

99-110
Rev. 03/09/99

Effective Call Center Management: Evidence from Financial Services

**Ann Evenson
Patrick T. Harker
Frances X. Frei**

Copyright © 1999 Ann Evenson, Frances Frei, and Larry T. Harker

Working papers are in draft form. This working paper is distributed for purposes of comment and discussion only. It may not be reproduced without permission of the copyright holder. Copies of working papers are available from the author.

Effective Call Center Management: Evidence from Financial Services

Ann Evenson
Patrick T. Harker
Financial Institutions Center
The Wharton School
University of Pennsylvania
Philadelphia, PA 19194-6366

Frances X. Frei
Harvard Business School
Harvard University
Boston, MA 02163

Abstract

Call centers are quickly becoming the major point of contact for serving customers and generating new revenue in a variety of industries. No where is this growth in the importance of call centers more apparent than in the financial services industry. This paper presents the results of a survey of the management of call center operations at major financial service firms. The results clearly indicate the importance of human resource management practices and technology in creating high-performance call center environments.

1. Introduction

Financial institutions are in the midst of major changes in the choice and investment in delivery channels. Call centers, which had previously been viewed as little more than lower cost channels for customer problem resolution, are quickly becoming a powerful means of service delivery with a potential for substantial revenue generation. Although much literature has recently been written about various ways to steer customer interactions to sales opportunities (Hamblen, 1997; Dorf, 1997), the topic of effective service delivery has almost entirely been overlooked. Before being able to generate revenue through the call center, institutions have to fully understand and be able to implement superior customer service.

Service delivery can be a source of significant differentiation between call centers of various financial institutions (TARP, 1997). Each service interaction forms the basis of consumer's perceptions of the overall quality of an organization. How well a business is able to manage and implement the service delivery process has a direct effect on retention of existing clients, and can have a significant impact on acquiring new business. The result is that satisfaction is based on how well an institution meets and exceeds a customer's expectations in every interaction.

There are many aspects of an institution's operations that affect the customer experience. The service delivery process is influenced by quality of personnel, information technology, internal processes, human resource practices, and even an institution's own change orientation. This study will develop a model that will derive correlation between effective service delivery via the phone channel and its primary drivers.

The theoretical framework proposed in this study establishes causalities between a desired outcome (effective service delivery) and its primary drivers. Figure 1 presents the proposed model for effective service delivery. The three primary drivers of the quality of an organization's service delivery are (1) effective people, (2) effective internal processes, and (3) effective information technology. The reason this study uses the word "effective" is to clearly make the point that individual elements of this mix may be better or worse across different institutions, but making them work together effectively is the key to developing world class service delivery.

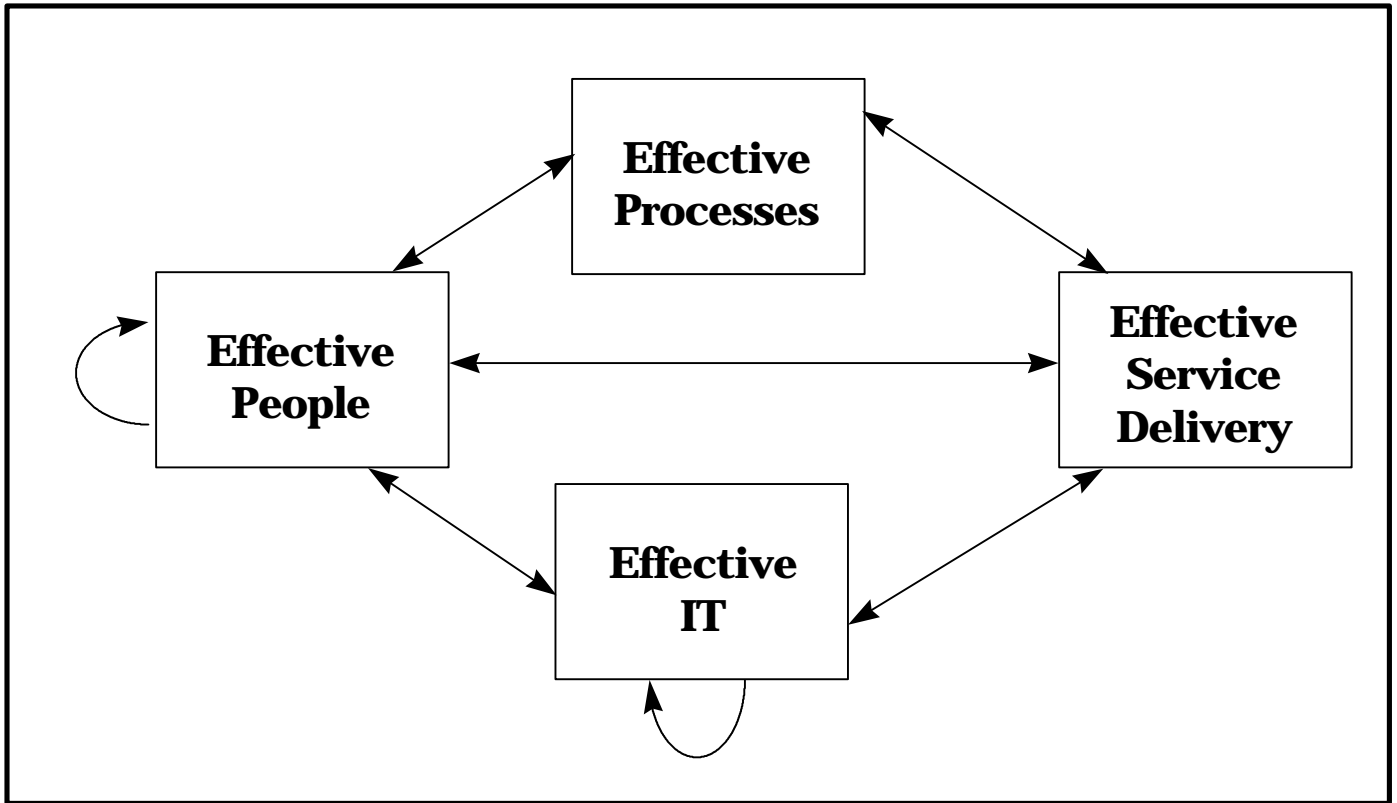


Figure 1
Theoretical Model for Service Delivery

2. Literature Review

The majority of academic literature having to do with service delivery via the phone channel concentrates primarily on the use of information technology and human resource practices. Literature having to do with technology selection and implementation (Dunlap & Volpe, 1998) concentrates on optimizing the various phone-related technology applications call centers currently use. Human resource research spans from the productivity benefits resulting from empowered workers (Schneider & Bowen, 1993; Schlesinger & Heskitt, 1992) to the potential benefits of a CSR's responsiveness to customers during a service interaction (Doucet, 1998).

Consultants have done considerable work in the area of call centers of financial institutions (TARP, 1997). These analyses attempt to quantify monetary benefits associated with improved service interactions. The benefits are typically a result of improved customer retention or increased repurchase intention.

This paper examines the links between the various elements of a call center's operations. Specifically, it is aimed at understanding how the various elements of the service delivery process (Technology, Human Resources, and Processes) influence each other and ultimately the affects each has on service delivery.

3. Theoretical Model

This section defines the elements of the model proposed in Figure 1 for capturing the relationships between the drivers of effective service delivery.

Effective Service Delivery. In financial services, there are both internal and external quality measures that are used to evaluate performance. External measures are typically based on customer perceptions of service quality, which are obtained through surveys and focus groups. Although these measures can be effective in guiding an institution's performance closer to its clientele's needs, they are not very effective when compared across institutions. There are many measurement-related reasons why this is the case, but even more fundamentally, an argument can be made that results vary based on the way in which an individual's expectations are formed.

The expectations of customers when interacting with a financial institution via the call center are not based on past experiences with the branch, or even with competitor's call centers. They are instead a function of the customer's own experiences with a myriad of phone service deliveries. These can range from apparel catalogs to pizza delivery; with each experience elevating a customer's definition of quality service delivery and effective selling techniques. When judging their own service quality, financial institutions need to evaluate themselves on objective measures which span across industries.

To eliminate any measurement/perception discrepancies, this paper will focus on an internal, unbiased measure of service quality that can be compared across institutions. We will use two proxies for service quality: customer hold and system time, and an institution's tenacity for eliciting customer satisfaction. We believe these measures adequately reflect a financial institution's use of internal resources, as well as its customer-focus.

Effective People. Since the primary interface between a financial institution and its customer is a service representative, this element strongly influences an institution's ability to deliver quality service. An organization's human resource (HR) practices effect how well its employees are able to perform. More

specifically, human resource practices directly influence how knowledgeable an employee is about the product offering, whether or not an employee is empowered to resolve customer issues in real time, and the level of turnover within the organization.

Effective Processes. An institution's internal processes strongly influence the quality of customer interactions with that institution. Ideally, a process is designed and implemented in a manner to most effectively utilize all the elements of a call center's operations. For instance, if the processes are set up to sense shifts in attitudes, needs, or perceptions an institution can quickly act upon those influences to gain an advantage over the competition. Similarly, how quickly those responses can be implemented is a direct function of the flexibility of the processes.

Effective Technology. Information technology has the potential of being a significant source of competitive advantage. Not only will this technology enable institutions to more closely ascertain and align themselves with their client's needs, but also has the potential of significantly improving the effectiveness of both the internal processes and personnel. With the right use of technology, all other drivers of service delivery can be made more flexible, faster, and more effective.

The theoretical model depicted in Figure 1 is intentionally high-level in nature. The Literature Review section of this paper alludes to the fact that this study is one of the first to attempt to understand the inter-relationships of the elements of a call center's operations and how they ultimately influence service delivery. To that end, a secondary purpose of this study is to verify and/or dispel some of the industry hypotheses that call centers and researchers have come to believe.

4. Empirical Analysis of the Model

In order to test the theoretical linkages described in Figure 1, a detailed survey was conducted of eleven major financial service firms; this survey is reproduced in Appendix B. The goal of this survey was to obtain metrics on practices which drive effective service delivery. The metrics were then grouped into supersets (which we will refer to as proxies) and analyzed to understand the relationships between them.

This section will be broken down into two sections: definitions and results. The definition section describes the proxies that were used for each of the elements of Figure 1, based on the data that we were able to

obtain from the financial institutions we surveyed. Section 4.2 reveals not only the findings of the regressions, but also our interpretations as the possible implications of each result.

4.1 Elements of the Model

The following section summarizes the definitions of the various proxies used in our analysis. Each subsection will include the proxies used for each element in the theoretic model depicted in Figure 1. It is important to note that in some cases the proxy used may not be ideal for describing a particular element of a call center's operations. However, in each case the proxy was chosen because of ease of measurability and our ability to capture consistent data across eleven financial institutions.

Effective Service

As our goal was to eliminate measurement and perception discrepancies as much as possible, we chose measures of service effectiveness that could easily be compared across call centers and that each call center was likely to track. The two measures we use going forward are:

- Efficiency - The average amount of time a customer spends waiting to speak to a CSR. A low wait time implies higher efficiency, as that call center is believed to be better able to handle the call volume with which it is faced.
- Customer-focus - The tenacity of eliciting customer satisfaction. This is a measure of how often and in which manner an institution chooses to elicit customer response. A high number implies an institution is more aggressive at eliciting customer inputs and therefore more likely to be aligned with customer needs.

Effective Information Technology

After asking financial institutions a myriad of questions regarding technology uses, it became obvious that the only ones that we could consistently compare across call centers is the automated voice response system (VRU). As a result, the two proxies that were used for the effective IT element of a call center's operations were:

- VRU Complexity - The number of touch-tones necessary to reach the single most common transaction performed in the VRU.
- VRU's Customer-Focus - The percentage of incoming calls that are entirely handled in the VRU. A higher percentage implies a "smart design", whereby an institution has designed its VRU to be responsive to its customer's needs.

The metrics which we have no information on, but are certainly critical to developing a comprehensive model, are the internal uses of IT resources. In further research, it would be interesting to understand how information technology is used by various institutions to facilitate a CSR's information requirements.

Effective People

This element of a call center's operations seemed to be the one where data was not only readily available, but could easily be compared across institutions. This is perhaps, as the Literature Review section would suggest, a result of the amount of focus the industry and academia has placed on optimizing the human resource aspect of the call center.

- Empowered Employees - The amount of freedom a CSR is given to handle calls that concern a threat of a customer defection. A high percentage of calls of this nature handled without having to transfer to a specialist or supervisor implies high employee empowerment.
- Turnover - The average number of CSRs to leave an organization compared to the average number employed in that organization in the previous year. This is an important proxy as call centers all realize that high costs associated with recruiting and training quality personnel.
- Tenure - The average number of years CSRs are employed by the call center.
- Not Utilized - Referring to the amount of time a CSR spends at work during which he/she is not answering the phone, doing paperwork, or in training.
- Generalist/Specialist - The percentage of incoming calls which are completed without transferring to another CSR. A high percentage implies that CSRs are generalist and are capable of solving a variety of customer issues. Alternately, low percentage implies CSRs are specialists and transfer calls that are not in their area of expertise.

In further research, it would be interesting to include job satisfaction metrics in the model to understand how a CSR's own perceptions of their job and work environment effect every element of the service delivery model.

Effective Processes

This element refers primarily to the types of inbound and outbound calls handled by the phone center. Inbound calls are either related to a specific need (such as product information or account information) or

are general in nature. Outbound calls range from sales/telemarketing functions to ones aimed at customer retention.

In further developing the model it would be interesting to understand how a call center's internal practices and overall change orientation effect the service delivery process.

4.2 Drivers of Performance

This section describes the results of the study. Each subsection includes information relating to internal drivers of a particular measure (for instance how human resource practices tend to affect each other), possible relations between drivers of performance and finally, how a particular element relates to service delivery. The format is to state a particular finding (based on a statistically significant correlation) and then give a rationale as to why this phenomenon occurs.

The table in Appendix A summarizes all statistically significant correlations, the sign of each correlation, and the number of institutions used in each regression.

Information Technology

As described in Section 4.1, the elements of IT that our model includes are ones that are front-end in nature, in that they refer primarily to the VRU. We concentrate our research primarily at the annual IT spending levels across institutions and at direct customer interactions with that IT (VRU).

Internal Drivers of IT

- *The higher the annual IT spending, the more complex the IT.* This result implies that as institutions spend more on IT, they are more likely to build additional complexity into their system.
- *The more complex the IT, the less calls are able to be handled by the VRU; resulting in customers bailing out and choosing to deal directly with an agent.* This result confirms conventional wisdom, whereby as a VRU becomes difficult to navigate, customers will not bother trying to figure it out.

At this point, it is important to note a potential downward spiral that may result from a combination of the preceding findings.

In high turnover environments, more spending is diverted from labor to IT. However, higher IT spending results in a more complicated VRU that is difficult for customers to use. Customers balk at this complexity and bail out of the system, requesting to speak to an agent. These agents are likely less capable of resolving the customer's problems due to the original shift in resource allocation from labor (in particular, training) to IT.

Correlation between IT and People

- *In situations where VRU's are customer-focused, CSR's tend to be generalists.* If VRUs are able to effectively handle a large portion of customer's requests, CSRs are left to handle more challenging problems in a variety of contexts. In this environment, CSRs have to be capable of dealing with broader issues, thereby being far less likely to be specialists.
- *Institutions which have high annual IT spending, have more empowered employees.* This result implies that IT dollars are being spent on facilitating the work environment for empowered CSRs to be more effective.
- *In high turnover environments, VRUs tend to be equipped to handle a larger percentage of calls.* This result implies a "smart design" in that institutions that realize that they are continually training new CSRs due to the high turnover, build more functionality into the VRU.

Correlation between IT and Effective Service

- *Higher annual IT spending, results in higher system efficiencies.* Institutions that spend more on IT also provide shorter wait times for customers. This implies that these institutions are spending their money, at least in part, on system efficiencies.
- *The more complex the IT, the less customer-focus.* Institutions that make it difficult for customers to navigate the VRU, tend to have lower overall customer-focus. This implies that institutions that have not considered the customer's perspective in the VRU, have similarly not considered it throughout the rest of the call center.
- *The higher the VRU's customer-focus, the higher system efficiencies.* Institutions that design a VRU with a customer's needs clearly in focus tend to have shorter wait times, which is consistent with having a customer-centric focus.

Effective People

Human resource practices greatly effect a call center's overall performance. This subsection sheds light on some of the key implications of these practices.

Internal drivers of Effective People

- *Institutions that have higher average tenures also have lower turnover.* This result indicates that there is no evidence of “short-term churn”. In other words, it is not the case that the majority of CSRs that leave an institution do so at the very beginning of their employment.
- *Turnover is lower in organizations where the CSRs come from within, and higher if CSRs come from another organization.* Institutions that have “career pathing” in call centers, where employees understand their career opportunities within the organization, tend to have lower turnover.
- *Organizations that have fewer empowered employees have higher turnover.* This seems to indicate people's preference for having more responsibility in the work place, and feeling capable of dealing with broad ranges of issues.
- *The more employees are not utilized, the lower the turnover.* This seems to imply (as intuition would suggest) that the more pleasant the work-environment, the less likely employees are to leave.

Correlation between People and Process

- *If inbound calls concern sales, they are transferred to a specialist.* This result indicates that most organizations have distinct sales and service functions, and service representatives transfer sales-related calls to that function.
- *The more CSRs are not utilized, the higher the number of outbound customer retention calls made.* This result indicates that as more capacity is built into the system, more time is being spent on customer retention.
- *If an institution outsources any part of their organization, the turnover of inbound sales reps tends to be lower.* Most institutions indicated that the majority of their outsourcing is related to large campaigns. The inbound calls from these initiatives would overwhelm the call center, so the institution outsources these calls. This outsourcing leaves the inbound sales reps happier, and less likely to leave.

Correlation between People and Effective Service

- *An institution's efficiency goes up if employees are less empowered.* If supervisors handle the threat of customer defection (instead of letting CSRs handle those cases), the average hold times for the call center go down.

- *Institutions that have higher employee empowerment tend to have higher overall customer-focus.* Institutions that allow CSRs to handle more customer issues, believing that customers prefer not to be transferred to different part of a call center to resolve a single issue, tend to have higher customer focus.
- *Institutions with greater customer-focus have higher average labor spending.* This implies that customer-focus does not come without additional costs.
- *Institutions with more customer-focus have a higher percentage of not utilized work hours.* Institutions that care about clients also care about making a more comfortable work environment for their employees.

Effective Process

This section primarily deals with how well call centers are able to handle various inbound and outbound call mixes.

Correlation between Effective Process and Effective Service

- *Institutions that make large numbers of outbound sales calls tend to be less customer-focused.* This seems to imply that as institutions get caught up in telemarketing, they lose customer-focus.
- *Institutions who outsource tend to have lower service levels.* There are two possible explanations for this phenomenon. The first reason is that if outsourcing is done simply for the purpose of lowering cost, the focus on a customer's needs may become secondary. The second explanation has to do for the reason behind outsourcing. If a call center chooses to outsource because they are finding it difficult to manage the call volume, their focus is clearly not on meeting a customers needs but more likely on fighting more operational issues like staffing levels and call routing.

5. Managerial Implications

The previous section described each result of our analysis and what we believe to be the implications of those results. This section summarizes what we believe to be the key findings of this study, and what issues managers should be cognizant of in managing their own call centers.

1. Effective service delivery is critical for client retention and sales. Although most call center managers would agree with this statement wholeheartedly, it sometimes proves difficult to justify additional investment into an entity that is typically thought of as a cost center. The TARP (1997) study attempts to quantify some of the revenue benefits associated with effective service delivery.
2. Customer-focus goes hand in hand with employee focus. Our findings indicate that institutions that tend to focus more on their customer also do so with their employees. Employee focus comes in the form of increased empowerment, higher labor spending, and better work environment for CSRs.
3. Turnover is much more heavily influenced by work environment, rather than compensation. This finding implies that, all else being about equal, employees are more likely to leave for work environment issues, rather than money. (This does not imply that call centers can pay CSRs significantly lower than their competitors and expect them to stay.)
4. Additional capacity results in lower CSR turnover, and a greater potential for increasing customer retention. Customer retention is critical for financial institutions. Studies have indicated that the costs of attracting a new customer are five times (American Bankers Association, 1995) that of retaining existing clients. Furthermore, given the ever-increasing number of call centers, the costs associated with attracting, screening, and training personnel are far from trivial.
5. Outbound sales efforts can shift attention away from effective service delivery. This finding has an interesting “spiral” implication. As financial institutions attempt to sell more (to new or existing clients) they lose sight of customer service. As service drops, retention becomes a problem. With lower customer retention, not only do sales to existing customers drop, but also there is a significant cost increase due to attracting new customers. Once these new customers come in, however, the lower service will only serve to drive them away.
6. IT spending needs to be closely monitored to ensure “smart design” versus increased system complexity. Call centers need to continually question the true benefits derived from additional information technology spending.
7. Outsourcing can result in a shift of focus away from the customer. All decisions taken by the call center have to take the customer into account. Often decisions that are made solely for the purposes of cost savings tend to have a negative impact on customer service.

References

American Bankers Association (1995), *Call Centers: Moving Beyond Call Centers to Full Service Delivery*, Issue 5.

Dorf, B. (1997), "Phone-to-phone marketing: telephone call centers are an underappreciated means to that elusive grail of one-to-one marketing," *Brandweek*, v38 n33 p25(5).

Doucet, L. (1998), "Responsiveness: emotional and information dynamics in service interactions," Working Paper, Department of Management, The Wharton School, University of Pennsylvania (Philadelphia, PA).

Dunlap, P. & Volpe, P. (1998), *Performance Support Systems*, White Paper, RWD Technologies (10480 Little Patuxent Parkway, RWD Building, Suite 1200, Columbia, MD 21044-3530).

Duncombe, V., Griffiths, G., LaBrie, D., Muskat, D. (1996), "Moving from basic call centers to world class call centers," *Bank Marketing*, 28(2): 19-22.

Goodman, J., Yanovsky, M. & Blanchard, A. (1997), "Measuring the bottom line impact of inbound call centers: a financial services example," Working paper, TARP (1300 Wilson Blvd., Suite 950, Arlington, VA 22209).

Hamblen, M. (1997), "Bank call center system pays dividends," *Computerworld*. 31(45): 55-56.

Luhby, T. (1998), "Call centers failing to ring the bell, survey finds," *American Banker*, v163 n1 p11.

Appendix A: Correlation Table

PROXY 1	PROXY 2	COEFFICIENT	P-VALUE	R ²	DATA POINTS
VRU Complexity	IT Spending	19.27	.055	67.7%	7
CSR Turnover	CSR Empowerment	-.344	.093	55.2%	9
CSR Turnover	Tenure	-.02	.05	41.5%	7
CSR Turnover	Recruited from within	-.47	.006	92.2%	7
CSR Turnover	Recruited from outside	.29	.03	78%	7
CSR Turnover	Work Environment	-1.21	.04	52.1%	9
Avg. Hold Time	IT Spending (per FTE)	-.0022	.05	48.4%	10
Avg. System Time	IT Spending (per FTE)	-.0035	.02	71.1%	9
Customer-focus	IT Spending (per House)	.444	.04	43.9%	8
Customer-focus	VRU Complexity	-.8	.05	69.8%	6
Customer-focus	VRU's Customer-focus	21.7	.007	75.6%	6
CSR Empowerment	Avg. System Time	-101	.09	44.2%	7
Customer-focus	CSR Empowerment	8.02	.01	72.3%	7
Outbound Sales Calls	Customer-focus	-5.52	.04	45.1%	6
VRU's Customer-focus	Hold Time	-187.6	.098	41.9%	8
VRU's Customer-focus	Generalist CSRs	7.17	.07	80%	6
Customer-focus	Labor Spending (per FTE)	.0002	.075	34.1%	8
Customer-focus	CSR Empowerment	8.03	.01	72.3%	6
Customer-focus	Work Environment	29.5	.08	33.2%	8
VRU Complexity	VRU's Customer-focus	-12.8	.08	48.1%	7
CSR Empowerment	IT Spending (per House)	.053	.028	58.6%	7
Outbound Retention Calls	Work Environment	.705	.02	54%	6
Turnover	VRU's Customer-focus	.904	.02	58.9%	8
Outsourcing	Inbound Sales Reps Turnover	-.476	.03	59.7%	7
Outsourcing	Avg. Hold Time	39.38	.01	78%	6