Research and concepts

An empirical assessment of internal customer service

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Abstract

The quality service movement is often accused of being merely slogans, fads, and "hot topics". In an effort to counter this assumption and continuously improve organizational performance, empirical research is needed. Examines empirically the popular concept of internal customer service. Although there is considerable descriptive, anecdotal literature on internal service, to date there has been very little empirical assessment of this "hot topic" in total quality. While the concept of viewing fellow coworkers as customers makes intuitive sense, there is still a debate among both academics and practitioners as to the real value of internal customer service on the service quality to external customers. Using a large food and grocery wholesaler, examines empirically the impact that internal customer service has on external customer service. Finds that internal customer service seems to have a mixed, complex relation with external customer service. Discusses practical implications that these findings have for managing service quality.

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The hyper-competitive business environment of the new millennium has forced organizations to increase their emphasis on service quality. Because of this, a wealth of practical applications have emerged on the many facets associated with managing service quality. Consider, for example, the past issues of this journal and the quality literature as a whole on such topics as benchmarking, re-engineering, and total quality management (TQM). One point of debate within this literature concerns defining the customers that quality programs are supposed to be serving. Various models have been proposed that revolve around the concept of customers existing within the boundaries of the organization. This basic principle of internal customer service posits that every department in an organization exists to serve someone, whether that be the external customer or another department. The organization consists of an interdependent chain of individuals and functional units, each taking inputs from one another and turning them out into external customer service. The basic assumption is that if everybody strives to provide their "internal customer" with better service, then the end customer will receive higher quality service.

This term "internal customer" emerged during the mid 1980s when many organizations were trying to simultaneously improve quality and reduce costs (Davis, 1991). Reducing costs often came by eliminating people through downsizing. Because of the understated importance of internal operations, quality was often sacrificed for short-term cost savings. The internal customer service model emerged to counter the negative impact of downsizing and became a rallying cry for enhancing the organization's quality efforts.

While the concept of internal service makes intuitive sense, little theoretical or empirical work regarding the impact of internal customer service exists (Hallowell *et al.*, 1996; Stanley and Wisner, 1998). This could be because the concept does not fit in any one academic discipline, but rather is both a marketing and a mangement issue. That being said, there is still considerable controversy regarding the value of viewing organizations as groups of internal customers. In fact, some theorists view the concept as actually harmful to an organization's quality efforts. This article provides an empirical

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assessment of the role that internal customer service plays in predicting external customer service.

First, the concept of the process approach to quality and continuous improvement is reviewed because these basic principles provide the foundation for internal customer service. Next, the concept of internal customer service *per se* is analyzed, with specific attention given to both sides of the debate concerning whether this internal emphasis provides a valid approach for improving quality service to external customers. Finally, results of our study are presented which provide empirical evidence of the impact of internal customer service on the external customers of a large wholesaler.

Process management and continuous improvement

A process perspective provides a theoretical underpinning for internal customer service. Process management refers to management practices that emphasize the processes of an operation, rather than the actual results. A process in an organization refers to "a group of logically related tasks (decisions and activities) that, when performed, utilize the resources of the business to produce definitive results" (Kane, 1986). The term was developed by IBM during the 1980s in response to a concern that certain administrative functions were actually holding up production (Davis, 1992). The realization that customer expectations were changing faster than the organization forced IBM to re-analyze each process in an effort to provide faster continuous improvement.

A typical process management approach involves examining all organizational activities in the sequence that they occur. Emphasis is on what precedes each activity (inputs), what occurs within each activity, and what follows (outputs). What results is a flowchart of all activities performed within the system. By examining all activities in sequence, quality is enhanced by pinpointing potential trouble spots.

Another theoretical backdrop for internal service is continuous improvement. Striving to continuously improve products or services serves the function of ensuring that the quality process is not abandoned because of implementation problems, adopting a continuous improvement mandate forces organizations to recognize that future changes will be needed to ensure future competitiveness, regardless of current success. This involves improving the product or service being offered in order to respond to the ever-changing needs of the market. Deming has defined it as "better and better quality, less and less variation". This definition of continuous improvement encompasses both goals of making better products or services and providing an innovation mechanism for the future.

The term "internal customer" evolved in part from both the process and continuous improvement perspectives. In short, internal customer service serves as a useful framework for implementing a process approach to quality management on a continuous basis. The following section reviews the existing largely anecdotal literature on internal customer service.

These concepts are operationalized in Heskett's Service Profit Chain (Heskett *et al.*, 1994, 1997). This model is based on the premise that internal service quality drives or predicts employee satisfaction, which in turn enables the organization to deliver high value service, resulting in customer satisfaction and loyalty, which ultimately lead to increased profits. Although conceptual, Heskett does provide case study examples supporting his theory.

The current status of internal customer service

Considerable quality literature espouses the belief that process improvement on a continuous basis is best exemplified by having each department treat those that they serve as customers (Albrecht, 1990; Davis, 1991; Gremler *et al.*, 1995; Lee, 1991). For example, well-known quality expert Albrecht (1990) emphasizes the importance this way:

> If you're not serving the customer, your job is to serve somebody who is. The concept of internal service – the idea that the whole organization must serve those who serve – has emerged as one of the most important principles of the service management approach. It is, truly, a management idea whose time has come.

The basic tenet of internal service is that each department either receives work from, or processes work for another department, as the process management approach emphasizes. Because of this, individual units or departments need to view themselves as both customers and suppliers. They receive inputs from another department (their supplier), add value, and send the output of their work to another department (their customer). Processes can be improved, and thus quality improved, if each department treats the people who receive the outputs from their work as "customers".

This internal service approach often requires individual sub-units to justify their existence (Zemke and Zemke, 1994). In the traditional, free market situation, external customers have the option of exiting relationships with their suppliers. This of course forces organizations to provide top quality service to their customers or eventually go out of business. Internal operations do not face such market forces and therefore may not provide quality service to the other departments they serve. For internal operations, the opportunity does not traditionally exist for their "customers" to exit the relationship. However, increasingly exit opportunities are becoming a reality because of the growing popularity of outsourcing. The opportunity to outsource provides a mechanism inside the organization that forces each sub-unit to provide the best, most efficient service or risk being eliminated, similar to the market mechanism.

Related to overall internal customer service are "internal guarantees". Under this arrangement, departments actually contract with other internal departments to provide a specified level of service. The penalty for not living up to the guarantee serves as an incentive to provide quality service. This is what separates internal guarantees from simple performance standards. According to Hart (1995), internal guarantees improve organizational performance in three ways:

(1) a true spirit of teamwork and partnership develops between different parts of the organization;
(2) an environment of blameless error takes hold, wherein employees are rewarded, not punished, for identifying problems instead of sweeping them under the rug or blaming someone else; and
(3) continuous dialogue and feedback begin with progress, problems, and processes.

Sub-unit evaluation

If the internal departments are to be treated as customers, periodic evaluation of each department is necessary for accurate feedback. Albrecht (1992) discusses this in the context of developing a "customer report card". This could include the industry and departmental specific aspects of service that are necessary to provide top quality service to the end customer. He stated that the report card should be developed by analyzing both the cycles of service and the "moments of truth" to determine what the service attributes are. This practice sometimes involves actually compensating managers based on their internal customer's evaluations. For example, at San Diego Gas and Electric Company, manager salaries are tied to how the other departments view them. Changes in survey scores from year to year actually affect pay (Zemke and Zemke, 1994).

There are many examples of how organizations that have made efforts at improving internal processes through the internal customer service concept have improved quality. UPS, through industrial engineering, has achieved success through managing the package delivery process in great detail (Davis, 1992). In addition, they emphasize the communication process. They also foster the internal customer concept by spending a great deal of time evaluating internal employee satisfaction. They do this both through daily meetings and regular employee involvement meetings designed to increase worker participation. Their motto, according to CEO Kent Nelson is "employee satisfaction equals customer satisfaction at UPS". Hyatt Hotels has also found success through the internal customer concept. They use an employee satisfaction survey on a monthly basis to rank the performance of their managers. They have found these to be a better predictor of external customer satisfaction than the traditional customer surveys normally found in the hotel rooms. They use these internal surveys to such a degree that performance appraisals, bonuses, and even promotions are partially based on this survey instrument (Davis, 1992). Although these examples are only anecdotal in nature, they do serve as concrete examples of how companies have seemingly benefited from implementing this internal customer approach.

The empirical research on this topic is primarily focused on the concept of "internal marketing" (Bowers *et al.*, 1990; Joseph, 1996). The concept is that the basic needs of internal employees must be satisfied in a similar fashion to satisfying external customer needs before an organization is able to provide quality service to the external customers (Wisner and Stanley, 1999). Although conceptualized around the concept of internal customers, operationalizing this often involves implementing traditional management techniques such as empowerment, training programs, enhancing communication, and implementing teams.

In one empirical study, Wisner and Stanley (1999) studied internal service of 118 purchasing professionals across a variety of different organizations. Their findings included a positive relationship between communication effectiveness and internal service quality levels. They also found a relationship between purchasing agents' level of internal customer service and the level of perceived external customer service.

In another study, Hallowell *et al.* (1996) surveyed a group of front-line employees and front-line managers at two US insurance companies. They did find a significant relationship between internal service quality and levels of service capability, although it was a complex relationship. They found that tools, policies and procedures, teamwork, management, goal alignment, and training are related to service capability. However, they did not find a relationship between service capability and the level of communications, or rewards and recognition.

Despite this apparent success, there are some arguments that an internal customer approach can actually harm organizational quality efforts (Harari, 1991, 1993).

Should internal customers exist?

In commenting on Albrecht's phrase cited above "if you're not serving the customer, your job is to serve someone who is", Harari (1991) proposes changing it to "if you're not serving a customer, maybe you'd better start". He states several reasons for this counter argument. Getting departments to work together is not always easy. They may have little incentive to cooperate. Many employees, especially specialists, do not view their function as "serving" others; they have never been in a customer service position, and it is not an easy task for an organization to alter these perceptions. These types of departments generally have the freedom to spend and to provide services that they deem necessary, without being accountable to another department's "satisfaction" measures.

Even if these perceptual and intergroup difficulties can be effectively managed, there is still debate as to whether internal customers should exist at all. Harari (1991, p. 41) comments as follows:

> This internal customer business troubles me. Let's say my controller prepares a report requested by someone in manufacturing. Using the internal customer logic, she's done her job. She can wash her hands of everything from then on, because she's served her customer. But was that report useful? Should it have been written in the first place? Will it help the operator or our end user? Will it help us in terms of efficiency? Or getting out product faster? That's irrelevant to the controller, because she's supposedly responded to her customer. But those issues should be her – and everybody's – responsibility.

This basic argument is that although the internal customer perspective can help assure that department A gives proper service to department B, it fails to ask the question of whether or not it should be serving department B in the first place.

Harari gives three specific reasons why focusing on internal customers will actually hurt the organization. The first is that it diverts attention away from the real customer who pays the bills. It is quite possible that the internal customers could be satisfied with the products and services that they receive, with this having little or no effect on external customer satisfaction. His analogy is to "arranging deck chairs on the Titanic". He argues that market forces are changing so quickly today that everybody's focus needs to be on the outside. Internal satisfaction could be irrelevant to the end goals of the organization.

The second reason is that the basic principles associated with the internal customer concept can foster a climate of "turfism", meaning that departments are again not focused on the customer who actually produces the revenues. Those employees or departments that have no contact with the paying customers can easily slip into the mentality that as long as they can document service to an internal customer, their service must be legitimate and necessary.

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In addition, this can also foster dominant-subservient relationships in organizations. Consider the statement "the customer is always right". Unhealthy relationships can exist if the analogy is carried over to internal customers in the traditional organizational structure.

Finally, Harari argues that to operationalize internal customer service in the intended manner causes organizational inefficiencies in general. The concept of department B taking inputs or resources from department A, then passing them on to department C has negative consequences associated with waiting, reworking, fingerpointing, and backstabbing. Instead of isolated departments and internal customer groups, he proposes that cross-functional, multidisciplinary teams will get the job done much better. Harari suggests we should forget about "serving" colleagues and consider them equal partners with the same goal. Consider the following (Harari, 1991, p. 43).

> But isn't it important to help and support employees and colleagues? Of course, but don't call them customers. Real customers purchase goods and services. And thriving in the current marketplace madness can only be done if everyone on the team is directly and proactively pitching in. When you're a raft howling through the white water, you don't want anyone in that boat waiting to serve internal customers.

Unfortunately, both the pro and con arguments on internal customer service from the popular business literature are not based on any empirical analysis. Our study was designed to reconcile these opposing points of view by empirically assessing the impact that internal customer service has on external customer service in a large wholesale distribution firm.

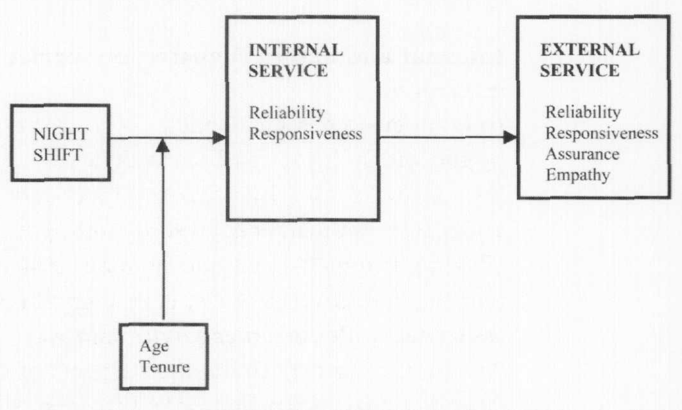
Analyzing the importance of internal customer service

The organization used for this study was a large food and grocery wholesaler located in the Midwest region of the USA, servicing about 10,000 customers in a five state area. This organization was relevant for this study for several reasons. First, the steps that this organization takes to complete a customer order inherently requires a process approach to quality service. Each department in this organization adds value to the service, requiring coordination and service to each other. Therefore, satisfying the external customer greatly depends on a smooth running, process approach to successfully complete a customer transaction. A second desirable characteristic is that there is a large population of different types of customers across different geographic regions in this organization. Thus, history and sampling threats were minimized.

Figure 1 graphically depicts the proposed relationships that we wanted to test between internal and external customer service. The wholesale distribution firm has individual departments that serve other departments in a process manner. Specifically, successful completion of the daily tasks requires high levels of quality service and cooperation between departments.

The main contact between the organization and the external customer is the sales department. Through interviews with management, it was determined that the primary product and internal service provider for the sales force is the night shift. Although there are other departments in this organization, the night-shift and sales are the most direct internal service relationship to this external customer. The night shift is at the heart of this organization's process. Typically, the sales associates will turn in their orders at the end of a day for processing during that evening. The night shift processes the order for delivery the following day. This involves picking, loading the trucks for delivery, and running invoices. Service to the sales associates includes such things as notification of any problems (e.g. late trucks, out-of-stock items). Typically, communications between night shift personnel and sales associates

Figure 1 Proposed relationships between internal and external customer service



occur several times a week. We propose that in this organization, sales associates who receive higher levels of service from this night shift (i.e. the internal customer relationship) will have external customers that are more satisfied with their level of quality service.

The external customers see this organization's approximately 100 salespeople on a weekly basis. Their primary functions are order taking, selling of new products, and resolving customer problems. Ratings of internal customer service were collected from 81 salesforce associates. The surveys were administered at a weekly sales meeting, which contributed to the high response rate of over 80 percent. The sales associates averaged 35 years old, and had an average of 10.5 years' experience in the organization.

A stratified random sample was drawn from the population of external customers that the organization serves ($N = 2{,}000$). It was stratified to allow higher volume customers to have a better chance of being selected. Given the customer base, a true random sample would have been loaded with customers who purchase small quantities, and do not represent the typical activities and interactions of the firm. This sample was told that this was a university project which was studying attributes of service. In addition, the company provided a memo on their letterhead encouraging them to participate. Customers were assured anonymity, but encouraged to participate so that the aggregate results could be used by the company to provide better service in the future. They were provided with a return envelope addressed to the university. A total of 520 responded to the survey (28 percent), which is consistent with the typical response rates of between 20 and 25 percent for customer surveys of this type (Parasuraman *et al.*, 1991).

Internal and external customer service measures

Internal customer satisfaction was measured by the widely recognized and validated instrument called SERVQUAL (Jiang *et al.*, 2000; Parasuraman *et al.*, 1985, 1988, 1991). This multi-dimensional questionnaire reflects many of the theoretical elements commonly associated with customer service and was designed to capture the unique aspects of customer perceptions as applied to service organizations in particular. The dimensions measured are:

- *Reliability* – the ability to perform the promised service dependably and accurately.
- *Responsiveness* – the willingness to help customers and to provide prompt service.
- *Assurance* – knowledge and courtesy of employees and their ability to inspire trust and confidence.
- *Empathy* – caring, individualized attention to customers.
- *Tangibles* – physical facilities, equipment, and appearance of personnel.

Support for this construct of customer service has been provided in studies across many different types of service industries.

SERVQUAL measures the gap between the level of service a customer would expect to receive from an "excellent" company versus the level of service they are actually receiving from the target company. Because different industries are unique in how service is defined, this tool was designed to be custom tailored to each organization's specific needs. Therefore, using Parasuraman *et al.*'s (1985, 1988, 1991) suggestions as a guide, this instrument was modified for this study to only measure internal customer service levels as perceived by the employees requiring service. Specifically, the instrument was customized to reflect the most relevant dimensions of internal customer service that the salespeople require in this organization – reliability and responsiveness. These are two service dimensions (of the five in the SERVQUAL instrument) that were deemed by management to most directly affect sales associate impact on external customers. The sales associates require the night-crew department be reliable in performing their tasks and respond to specific needs in a timely fashion. Tangibles, assurance, and empathy were not felt by management to directly affect the sales associates delivery of service to external customers in this organization. However, based upon the services this sales department provides to external customers, internal service from the night shift does affect external customer service on dimensions of reliability and responsiveness (i.e. dependable, prompt service).

The first part of the SERVQUAL instrument measures the internal customers' (sales associates) expectations of a dimension,

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and the second section measures the perceived level of service that the salespeople feel they are actually receiving. Service level expectations are subtracted from their perceptions of what they are actually receiving in order to measure customer service. Therefore, negative scores reflect un-met expectations whereas positive scores reflect service that exceeds customer expectations. The sales associates were asked to rate the night-shift on reliability and responsiveness as this department is directly responsible for processing the external customers' orders. The reliabilities for these measures were quite high (alpha's were 0.85 for reliability and 0.70 for responsiveness).

The external customers also filled out a SERVQUAL survey. The "Tangibles" dimension was not included in this analysis, as the customers rarely see or come into contact with the physical facilities of this organization. The other four dimensions were so highly correlated (*rs* = 0.72-0.85) that the dimensions were combined into one composite measure of customer service and the reliability for this measure was very high (alpha of 0.94).

Results of the empirical analysis

The overall external rating of quality service shows this organization is slightly below customer expectations (see Tables I and II). On the other hand, the sales staff, as internal customers, rate the night shift staff as greatly exceeding their expectations for reliability and as slightly exceeding expectations in terms of responsiveness.

Table I Descriptive statistics

	Mean	1	2	3	4	5
Age	37.20 (9.02)					
Tenure	10.14 (7.17)	0.56*				
External service	–0.54 (0.91)	0.10	0.01	[0.94]		
Internal reliability	–1.28 (1.15)	0.29*	0.30*	0.15	[0.83]	
Internal responsiveness	–0.33 (1.53)	0.31*	0.16	–0.08	0.62*	[0.70]

Notes: Standard deviations in parentheses, reliabilities in brackets; $^*p < 0.01$

Table II Regression results

	B	*t*	R^2	*F*	R^2	*F*
Step 1						
Age	0.014	0.066	0.016	0.10		
Tenure	–0.086	–0.405				
Step 2						
Reliability	0.497	2.37*	0.274	2.69*	0.258	5.26*
Responsiveness	–0.692	–3.22*				

Notes: $^*p < 0.05$

As would be expected, the demographic variables of age and tenure were highly correlated. This organization has a loyal workforce where many employees have spent their entire employment career. Of interest, however, is that the demographics were not related to external customer service ratings but were significantly related to perceptions of internal customer service. In particular, the older and more tenured the salesperson, the lower the perceived quality service this individual received from the night shift. Finally, the two internal service measures were highly related but importantly were not found to be significantly related to external service quality. However, one should avoid a quick conclusion that internal service is not related to the quality of service provided to external customers.

First, the high correlations between age and internal service suggested that experience may influence external service through its influence on expectations of how internal processes should perform. Hierarchical regression can be used to partial out such indirect effects. Second, the two internal service dimensions of reliability and responsiveness show opposite relationships with the external service dimension, yet they are significantly and positively related to each other. This suggests a potential masking effect. Multiple regression can be used to identify the unique and individual effects of highly related independent variables on a common dependent variable.

Entering age and tenure as control variables in the first step of the regression analysis showed no significant relationship to external service ratings. However, entering the two measures of internal quality service simultaneously in the second step did reveal a significant external customer service rating. Specifically, higher levels of internal service reliability were related to lower external

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quality service ratings, whereas higher internal ratings of service responsiveness were related to higher external service quality.

Interpreting the results of the empirical analysis

This study had two major findings, but in opposite directions. First, in accordance with conventional wisdom, those sales associates who perceived higher levels of internal service responsiveness were associated with external customers who felt they were receiving better service. The second finding was that sales associates' higher levels of perceived reliability were related to lower levels of perceived quality service on the part of external customers. What this indicates is that the concept of internal customer service is not as straight forward as the advocates suggest and it is a complex construct. In particular, it may be much more difficult to assess internal service in the same fashion as external service. External customer service has proven measures. The internal customer concept appears to be much more difficult to define, operationalize, measure, and analyze.

Internal customer service requires deeper analysis and understanding as evidenced in this study. For example, this study found that internal service reliability does not carry over to the external customers in this particular situation, in fact, there was a negative relationship. This could indicate that the dimension of reliability was being "overmet", whereas the responsiveness of the personnel in the delivery chain was the key internal service variable leading to satisfied external customers. This could suggest that at least in this organization, the night shift spends more time on getting the orders processed correctly instead of focusing on getting them done quickly and out the door to the customers, thus reflecting an accuracy versus speed tradeoff. If this is the case, it would seem plausible that the sales associates prefer timely service to reliable service, given the capabilities that they have to fix mistakes, but are in trouble with the customer if the products are not delivered. In other words, the competitive advantage for customers in this situation is speed over accuracy. Customers expect some mistakes, but definitely want prompt, timely service.

Age and tenure of the sales associates were tested as moderators. Although moderation was not evident, a negative relationship was found between tenure and perception of internal service. This means that those sales associates who have been with the organization the longest have the perception that they are not getting as reliable of service. One explanation for this is that the longer sales associates have been with the organization, they know what is possible, the less tolerant they are of mistakes and the more service they expect. As they become more experienced, their perception is that service is not as good as it should be. As older, more experienced associates learn the informal networks and workings of the organization, they expect better service, and they have the perception that it could be much better.

Conclusion

This study shows that internal customer service may be important, but is clearly more complex and may involve trade-offs between various service dimensions. This was evident in this situation in the tradeoffs that seemed to be occurring between reliability and responsiveness.

Nevertheless, the study findings showed that perceptions of internal customer service did matter. Based on this, it appears that the two sides of the debate on internal customer service are reconcilable. The major differences appear to be semantical in nature. While operating an organization as groups of internal customers may very well shift the focus and the organizational goals in an undesirable direction, the purpose of developing the concept was to bring to life the concepts of process management, continuous improvement, and forcing individual sub-units to demonstrate the value that they add to the process. These time tested concepts are necessary for organizations wishing to improve quality and remain competitive in the global economy. If the internal customer service concept helps these firms to operationalize and implement quality concepts, then the internal customer service perspective seems important. Another "semantical" interpretation of this concept could be that internal customer service is simply good management with new terminology. Consider, for example, that providing high levels of internal customer service could simply be defined as implementing traditional management techniques such as empowerment, training programs, enhancing communication, and implementing teams or restructuring the organization to provide faster service.

Finally, because little research on this topic exists, more theory building as well as this type of empirical analysis is needed. For example, little empirical work exists on the concept of "overmet" expectations. While researchers have concluded that there can never be "too much" quality, the results of this survey did show that the sales associates were getting more than they expected across certain quality measures. If this is the case, it is plausible that the organization is paying for more quality than they need through the design of the system. This empirical analysis mainly leads to the conclusion that popular concepts such as internal customer service are not necessarily right or wrong, but that they are more complex than portrayed in the literature and practice to date.

References

Albrecht, K. (1990), *Service Within. Solving the Middle Management Leadership Crisis*, Business One Irwin, Homewood, IL.

Albrecht, K. (1992), *The Only Thing That Matters: Bringing the Power of the Customer into the Center of Your Business*, Harper Collins, New York, NY.

Bowers, M.R., Martin, C.L. and Luker, A. (1990), "Trading places: employees as customers, customers as employees", *The Journal of Services Marketing*, Vol. 4 No. 2, pp. 55-70.

Davis, T.R.V. (1991), "Internal service operations: strategies for increasing their effectiveness and controlling their cost", *Organizational Dynamics*, Vol. 20 No. 2, pp. 5-23.

Davis, T.R.V. (1992), "Satisfying internal customers", *Planning Review*, Vol. 20 No. 1, pp. 34-7.

Gremler, D., Bitner, M. and Evans, K. (1995), "The internal service encounter", *Logistics Information Management*, Vol. 8 No. 4, pp. 28-34.

Hallowell, R., Schlesinger, L.A. and Zornitsky, J. (1996), "Internal service quality, customer and job satisfaction: linkages and implications for management", *HR. Human Resource Planning*, Vol. 19 No. 2, p. 20.

Harari, O. (1991), "Should internal customers exist?", *Management Review*, Vol. 80 No. 7, pp. 41-3.

Harari, O. (1993), "Internal customer RIP", *Management Review*, Vol. 82 No. 6, pp. 30-1.

Hart, W.L. (1995), "The power of internal guarantees", *Harvard Business Review*, Vol. 6 No. 1, pp. 64-72.

Heskett, J.L., Sasser, W.E. Jr and Schlesinger, L.A. (1997), *The Service Profit Chain: How Leading Companies Link Profit and Growth to Loyalty, Satisfaction and Value*, Free Press, New York, NY.

Heskett, J.L., Jones, T.O., Loveman, G.W., Sasser, W.E. Jr and Schlesinger, L.A. (1994), "Putting the service-profit chain to work", *Harvard Business Review*, Vol. 72 No. 2, pp. 164-75.

Jiang, J.J., Klein, G. and Cramption, S.M. (2000), "A note on SERVQUAL reliability and validity in information system service quality measurement", *Decision Sciences Journal*, Vol. 31 No. 3, pp. 725-44.

Joseph, W.B. (1996), "Internal marketing builds service quality", *Journal of Health Care Marketing*, Vol. 16 No. 1, pp. 54-60.

Kane, E.J. (1986), "IBM's quality focus on the business process", *Quality Progress*, April, pp. 24-33.

Lee, C. (1991), "The customer within", *Training*, Vol. 28 No. 6, pp. 21-9.

Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1991), "Refinement and reassessment of the SERVQUAL scale", *Journal of Retailing*, Vol. 67 No. 4, pp. 420-50.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 4, pp. 41-50.

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

Stanley, L.L. and Wisner, J.D. (1998), "Internal service quality in purchasing: an empirical study", *International Journal of Purchasing and Materials Management*, Vol. 34 No. 3, pp. 50-60.

Wisner, J.D. and Stanley, L.L. (1999), "Internal relationships and activities associated with high levels of purchasing service quality", *Journal of Supply Chain Management*, Vol. 35 No. 3, spp. 25-32.

Zemke, R. and Zemke, S. (1994), "Partnering: a new slant on serving the internal customer", *Training*, Vol. 31 No. 10, pp. 37-43.