CHAPTER 1—INTRODUCTION

Researcher’s Overview

The purpose of this research is to study service gaps model of service quality from customer perspective. The study takes in-depth view of service quality; and tests predictive relationships between internal service gaps (knowledge gap, design gap, delivery gap & communication gap) with external (customer) gap. The study also analyzes television brand differentiation in retail service quality at television retailers.

Service sector is the largest and the fastest growing sector of global economy. Even after various challenges faced by Indian retail industry; the industry, specifically organized retail industry is showing encouraging growth. In last few decades, Indian television industry has not only evolved on; product technology, and retail formats; but has also witnessed changes in brand leadership when older brands have lost to new brands.

Since measurement and operationalizing service quality is a challenge; service gaps model is recommended to measure and operationalize the concept. There are continued debates, and conflicting views among researchers over rationality of using the model.

This chapter discusses; background of the study i.e. service industry, retail industry, gaps model of service quality, internal & external service quality, and operationalization & measurement of service quality. The chapter uses information primarily from; economic survey of Government of India- 2015, research work in service quality by Parasuraman, service-profit chain of Heskett, official websites of television manufacturers, research reports by research consultants, and research articles. This chapter proposes a hypothesized research model for measurement and testing of internal service quality. It also formulates research question, defines research problems, objectives, scope, and identifies limitations of the work.

Background of the Study

In year 2013, India’s services sector has contributed 57% share in gross domestic product (GDP), and is the largest sector of the economy. The same year US GDP, which is approximately nine times larger than India’s, could clock in 78.6% of its GDP from service sector (Table 1). For India, service sector contribution is not only the highest, but is also growing consistently over past few years. In financial year
2014-15, service sector of India, grew 10.6% year-on-year, and is the fastest growing sector of the economy. In the same year all major service-sector activities are estimated to have done better. The segment ‘Trade, hotels & restaurants, transport & communication’ grew 8.4% as displayed in Table 2 (Government of India, 2015b; “The World Bank,” 2015).

In terms of gross value added (GVA), of the total growth in GVA, 72.4% is contributed by service sector alone (Government of India, 2015b). See Table 3.

![Figure 1. US GDP 2013; “The World Bank,” 2015](image1)

![Figure 2. India GDP 2013; “The World Bank,” 2015](image2)

<table>
<thead>
<tr>
<th>Table 1. US &amp; India Comparison</th>
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<tr>
<td>GDP 2013</td>
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<td>Services GDP</td>
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**India’s retail trade.** The ‘internal trade & repair services’ sector amounts to the business of INR.11,47,274 crore, and is 11% of nation’s GDP. It has grown 14.3% in financial year 2013-14. On the negative side; in year 2014 country’s global retail trade ranking has slipped to 20th position from 14th the year before. Major challenges faced by India’s retail sector are; high consumer price inflation, currency fluctuations, and stringent FDI norms (Government of India, 2015b).

In India, modern retail is picking up, even though its contribution is mere 8% of total market. E-commerce activities are expected to grow by whopping 50% in next 5 years. The major challenges faced by e-commerce businesses in India are; inventory management, logistics planning, resource availability, and security of transactions (Government of India, 2015b).

Table 2. *Growth in Gross Value Added (GVA)*

<table>
<thead>
<tr>
<th></th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
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<tbody>
<tr>
<td>Agriculture, forestry, &amp; fishing</td>
<td>1.2</td>
<td>3.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Industry</td>
<td>2.3</td>
<td>4.5</td>
<td>5.9</td>
</tr>
<tr>
<td>Mining &amp; quarrying</td>
<td>-0.2</td>
<td>5.4</td>
<td>2.3</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>6.2</td>
<td>5.3</td>
<td>6.8</td>
</tr>
<tr>
<td>Electricity, gas, water supply, &amp; other utility services</td>
<td>4</td>
<td>4.8</td>
<td>9.6</td>
</tr>
<tr>
<td>Construction</td>
<td>-4.3</td>
<td>2.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Services</td>
<td>8</td>
<td>9.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Trade, hotels &amp; restaurants, transport &amp; communication</td>
<td>9.6</td>
<td>11.1</td>
<td>8.4</td>
</tr>
<tr>
<td>Financing, insurance, real estate &amp; business services</td>
<td>8.8</td>
<td>7.9</td>
<td>13.7</td>
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<tr>
<td>Community, social,&amp; personal services</td>
<td>4.7</td>
<td>7.9</td>
<td>9</td>
</tr>
<tr>
<td>GVA at basic prices</td>
<td>4.9</td>
<td>6.6</td>
<td>7.5</td>
</tr>
<tr>
<td>GDP (at market prices)</td>
<td>5.1</td>
<td>6.9</td>
<td>7.4</td>
</tr>
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</table>

Note. At Constant (2011-12) Basic Prices % (Government of India, 2015a)

Retail in India is on the verge of momentous change. Highly fragmented Indian retail industry, with millions of unorganized mom-n-pop stores spread across length and breadth of the country is witnessing a major change for over a decade. Organized retailers are slowly spreading their roots across the markets and products.
Equipped with latest technologies and management concepts, these retailers are preparing themselves for new generation of business practices.

Table 3. Share of Gross Value Added (GVA)

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Agriculture and allied activities</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>18.9%</td>
<td>32.9%</td>
<td>48.2%</td>
</tr>
<tr>
<td>2012-13</td>
<td>18.7%</td>
<td>31.7%</td>
<td>49.6%</td>
</tr>
<tr>
<td>2013-14</td>
<td>18.6%</td>
<td>30.5%</td>
<td>50.9%</td>
</tr>
<tr>
<td>2014-15</td>
<td>17.6%</td>
<td>29.7%</td>
<td>52.7%</td>
</tr>
</tbody>
</table>

Note. At Factor Cost- Current Prices, Y-O-Y %; (Government of India, 2015a)

Consumer durable retailers dealing in range of products like television, washing machine, refrigerator, and whole range of electronic white & brown goods, are offering memorable experiences to their customers. These retailers are following services marketing concepts such as service quality, customer satisfaction and customer loyalty, customer experience and many more.

**Gaps Model of Service Quality**

From craftsmanship of early 19th century, to factory system of mid-19th, to mass manufacturing of late 19th; quality assurance has come a long way. Various goods quality management philosophies under total quality management received attention during industrialization. Concept of total quality management (TQM) using advanced technology was practiced mainly in manufacturing of goods. Goods quality management was made easier with technology advancement; while service quality management was difficulty to operationalize because of typical characteristics of intangibility, heterogeneity, inseparability, and perishability (V. A. Zeithaml, Parasuraman, & Berry, 1985).

In this background, service gaps model (Parasuraman, Zeithaml, & Berry, 1985) proposed an approach to measurement of service quality (Figure 3). For its ease of operationalization; research community overwhelmingly accepted the model and the subsequent instrument SERVQUAL (Parasuraman, Zeithaml, & Berry, 1988).

Businesses have found products augmented with services are more profitable than basic products. Services have better profit potential as it adds loyal customer base ready to pay higher prices. Research suggests that services marketing focused on service quality and customer satisfaction may actually be highly profitable. Service-
profit chain (Figure 4) explains relationship of service quality to revenue growth and profitability.

*Figure 3. Gaps Model of Service Quality- PZB 85; Parasuraman et al., 1985*

**Internal and External Service Quality (ISQ & ESQ)**

Internal service quality (ISQ) is the service quality delivered by organization’s internal suppliers to its internal customers. External service quality (ESQ) is the net effective service quality delivered by the organization to its customers.

**Internal service quality (ISQ).** Parasuraman has proposed ISQ, as the multidimensional-interactive construct of; service knowledge, service design, service delivery, and service communication.
Internal service quality (ISQ) can be defined as, service quality perception of various organizational units or people,—towards the services received by them,—from other organizational units or people. For effective delivery of services; every function within the organization has its own set of expectations of internal services received by them,—from other functions. These functions also has own set of perception of internal services, received from other function. The difference between ISQ expectations and ISQ perceptions; termed as ISQ gap is used as a measure of internal service quality. ISQ is a network of internal functional units linked together, in order to deliver designed external service quality (ESQ), also called as Customer Service Quality.

There is no specific scale available for measurement of ISQ; however modified versions of SERVQUAL are often used by researchers.

**External service quality (ESQ).** External service quality, popularly called customer service quality is the customer perception of service quality, as received from the organization. The differential between perceived service quality, and expected service quality is considered as a measure of service quality.

Most of the research in service quality is directed at external service quality. Parasuraman et al. operationalized the external service quality concept as, factorial structure of; tangibility, reliability, responsiveness, assurance, and empathy. The measurement of ESQ is proposed using various scales like; SERVQUAL (PZB 88) (Parasuraman et al., 1988), SERVQUAL (PBZ 91), and SERVPERF (Cronin & Taylor, 1992). There are numerous other scales proposed by various researchers, but these three scales are the most accepted once.

Parasuraman has proposed service gaps model as, the direct predictive relationship of ISQ to ESQ (Parasuraman et al., 1985). The similar predictive relationship is also proposed by Heskett & Jones’s in ‘service to profit chain’ (Heskett, Jones, Loveman, Jr., & Schlesinger, 1994). While service gaps models explains concept of service quality,—the relationship between; internal service quality, employee satisfaction, external service quality, customer satisfaction, loyalty, and revenue growth & profitability is required to be addressed. Establishing this relationship is important to research community, and the practitioners. Heskett & Jones’s ‘service to profit chain’ provided the required justification.
Beyond 1994, literature significantly changed its approach, in favor of exploration of Heskett’s service profit chain, the pioneering article on ‘service to profit chain’ (Heskett et al., 1994) in Harvard Business Review set the ball rolling.

**Figure 4.** Service to Profit Chain; Heskett et al., 1994

**Indian Television Retail Market**

Television market of India has seen dynamic shifts in brands, display technologies; improvements in broadcasting technology; changes in retail market scene, corporate & online retail market activities, retail formats; and entry of global retailers.

**Television brands.** In 1970s; Indian customer used to wait six months for his television delivery. ECTV, a government owned firm, and other brands Murfy, Crown, and Dianora, were the major players in the black & white (B&W) television market. In 1982; at the time of Asian games, government owned Doordarshan started color transmission of its channels. (Saikia, 2014). This led to important technological shift to color television broadcast. Later in 1990, the industry picked up the steam, when Indian manufactures like BPL, Onida, Akai, Western, and Videocon sold color televisions (CTV) to first time buyers. In this first industry shakeup, caused by technological shift; many big brands ECTV, Crown, and Dianora lost the market grip.
After opening up of the economy, Korean players LG ("LG Electronics India Pvt. Ltd.," 2015) and Samsung ("Samsung India Electronics Ltd.," 2015) entered the market in 1997 & 1995 respectively. These international players shifted technological goal post further by launching flat screen televisions supported by aggressive marketing campaign ("Business India Intelligence: A bright picture," 2007). This led to second industry shakeup when market leader BPL lost the battle; another Indian brand Onida ("MIRC Electronics Ltd.," 2015) somehow survived; while Videocon ("Videocon Industries Ltd.," 2015) adopted multipronged strategy; by acquiring brands of Akai, and Thomson; developing in-house brand Sansui; and contract marketing of Hundai and Toshiba.

Netherland based Philips, an old timer in India, struggled for years, but failed to make any worthwhile place for itself. Japanese player Sony ("Sony India," 2015) had a late entry in India, but could create a niche by; quality positioning, product range; and exclusive showrooms branded ‘Sony World’, and ‘Sony Center’. At a later stage other Japanese brands Sharp and Panasonic also entered and survived the competition. Even Hitachi (Japan), TCL (China) tried their hands at the market.

In last five decades; BPL, ECTV has vanished; LG, Samsung, Sony, and many others has entered, Philips has contracted its brand to Dhoot’s of Videocon. Japanese players Panasonic and Sharp have taken up positions. Onida is fighting its way, and Sony is experimenting with exclusive retail. As LG, Samsung and Sony are occupying top three positions, competition is heating up, and industry is going for service differentiation, improving service quality and experience. The action is on the street, at retailer level.

Broadcasting technology. Emergence of new display & broadcast technologies, and industry convergence is changing the industry extensively. Television display technology has changed from black & white (B&W) TV, CTV, flat TV, plasma TV, projection TV, LCD, to LED. Today, television is no more watched on television per se, but also on; desktops, smartphones, and many other devices. The satellite transmission quality has changed from the modest beginning in 1965, with flickering feeble signals of Doordarshan antennas; followed by cable-walla networks, direct to home (DTH) network, web-enabled smart TVs, HDTV and 3DTV. In last few years Indian corporates like; Tata, Reliance, Airtel and others have introduced digital transmission, beaming over 400+ channels.
**Retail scene.** Rising consumer incomes, retail revolution, falling prices, changing choices are the growth drivers of television market of the India (“Business India Intelligence: A bright picture,” 2007). Consumer durable retailing in India is dominated by small independent unorganized retailers. Over the years few of these small retailers like Vijay Sales- Mumbai; Dass Electronics- Pune; Vivek’s- Chennai, Lotus- Indore, and many more with their expertise in retailing have started chain stores across cities. While few of these multi-store retailers could make it big in diversified world, few like Dass Electronics has shut the shops.

**Corporate and online retail.** In past few years, organized corporate retailers like; Croma electronics by Tata’s, Next retail chain by Videocon, and E-zone by Futuregroup have started specialty electronics retail stores. Online retailers Flipkart, Amazon, Snapdeal and others are also trying to eat into the pie of brick-n-mortar retailers. Corporate retail in durables has picked up as they offer; wide product range, good in-store-service, and convenience. If economy opens up further, global retailers may enter India in this space.

**Retail formats.** Retail formats has also evolved over a period of years. Standing side-by-side to unorganized retailers; there are corporate retail-chains, discount stores, and specialty stores all selling similar products. New retail locations of shopping malls and shopping centers are buzzing with crowd. Behind this volatile background retailers are experimenting with brands, retail formats, locations and service mix.

**Global retailers.** Retail as one of the important sectors of Indian economy is still waiting to be opened up to global players. The industry is at loggerheads with political pressures from local lobbies (“Retail resistance (is futile?) Protests may delay, but are unlikely to reverse, retail reform in India,” 2007). For political compulsion, the situation may prevail for some more time (Deloitte, 2013). Major reforms in; tax & regulatory structures, related to capital structuring, repatriation strategy, and multi-brand retail trade are pending for a while at government’s door (Deloitte, 2013).
Rationale and Significance of the Study

The topic of service quality is one of the most discussed topics in last five decades of services marketing literature. This study uses a different approach to the concept. The study develops constructs and questionnaire for internal service quality (ISQ) – *from customer perspective*; checks for scale validity & reliability, and confirmatory factor analysis (CFA). Then, the study tests hypothesized internal-external service gap relationship using structural equation modeling (SEM) and mediation effect analysis. Later, top three brands are identified and compared, for retail service gaps using Kruskal-Wallis test across three brands. Finally, Friedman test is used to test service quality across service gaps, followed by Post-hoc Wilcoxon signed rank test using Bonferroni correction.

Even though numerous models, concepts, and constructs are proposed; service quality topic is still debated and explored. As service economy is evolving globally; goods marketing concepts of yesteryears, needs to be realigned with services marketing. Services marketing is reinventing itself, as it embraces holistic marketing approach, —of connecting stakeholders in service-profit chain (Heskett et al., 1994). Service-profit chain indicates relationships between internal service quality and external service quality, — extending further to customer loyalty and profitability.

While service gaps model explains *how* of service quality (Parasuraman et al., 1985); service-profit chain explains *why* of the service quality. This research operationalizes service-profit chain; and provides needed explanation to (internal) human resource, and (external) customer aspect of the business. The research also provides rational explanation to internal marketing philosophies.

Various scholars in the past has defined or measured service quality either in generalized form, or in specialized form; — but no research is directed at investigating possible predictive relationships amongst various service gaps proposed in the model. This research is directed at investigating these hypothesized predictive relationships in service quality constructs.

Parasuraman et al., proposed the predictive relationships between; knowledge gap, design gap, delivery gap, communication gap; — with external service gap in their 1985 work; but it remained unexplored in later years. The understanding of such regressive relationships could be vital for industry practitioners and research scholars; as it establishes previously unattended area of service quality. If the model establishes significant relationships, a better explanation to service quality could be forthcoming.
The research comes at a time when retailers are reinventing themselves with newer retail formats, and use of technology like e-services and online marketing. Hence it is imperative to know evolving nature of services management under such circumstances.

The study comes at a time when the world is looking at growing service businesses and complex business processes. The research demonstrates hypothesized predictive relationships between internal and external service gaps. Beyond testing this hypothesized relationship; the model also investigates interrelations between various service gaps like; knowledge gap, design gap, delivery gap, communication gap; and customer gap. The new insight may open up new areas of investigation for future research.

The study is significant endeavor as it uses confirmatory factor analysis, structural equation modeling, mediation analysis, Kruskal-Wallis test across three brands; Friedman test across service gaps, followed by post-hoc Wilcoxon signed rank test using Bonferroni correction to operationalize the study objectives. These tools are useful for their ability of testing complex, multivariate, and multi-construct relationships.

This is the first study which uses customers as respondents – to external as well as internal service quality. Historically research is restricted to; either internal service gaps based on employee; or external service gaps based on customer; or internal-external gaps based on employees. Customer oriented approach to internal service quality opens new insights to the minds of customers; which could be useful to practicing service managers and research community.

The study proposes a new measurement scale for internal service quality (ISQ) – from customer perspective. The validity & reliability tested scale is simple, generalized in nature, and has universal appeal. The scale uses ‘expectations only’ approach like SERVPERF; instead of ‘expectation-perception approach’ popularly used in SERVQUAL.

**Research Problem**

Retailer is an important link of the brand with its customer. The service quality delivered at television retailer is proposed to affect customer behavior. The research problem of this study is to investigate applicability and effectiveness of service gaps model at television retailers, with reference to top three identified brands. The
research problem, when addressed should be useful in improving customer service quality at retail. In next section, a set of research questions are formulated around stated research problem. Then research questions are converted to set of research objectives. Finally, hypothesized model is developed in line with research objectives.

Research Questions

Services management is a complex process involving organizational strategies, skills, and tasks. Retail management being a service business, is also challenge requiring systematic approach. Since, services are highly intangible, inseparable, variable and perishable; planning and implementation of retail services is a difficult task. In this competitive market, the product-centric approach of retailers is changing to service oriented customer-centric approach.

The research problems for this study are formulated with customer as a focus. The study traces service – profit chain to explore relations between internal service quality and external service quality.

As presented in service gaps model; ‘customer expectations’ are developed in the customer through various means; and ‘customer perceptions’ are customer’s actual service assessment. Closing this gap between ‘customer expectation and customer perception’ is the objective to improve service quality. The customer gap can further be explained using gaps model. The model connects customer gap with service providers internal gaps namely knowledge gap (gap 1), design gap (gap 2), delivery gap (gap 3), and communication gap (gap 4).

The model is discussed at length in literature review (Parasuraman et al., 1988). The nomenclature for the constructs is partly adopted from other research (Chatterjee & Chatterjee, 2005). In line with the rationale & significance of the topic, literature review and service gaps model following research questions are formulated.

Primary Research Questions

Research questions- model.

- *Do internal service gaps have any predictive relationship with external service gap?*
- *Do internal service gaps (knowledge gap, design gap, delivery gap, and communication gap) have any interactive relationships with each other?*
Research questions - service gaps.

- Is service knowledge, an important ingredient to the service quality?
- How fulfilling is retailer’s service design?
- How effective is retailer’s service delivery?
- Is retailer’s service communication effective?
- Can service gaps be measured and compared with each other?
- Are service gaps equal in magnitude? How large are service gaps?

Research questions - brand differentiation.

- Are television brands able to differentiate themselves on retailer service quality?

Secondary Research Questions

Research questions - measurement.

- How a valid and reliable measurements scale be developed for ‘internal service quality gaps’?
- How the service quality gap scales be used for studying relations between various service gaps?
- Are service gaps constructs applicable to television retail service?

Research questions - descriptive analysis.

- What brands, technologies, and screen sizes are preferred by television customers?

The above set of research questions are converted into set of research objectives. The study objectives are formulated as follows.

Objectives of the Study

In view of rational and significance of the study and research questions, the objectives of the study are formulated. Since the study aims to examine predictive nature of service gaps in retailing of three major color television brands the objectives are formulated as follows;
Primary Objectives

Objective - model testing for predictive relationships of gaps.
- To test the model for predictive relationships of internal service gaps to external service gap.
- To investigate relationships between various internal service gaps namely knowledge gap, design gap, delivery gap, communication gap, and external service gap.

Objective - service gaps analysis.
- To measure, analyze and compare service gaps.

Objective - brand differentiation.
- To identify top three television brands, and study their retail service quality differentiation.

Secondary Objectives

Objective - questionnaire development.
- To develop a valid and reliable questionnaire for internal service quality.
- To confirm constructs of internal and external service quality.

Objective - descriptive analysis.
- To identify customer preference of television brands, technologies, and screen sizes.

Hypothesized Research Model

Conceptualized on service gaps model, in line with study objectives a hypothesized research model is proposed. The model is designed to test relationship between various constructs of service gaps.

Four internal service quality (ISQ) gap constructs and one external service quality (ESQ) gap construct are developed for the research model as displayed in Figure 5. Range of 26 Likert scale questions on 1 to 7 (1: strongly disagree to 7: strongly agree) are developed. The attitude scale data queried about customers judgment of service quality at television retailers.
At first stage sample frame of 213 television showrooms at Pune city is used for selecting 60 retailers (28%) by simple random sampling—without replacement. At second stage, mall intercept interviews are conducted for over four months and 800 customers are approached, and 774 customers are interviewed.

![Service Gaps Model – Path Diagram](image)

**Figure 5.** Service Gaps Model – Path Diagram

After removing 23 incomplete questionnaire and deleting 46 outliers balance sample of 705 is rigorously tested for validity & reliability. Content validity is carried out initially and then construct validity is checked using convergent validity, discriminant validity, and nomological validity. Constructs are tested for internal reliability using Cronbach alpha. Common method bias is tested using Harman’s single factor method.

An initial confirmatory factor analysis (CFA) is conducted followed by structural equation modeling (SEM); and analyzed further by mediation analysis. The study also uses Kruskal-Wallis test across three brands for checking the model for top three brands, Friedman test across service gaps, followed by post-hoc Wilcoxon signed rank test using Bonferroni correction. Primary alternate hypotheses indicating paths as shown in Figure 5; are to be tested simultaneously are as follows.

\[ H_{a1}: \text{Knowledge gap has significant predictive relationship with design gap.} \]
\[ H_{a2}: \text{Design gap has significant predictive relationship with delivery gap.} \]
\[ H_{a3}: \text{Design gap has significant predictive relationship with communication gap.} \]
\[ H_{a4}: \text{Delivery gap has significant predictive relationship with external gap.} \]
\[ H_{a5}: \text{Communication gap has significant predictive relationship with external gap.} \]
Confirmatory factor analysis (CFA), structural equation modeling (SEM), and mediation analysis are conducted using IBM SPSS AMOS 21 software. Descriptive analysis, Kruskal-Wallis test across brands, Friedman test across service gaps, followed by post-hoc Wilcoxon signed rank test using Bonferroni correction in IBM SPSS statistical software. MS-Excel is mainly used for data entry and general calculations.

Meaning and Definition of the Topic

For better understanding of the hypothesized research model; relevant concepts of retail management, services management, household, and service encounters are defined as follows.

Retail management. Retailing is the set of business activities that adds value to the products & services sold to consumers for their personal or family use (Michael Levy, 2008). Retailer is a final business entity in a distribution channel linking manufacturers to consumers. A retailer performs value-creating functions like providing an assortment of products, breaking bulk, holding inventory and providing services.

Services management. The foundation of services management is a strong customer focus, which extends across all functions of the retailer. Services are deeds, processes, and performances provided or coproduced by one entity or person for another entity or person. “Services are all economic activities whose output is not a physical product or construction, is generally consumed at the time it is produced, and provides added value in forms (such as convenience, amusement, timeliness, comfort, or health) that are essentially intangible concerns of its first purchaser” (Valarie A. Zeithaml, 2011).

Lovelock defines services as; “An act or performance offered by one party to another. Although the process may be tied to a physical product, the performance is transitory, often intangible in nature, and does not normally result in ownership of any of the factors of production” (Lovelock page 7). Lovelock further says, “A service is an economic activity that creates value and provides benefits for customers at specific times and places by bringing about a desired change in, or on behalf of,
the recipient of the service”. An amusing definition could be “Services can be bought and sold but cannot be dropped on your foot” (Lovelock page 7).

**Service categories.** Services can be divided into four distinct categories, as service industries & companies, service as products, customer service, and derived service.

First group ‘service industries and companies’ include those typically classified within the service sector, whose core product is a service. These are industries and companies who sell services as their core offering like hotels, airlines etc. The service sector primarily consists of this group.

Second group is ‘service as products’; these represents wide range of intangible product offerings which customer value and are ready to pay for in the marketplace. These are sold by service companies as well as by non-service companies such as manufacturers and technology companies as well. IBM or HP, offering consultancy services and competing with service firms such as Accenture can be called as ‘service as products’.

Third group is ‘customer service’; these are services provided to support company’s core products. Companies do not usually charge customer for customer service, and there may not raise bill for the service offered. Television manufactures LG or Sony providing call center access to their customer can be termed as customer service. Good customer service is essential for goods as well as service business. However customer service is not service product offered for sale.

‘Derived service’ is a holistic approach to services. It considers all products and physical goods to be valued as services they provide. The goods in itself does not provide anything; while the value derived from physical goods is considered as the service provided by that goods. In this logic a shaving razor provides barbering service; and a laptop provides information service.

**Service characteristics.** Services are different from goods marketing because of typical characteristics of intangibility, heterogeneity, simultaneous production & consumption, and perishability. Detailed characteristics are provided in Table 4.
Table 4. Service Characteristics

<table>
<thead>
<tr>
<th>Goods</th>
<th>Services</th>
<th>Resulting implications</th>
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<tbody>
<tr>
<td>Tangible</td>
<td>Intangible</td>
<td>• Services are difficult to inventorize.</td>
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<tr>
<td></td>
<td></td>
<td>• Services are difficult to patent.</td>
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<tr>
<td></td>
<td></td>
<td>• Services are challenge to display and communicated to customers.</td>
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<td></td>
<td></td>
<td>• Service pricing needs different approach.</td>
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<tr>
<td>Standardized</td>
<td>Heterogeneous</td>
<td>• Service delivery may not be consistent.</td>
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<td></td>
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<td>• Employee and customer actions dependability.</td>
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<td>• Too many uncontrollable factors to be managed.</td>
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<td></td>
<td></td>
<td>• Actual service delivery may not match planned and communicated plan.</td>
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<tr>
<td>Production</td>
<td>Simultaneous production and consumption</td>
<td>• Customer participation in the service process may affect the transaction.</td>
</tr>
<tr>
<td>separate from</td>
<td></td>
<td>• Customers are likely to affect each other.</td>
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<tr>
<td>consumption</td>
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<td>• Employees may also affect service outcome.</td>
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<tr>
<td></td>
<td></td>
<td>• Decentralization and empowerment may be essential for smooth operations.</td>
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<td>• Economy of scale is difficult to achieve.</td>
</tr>
<tr>
<td>Nonperishable</td>
<td>Perishable</td>
<td>• Synchronization with demand &amp; supply is difficult.</td>
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<td>• Services cannot be stored, returned or resold, this may need strong service recovery plan.</td>
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Services are mainly intangible in nature, because many of the services cannot be seen, touched, felt or tasted. Since services are intangible, those cannot be inventoried and demand-supply management becomes a challenge. On account of its intangibility; services are difficult to patent, communicate to customers, and even price.

Services are usually heterogeneous in nature, they are usually performances from human, hence consistency of performance is difficult to maintain. Service performance may vary on time, organization and person; even after using technologies. Heterogeneity of services is a challenge to consistency of the services, and service quality control.

Services are usually simultaneously produced and consumed, while goods are usually produced separately and consumed later. The food is served while the patron
consumes it, doctors operates his patient in his presence. During service process many times customers interacts with service providers as well as with other customers. Simultaneous production & consumption is a challenge to business managers; because mass production is difficult, real-time management is required, economies of scale is difficult to achieve, and requires decentralization and empowerment of employees and customers.

Lastly, perishability is the property of service which limits its storage, resale, or return of the product. Perishability of services is a challenge as inventory management, and demand-supply forecasting needs creative planning based on capacity utilization. Since resale or return is not possible, services needs to have strong service recovery strategy.

**Service encounters.** Christian Grönroos, has simplified customer relationship as a process; consisting of series of acts which happens during particular service episode. Every act is a small step in a service episode.

The episode is larger level of interaction related to a specific objective. Series of the episodes happen over a period of time, few positively evaluated, and few negatively evaluated; ultimately develop resultant customer relationship.

Acts of service encounter makes episode; series of episodes makes sequence and series of sequence over the period develops dynamic relationship quality (Grönroos, 2007). The dynamic relationship quality in terms of acts of encounter, service episodes, sequence and relationship quality in a television purchase is developed by the researcher as explained in Figure 6. Indicative service blueprint for the process is as presented in Figure 40.

**Household.** A household is usually a group of persons who normally live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so (Directorate of Census Operations, 2011). The Oxford dictionary defines household as a house and its occupants regarded as a unit (“Oxford Dictionaries,” 2015). Merriam Webster defines household as “those who dwell under the same roof and compose a family”; another definition is “a social unit composed of those living together in the same dwelling” (“Merriam Webster,” 2015).
Figure 6. Dynamic Relationship Quality: Acts–Episodes–Sequences–Relationship

Scope of the Study

The purpose of this research is to develop and confirm a valid & reliable instrument; test the predictive relationship in internal and external service gaps, and compare the service gaps for top three television retail industry brands. The research
pertains to services delivered by television retailers to customers in a typical retail outlet. The scope of the study is designed as follows.

- The study is related to retailers; independent or corporate owned, exclusive brand or multi-branded, general or specialty type. The study does not cover online retailers.

- The sample is collected from a cosmopolitan city of Pune, India; consisting of the municipal corporation of Pune and neighboring suburb of Pimpri & Chinchwad.

- The population of the study consists of households owning a television purchased from any of the retailers of Pune. The representing respondents are either the buyer or the user of television; who has visited and interacted with the retailer for any of the transaction. Telephonic and electronic interactions are not considered for the study.

- The data for the study is collected during period of four month between Dec-2014 to Mar-2015.

- While statistically arrived maximum sample size for the study is 620; considering time and financial resource constraints, 800 respondents are approached, 26 declined to respond for various reasons, 23 incomplete responses are removed, and 751 are studied. Of this 46 multivariate outliers are subsequently removed using Mahalanobis d-squared distance and last 705 sample size is used for inferences. For household population of 11.54 lakh (Table 11) this sample size is 0.06% of the population under study.

- Considering constraints of sample size per brand; analysis by comparison of the model across brands is limited to top three identified brands, Samsung, Sony, and LG.
• The study is limited to analysis of service gaps using confirmatory & structural model, mediation effects and brand comparison. The instrument is developed accordingly; limited information of any other nature is collected.

• Instrument consists of questions related to service quality, demographic information, and behavioral information of the customers. To avoid confusion and lengthy questionnaire other information is not collected.

• The instrument measures service quality as witnessed and perceived by respondents within; ‘line of interaction’ and ‘line of visibility’. Instrument does not include interactions beyond ‘line of internal interactions’. See Figure 40. Obviously the instrument does not measure the internal service quality beyond internal interactions & back office.

Limitations and Caveats

The study has few limitations to be noted. First; convergent validity of service gaps constructs using average variance extracted (AVE) for delivery gap, and design gap are lower than expected; and AVE score of knowledge gap is just close to expected value. Second; discriminant validity using squared correlations for few of the constructs, are larger than corresponding AVE values; thus indicating low discriminant validity of the model. Third; the multivariate normality of the constructs also could not be established, indicating multivariate non-normality of constructs. The study reflects upon above limitations and undertakes various corrective actions. The limitation of the work is discussed at length in Chapter 5.

Chapter Scheme

The thesis is structured into five chapters. Chapter 1 provides introduction of the research project, outlines background of the study, reasons out rationale & significance, formulates research problem, defines research questions, objectives, proposes hypothesized model, and defines scope & limitations of the study. Chapter 2, explores service quality literature, studies various service gaps models and scales. The chapter also identifies relationship of service quality with
important concepts like; customer satisfaction, relationship management, experience quality, service time-duration & waiting, technology, human resource, emotions, loyalty and others. In specific context the chapter discusses Indian and retail business and identifies research gaps; and proposes hypothesized research model.

Chapter 3 elaborates methodology by crafting research design, instrumentation and operationalizing methodology, elaborating sources of information, plan for data collection, sample design, appropriateness of design, construct & questionnaire design, and scale validity & reliability testing.

Chapter 4 is about results and interpretation, the chapter analyzes the data for all research questions using various techniques like descriptive analysis, outlier analysis, normality checking, confirmatory factor analysis, structural equation modeling, and range of non-parametric tests.

Last Chapter 5 is about summary of the research; managerial implications, contribution of the research, limitations, and future research suggestions. The chapter also discusses research conclusions and recommendations for action.