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Service Delivery Gap Measurement in Banking: An Exploratory Approach

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ABSTRACT

Service delivery is a critical part in ensuring excellent service quality to customer and to build strong competitiveness in service industry. In order to understand service quality in a comprehensive manner, it is necessary to understand the perception of various stakeholder along with customer. One of the most powerful models in service quality literature is the model of service quality gaps. This model explains various gaps that can influence service quality. However, the focus of this model is on customer gap only, other gaps which are internal in nature are still scantly researched. In this paper, Gap 3 (Delivery gap) measurement methodology has been understood and analyzed in order to understand factors influencing service delivery gap. Future researches can adopt similar methodology for understanding internal gaps in service quality of various sectors.

Keywords: Gap 3, Service quality, Service delivery, Employees, Delivery gap.

INTRODUCTION:

In commercial banking setup, there are mainly three entities involved managers, employees, and customers, while managers and employees are on the provider side, customers are on the receiver side (Parasuraman et al., 1985) of service. All three entities may have a different perception for the same service delivered that leads to different service quality gaps (Gap 1, Gap 2, Gap 3, Gap 4, Gap 5, Gap 6 & Gap 7). The SERVQUAL model developed by (Parasuraman et al., 1988) has focused on service quality measurement from the customer perspective. Extended gap model has contributed to the SERVQUAL model by the addition of two more gaps related to managers and employee's perception (Luk & Layton, 2002) (Figure 1). Various concepts of service quality and the gaps model of service quality has significantly contributed to service management literature. The five gap service quality model (Parasuraman et al., 1988) & extended gap model (Luk & Layton, 2002) is relatively well known for some time , and still many researchers further extended these models by including more gaps in accordance with change in a dynamic environment and service sector (Frederick and Mukesh 2001; Auty and Long 1999; Candido and Morris 2000; Nwabueze, 2001: Lee et al., 2007; Shahin & Samea, 2010). However, there are very few empirical researches concerning identifying and measuring service quality gaps (Gap 1, Gap 2, Gap 3, Gap 4, Gap 6 & Gap 7) apart from Gap 5.

OBJECTIVE OF THE STUDY:

This paper attempts to identify and measure gap 3 as per Extended gap model (Parasuraman et al., 1985, Luk & Layton, 2002).

LITERATURE REVIEW FOR IDENTIFICATION OF GAP 3:

Identification of Gap 3 includes exploring terminologies, dimensions, description and factors affecting Gap 3 in order to get a comprehensive understanding with the help of available literature in service quality management.

Terminology:
Gap 3 is also known as Delivery Gap in service quality literature.it is the difference between service specifications versus service delivery (Parasuraman et al.,1988).

Dimensions:
Parasuraman has identified seven factors for delivery gap in service quality namely teamwork, employee job fit, supervisory control systems, technology job fit, perceived control, role conflict, role ambiguity (Parasuraman et al., 1988). These factors were used by Jannadi in their analysis of Delivery gap (Jannadi et al., 2000). In addition to these factors like cooperation, perceived control, employee-job fit was found by chenet in their studies (Chenet et al., 2000). Lapses in the human resources management, poor support of customers, problems with servicing agents, badly harmonized offer and demand are also the important factor for emergence of gap 3 (Blešić, Ivkov-Džigurski, Dragin, Ivanović, & Pantelić, 2011)

Methodology for Service Delivery Gap (Gap 3) Measurement:
Service quality literature reveals that methodology for delivery gap is still scantly researched. Many researchers have collected perception and opinions of managers and employees to understand the Gap 3 in the respective organization. (Jannadi et al., 2000; Blesic et al.,2011). However Urban has used more statistically inclined approach where perception of employees is deducted from standard values of "5" which means that a dimension is fully realized in the organization, while the value of "1" means that it is not realized at all in the organization. Therefore Gap 3 can be measured by subtracting Employees perception with Standard value of each dimension of Gap 3 (Urban, 2009).
Based on Parasuraman there are seven dimensions of gap 3 (Parasuraman et al., 1988) which were later explained by Zeithaml (Zeithaml et al.,1990):

1. **Teamwork:** It is the extent to which employees and managers pull together for a common goal
2. **Employee Job- Fit:** It is the match between the skill of employees and their jobs
3. **Supervisory control systems:** It is the appropriateness of the evaluation and reward systems in the company.
4. **Technology Job- Fit:** It is the appropriateness of the tools and technology that employees use to perform their jobs.
5. **Perceived control:** It is the extent to which employees perceive that they can act flexibly rather than by rote in problem situations encountered in providing services.
6. **Role conflict:** It is the extent to which employees perceive that they cannot satisfy all the demands of all the individuals (internal and external customers) they must serve.
7. **Role ambiguity:** It is the extent to which employees are uncertain about what managers or supervisors expect from them and how to satisfy those expectations.

METHODOLOGY:

The three essential gaps, Gap 1, Gap 5 and Gap 6 are more associated with the customers (Shahin, 2005), while other gaps like Gap 2, Gap 3, Gap 4 (Parasuraman et al., 1985), Gap 7 (Luk and Layton, 2002) are internal in nature and more related to employees & management. Therefore gap 3 which is internal in nature and related to service delivery, it can be measured by understanding perception of employees and comparing with standard value for respective factors.

HYPOTHESES:

Hypotheses are framed on the basis of seven selected factors and their comparison with standard value.
$H_0$1: There is no significant difference between employee perception & standard value of:
$H_0$1.1: Teamwork
$H_0$1.2: Employee job fit
$H_0$1.3: Supervisory control systems
$H_0$1.4: Technology job fit
$H_0$1.5: Perceived control
$H_0$1.6: Role conflict
$H_0$1.7: Role ambiguity

Questionnaire for Employees:

Questionnaire for employees was based on specific dimensions as suggested by (Parasuraman et al., 1988) to find the gaps related to delivery gap (Jannadi et al.,2000; Blesic et al.,2011).

Following Dimensions were taken for the questionnaire for employees: - 1. Teamwork 2. Employee job fit 3. Supervisory control systems 4. Technology job fit 5. Perceived control 6. Role conflict 7. Role ambiguity

All Seven dimensions with their respective items were presented before five experts (bank managers & employees of private sector banks). Various new items were added in order to integrate the suggestions from managers and employees who had given an expert opinion & pretest the questionnaires, for its suitability for measurement of delivery gap (Gap 3) in private sector banks of western Uttar Pradesh. The items in the questionnaire were measured on a five-point scale ranging from "strongly disagree to strongly agree."

The final data collection was done from the employees of the private sector banks (HDFC, ICICI, & AXIS) situated in major cities of western Uttar Pradesh selected on the basis of researcher convenience.

1.Agra 2. Aligarh 3. Meerut 4. Ghaziabad 5. Moradabad 6. Noida (Gautam Budh Nagar) 7. Mathura 8. Khurja 9. Hathras 10. Bulandshahar

Questionnaire administration for employees was different from customers. Employees were approached in a friendly manner by the researcher in non-banking hours (before 9:30 am or after 3.30 pm) and were asked about their willingness to participate in the survey. Once the agreement was received from the respondent, the researcher introduced the general purpose and directions to fill the questionnaire of the survey to the respondents. They were also assured that all the data taken is for academic purpose only, will be kept confidential. Some of the employees asked to drop off questionnaire for one day and get it to pick up on next day. The respondents were given a required time to allow them to respond to the questionnaire conveniently in their own time and were collected the next day.

Convenience samples are frequently used to gather a large number of completed questionnaires quickly and economically in previous studies also (Ramseook-Munhurrun, 2010; Kumar & Charles, 2010; Luk & Layton, 2002 Arasli, Mehtap-Smadi, & Katircioglu, 2005; Y. C. Lee et al., 2016). Given the above advantages, the researcher adopts and considers it to be the most suitable sampling methods for the study. Convenience sampling is a non-probability sampling. The respondents for the study, employees were chosen based on convenience sampling. A non-probability sample was selected due to the large population, the absence of a sampling frame, large geographical area, and the limitations in term of time and cost involved.

Sample Size:

It is always desirable to use a large sample in order to find results which are representative of the population. Therefore, to decide the adequate sample size for this study, the researcher reviewed the similar research on measuring service quality gaps in various sectors (K. Chen, Chang, & Lai, 2009; Y. C. Lee et al., 2016 Large and Konig, 2009; Jannadi et al. ,2001; Ramseook-Munhurrun, 2010: Luk & Layton, 2002)

After reviewing similar studies researcher decided to distribute 200 questionnaires to employees, with response ratio of 64.5 % and questionnaires dropped due to incompleteness, final sample size of study stands at 123 employees.

Data Validity:

1) **Face Validity:** As the Delivery gap (Gap 3) dimensions are identified and selected from the literature, the selection of various dimensions for gap measurement are thereby ensuring the face validity of the questionnaires used for employees.
2) **Content Validity:** If expert judges validate the items representative of the different dimensions in an instrument, content validity can be ensured (Bohrnstedt, 1983).

In this the study selection of dimensions are based on an extensive review of the literature and validated by expert opinion, therefore achieving both face validity and content validity. Cronbach's alpha is a suitable test of internal consistency and reliability. Hence, the dimensions in the questionnaire were also measured by using Cronbach's alpha with the help of SPSS (Statistical Package for the Social Sciences) statistical software to find the reliability of the responses. Cronbach's alpha value ranges from 0 to 1, where the values on the higher side reflect higher reliability and vice versa. The Cronbach's alpha for the questionnaire was calculated, and the results show that questionnaire used in this study was having Cronbach's alpha equal to .922 higher than 0.9.

Data Analysis Methods: One Sample t Test helps in determining whether the sample mean is statistically different from a known or hypothesized population mean. To compare employee's perception with standard value one sample t test has been used in this study.

RESULTS:

Delivery gap (Gap3) has been measured on seven dimensions:

1. Teamwork
2. Employee job fit
3. Supervisory control systems
4. Technology job fit
5. Perceived control
6. Role conflict
7. Role ambiguity

The difference between employee perception and the standard value of 5(Urban, 2009) has been worked out on these seven dimensions. The data collected through questionnaire for employees is used for measurement and analysis of Gap 3. The results of hypotheses testing on seven dimensions are shown in table 1 and 2.

$H_0$1.1: There is no significant difference between employee perception & standard value of Team work

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.1 and conclude that there is a significant difference between employee perception & standard value of teamwork dimension. It can be understood that there is a lack of teamwork in terms of achieving service quality in selected banks. Lack of teamwork may be caused by demotivation, conflicts among employees and managers behavior which can hamper service delivery.

$H_0$1.2: There is no significant difference between employee perception & standard value of employee job fit.

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.2 and conclude that there is a significant difference between employee perception & standard value of employee job fit dimension. It can be understood that there is a lack of employee job fit in terms of achieving service quality in selected banks. Lack of employee job fit may be caused by bad selection, promotion and increment procedures which severely impact service delivery. It can be inferred from the above analysis that employee's perception and the standard value of seven dimensions do not match. Hence it can be concluded that the delivery gap exists in the selected banks.

$H_0$1.3: There is no significant difference between employee perception & standard value of supervisory control systems.

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.3 and conclude that there is a significant difference between employee perception & standard value of supervisory control systems dimension. It can be understood that there is a lack of supervisory control systems in achieving service quality in selected banks. Lack of supervisory control systems concerning policies, objectives, and responsibilities can impact service delivery.

$H_0$1.4: There is no significant difference between employee perception & standard value of technology job fit.

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.4 and conclude that there is a significant difference between employee perception & standard value of a technology job fit dimension. It can be understood that there is a lack of technology job fit in achieving service quality in selected banks. Appropriate technology is an essential tool in the hand's employees for service delivery.

$H_0$1.5: There is no significant difference between employee perception & standard value of perceived control.

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.5 and conclude that there is a significant difference between employee perception & standard value of perceived control dimension. It can be understood that there is a lack of perceived control in achieving service quality in selected banks. Lack of perceived control can be attributed to decision making and paperwork involved in service delivery.

$H_0$1.6: There is no significant difference between employee perception & standard value of role conflict.

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.6 and conclude that there is a significant difference between employee perception & standard value of role conflict dimension. It can be understood that higher role conflict among employees can hamper goals in achieving service quality in selected banks.

$H_0$1.7: There is no significant difference between employee perception & standard value of role ambiguity.

Since p-value = 0.000 (table 2) is less than our chosen significance level $\alpha = 0.05$, we reject the null hypothesis H01.7 and conclude that there is a significant difference between employee perception & standard value of role ambiguity dimension. Due to role ambiguity, employees are not clear about their roles and objectives. Therefore, it can hamper service delivery. It can be understood that higher role ambiguity among employees exists in selected banks

It can be inferred from the above analysis that employee's perception and the standard value of seven dimensions do not match. Hence it can be concluded that the delivery gap exists in the selected banks.

CONCLUSION:

Using the five-gap service quality model (Parasuraman et al., 1988) & extended gap model (Luk & Layton, 2002) as the theoretical background, this paper revealed the Delivery gap in relation to the employee's perception of different dimensions and standard service specification in private sector banks of western Uttar Pradesh. The results showed that there were significant differences between the employees' perception and standard service specification resulting in emergence of delivery gap. The major contributors of delivery gap are lack of cooperation between manager and employees, bad selection, promotion and increment procedures, policies of supervision, inappropriate technology, ambiguity of role and non-flexibility in working. This study presents a general framework for methodology to measure delivery gap (Gap 3) for understanding various factors in order to improve service delivery and resource allocation by management. It will help bank management to improve their service delivery by focusing on those factors which are important from the prescriptive of employees. However, it must be understood that methodology is based on exploratory approach that can be improved further. Data is collected from the private sector banks of western Uttar Pradesh; the results may not be generalized for other types of banks. This research has been done in the banking sector, and results cannot be generalized for other sectors. Therefore, similar research can be conducted for another sector also like insurance, transport, hospitality, etc.

REFERENCES:

Arasli, H., Mehtap-Smadi, S., & Katircioglu, S. T. (2005). Customer service quality in the Greek Cypriot banking industry, Managing Service Quality, 15(1), 41–7. http://dx.doi.org/10.1108/09604520510575254

Auty, S.; Long, G. (1999). Tribal warfare, and gaps affecting internal service quality, *International Journal of Service Industry Management* 10(1): 7–22. doi:10.1108/09564239910255352

Blešić, I., Ivkov-Džigurski, A., Dragin, A., Ivanović, L., &Pantelić, M. (2011). Application of Gap model in the researches of hotel services quality. *Turizam*, 15(1), 40–52. https://doi.org/10.5937/Turizam1101040B

Bohrnstedt, G., (1983). Measurement. In: Rossi, P., Wright, J., Anderson, A. (Eds.), *A Hand Book of Survey Research.* Academy Press, San Diego, CA

Candido, C. J. F.; Morris, D. S. (2000). Charting service quality gaps, *Total Quality Management* 11 (4/5&6): 463–472.

Chen, K., Chang, C., & Lai, C. (2009). Service quality gaps of business customers in the shipping industry, *Transportation Research Part E,* 45(1), 222–237. https://doi.org/10.1016/j.tre.2008.02.005

Chenet, P.; Tynan, C.; Money, A. (2000). The service performance gap: testing the redeveloped casual model, *European Journal of Marketing* 34(3/4): 472– 495. doi:10.1108/03090560010311993.

Frost, F.A. and Kumar, M. (2000). INTSERVQUAL: an internal adaptation of the GAP model in a large service organization, *Journal of Services Marketing*, Vol. 14 No. 5, pp. 358-77.

Jannadi OA, Assaf S, Maghraby HM, Al-Saggaf HA (2000). Service quality gaps analysis at SCECO East, Saudi Arabia. *J. Energy Eng*. 126(3):116–131

Kumar, M., & Charles, V. (2010). Comparative evaluation of critical factors in delivering service quality of banks: An application of dominance analysis in, 27(3), 352–378. https://doi.org/10.1108/02656711011023320

Large RO, Konig T (2009). A gap model of purchasing's internal service quality: concept, case study, and internal survey. *J. Purch Supply Manag.* 15:24–32

Lee, Y. C., Wang, Y. C., Chien, C. H., Wu, C. H., Lu, S. C., Tsai, S. B., & Dong, W. (2016). Applying revised gap analysis model in measuring hotel service quality. *Springer Plus,* 5(1). https://doi.org/10.1186/s40064-016-2823-z

Luk, S. T. K., & Layton, R. (2002). Perception gaps in customer expectations: Managers versus service providers and customers, *Service Industries Journal*, 22(2), 109–128. https://doi.org/10.1080/714005073

Nwabueze, U. (2001). Reality check: The identification of service gaps in the NHS. *Total Quality Management*, 12(6), 757–771. https://doi.org/10.1080/09544120120075361

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985). A conceptual model of service qualityand its implications for future research, *Journal of Marketing*, Vol. 49 No. 3, pp. 41-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). SERVQUAL: a multipleitem scale for measuring consumer perception of service quality, *Journal of Retailing*, Vol. 64 No. 1, pp. 12-37

Ramseook-Munhurrun, P. (2010). Service Quality in the Public Service, *International Journal of Management & Marketing Research (IJMMR)*, 3(1), 37–51. https://doi.org/10.1017/CBO9781107415324.004

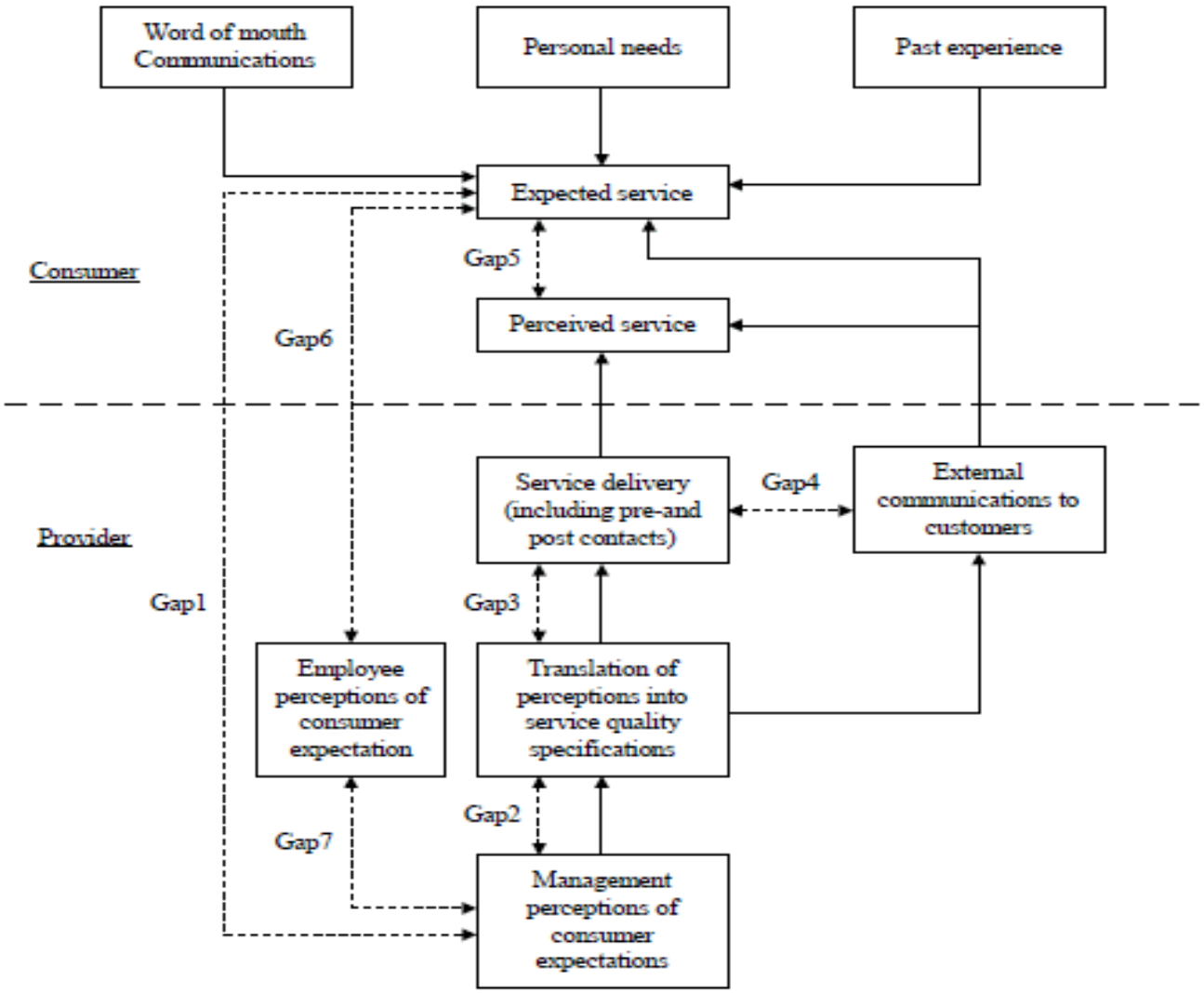
Shahin, A., & Samea, M. (2010). Developing the Models of Service Quality Gaps: A Critical Discussion, *Business Management and Strategy,* 1(1), 2. https://doi.org/10.5296/bms.v1i1.395

Urban, W. (2009). Service quality gaps and their role in service enterprises development, *Technological and Economic Development of Economy,* 15(4), 631–645. https://doi.org/10.3846/1392-8619.2009.15.631-645

Zeithaml, V. A.; Parasuraman, A.; Berry, L. L. (1990). *Delivering Service Quality, Balancing Customer Perceptions and Expectations.* New York: The Free Press

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1988). Communication and control processes in the delivery of service quality, *Journal of Marketing*, Vol. 52 No. 2, pp. 35-48.

Figure 1: Extended Gap Model



Source: Extended Gap Model (Parasuraman et al., 1985; Luk and Layton 2002)

Table 1: One-Sample Statistics for Delivery Gap

	N	Mean	Std. Deviation	Std. Error Mean
Teamwork	123	3.6894	.69102	.06231
Employee Job Fit	123	3.4756	.69719	.06286
Supervisory Control systems	123	3.4593	.73994	.06672
Technology Job fit	123	3.4797	.83322	.07513
Perceived Control	123	3.8760	.52340	.04719
Role Conflict	123	3.8504	.57920	.05222
Role Ambiguity	123	3.4898	.85195	.07682

Table 2: One-Sample t-Test for Delivery Gap

	Test Value = 5					
	t	df	Sig.)2-tailed(	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Teamwork	-21.034	122	.000	-1.31057	-1.4339	-1.1872
Employee Job Fit	-24.249	122	.000	-1.52439	-1.6488	-1.3999
Supervisory Control Systems	-23.092	122	.000	-1.54065	-1.6727	-1.4086
Technology Job fit	-20.236	122	.000	-1.52033	-1.6691	-1.3716
Perceived Control	-23.816	122	.000	-1.12398	-1.2174	-1.0306
Role Conflict	-22.012	122	.000	-1.14959	-1.2530	-1.0462
Role Ambiguity	-19.659	122	.000	-1.51016	-1.6622	-1.3581
