows quality of interaction with customers (60.2%) to be a most important measure of performance having great impact on customer satisfaction as compared to other efficiency measures, like queue time, average speed of answers and abandonment rate.

From the study it was find out that most important aspect of call monitoring system is quality of interaction with customers (60.2) followed by queue time(15.3), average speed of answering(10.5), abandonment rate (5.6).

The study also revealed the important aspects of service quality measurements in Indian call centers. Result of analysis of data shows competence (15.9), access (15.5), and courtesy (15.1) are the most important aspects of service quality measurements followed by reliability (10.7), communication (10.3), responsiveness (10.1), and security (6.2).
According to the study, the main focus of Indian call centers is customers (66) followed by employees (22) and agents (12). The highest weighted performance indicators were found to be qualitative (25.5), followed by financial (23.8), customer satisfaction (23.1), and quantitative (17.1).

According to the study, the effective measures that Indian call centers are using for overall success are customer satisfaction (25.5), service quality (23.8), technical effectiveness (15.2).

From the study, following key performance indicators are identified which are more important for measuring call centers performance and satisfying customers:

- Quality of interaction with customers,
- Service level & response time,
- Adherence to schedule,
- Forecasting accuracy,
- Self-service accessibility,
- Contact quality,
- Calls offered,
- Calls handled,
- Abandonment rate,
- Calls blocked,
- Average handle time,
- Average speed to answer,
- Average queue length,
- Service level,
- Occupancy, and
- Staffs turn over.

CONCLUSION

The present research paper identifies four areas of performance for call centers namely, operational efficiency, customer satisfaction, service quality and employee satisfaction. Performance measurement and identification of key performance indicators are necessary for maintaining quality, service, efficiency and more over satisfying the customers. Performance measurements make call centers enables to track and trend performance, identify, diagnose and correct call center performance and individual performance and also help in providing customer satisfaction. The present research paper identify the key performance indicators and common performance management practices that are commonly used in Indian call centers and also the role of key performance indicators in providing customer satisfaction. Hence all the three objectives of research paper are achieved.
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