Customer contributions and roles in service delivery

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Introduction
Service experiences are the outcomes of interactions between organizations, related systems/processes, service employees and customers. Considerable research in marketing and management has examined customer satisfaction with service experiences (e.g. Arnold and Price, 1993; Bitner, Booms and Mohr, 1994; Bitner, Booms and Tetreault, 1990; Keaveney, 1995; Ostrom and Iacobucci, 1995; Surprenant and Solomon, 1987; Zeithaml, Parasuraman and Berry, 1990). Predominantly, the research has focused on the roles of service processes, employees and tangibles in creating quality service experiences for customers. However, in many services customers themselves have vital roles to play in creating service outcomes and ultimately enhancing or detracting from their own satisfaction and the value received. This is true whether the customer is an end consumer (for example, consumers of health care, education, personal care, or legal services) or a business (for example, organizations purchasing maintenance, insurance, computer consulting or training services). In all of these examples, customers themselves participate at some level in creating the service and ensuring their own satisfaction.

This manuscript focuses specifically on the roles of customers in creating quality and productivity in service experiences. Drawing on previous (primarily conceptual) research, two frameworks are first presented to aid managerial decision making and guide potential research related to customer participation in service(1). The first framework examines different levels of participation required of customers across a variety of service contexts while the second framework presents three major roles played by customers in service delivery.

This paper is adapted from “Quality and productivity in service experiences: customers’ roles”, presented at the QUIS 5 conference in June 1996 and is reproduced by permission of The McGraw-Hill Companies.
The paper then summarizes the results of two empirical studies that illustrate the role of customer participation and the effects on satisfaction with the service (Faranda, 1994; Hubbert, 1995).

**Levels of customer participation**

The level of customer participation required in a service experience varies across services as shown in Table I. In some cases, all that is required is the customer's physical presence (low level of participation), with the employees of the firm doing all of the service production work, as in the case of a symphony concert. Symphony-goers must be present to receive the entertainment service, but little else is required once they are seated. In a business-to-business context, examples of services that require little participation are less common. One example shown in Table I is that of providing plant and flower interior landscaping services. Once the service has been ordered, little is required from the organization other than to open its doors or provide access to the service provider to move plants in and out.

<table>
<thead>
<tr>
<th>Level of Participation</th>
<th>Description</th>
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<tbody>
<tr>
<td>Low</td>
<td>Customer presence required during service delivery</td>
</tr>
<tr>
<td>Moderate</td>
<td>Customer inputs required for service creation</td>
</tr>
<tr>
<td>High</td>
<td>Customer co-creates service product</td>
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- **Products are standardized**
  - Low: Customer presence required during service delivery
  - Moderate: Customer inputs required for service creation
  - High: Customer co-creates the service product

- **Service is provided regardless of any individual purchase**
  - Low: Customer presence required during service delivery
  - Moderate: Customer inputs required for service creation
  - High: Customer co-creates the service product

- **Payment may be the only required customer input**
  - Low: Customer presence required during service delivery
  - Moderate: Customer inputs required for service creation
  - High: Customer co-creates the service product

- **Examples**
  - End consumer: Airline travel, Hair cut, Marriage counselling
  - Motel stay, Annual physical exam, Personal training
  - Fast-food restaurant, Full service restaurant, Weight-reduction programme
  - Business-to-business customer: Uniform cleaning service, Agency-created advertising campaign, Management consulting service
  - Pest control, Payroll service, Executive management seminar
  - Interior greenery maintenance service, Independent freight transportation, Install wide area network (WAN)

**Table I.** Levels of customer participation across different services

*Source: Adapted from Hubbert (1995)*
In other cases, consumer inputs are required to aid the service organization in creating the service (moderate level of participation). Inputs can include information, effort or physical possessions. All three of these inputs are required for a CPA to prepare a client’s tax return effectively: information in the form of tax history, marital status and number of dependents; effort from the client in putting the information together in a useful fashion; and physical possessions such as receipts, past tax returns, etc. Similar types of information, effort and possessions are required when the customer is an organization seeking to outsource services such as payroll, customer database management, or tax accounting.

In some situations, customers can actually be involved in co-creating the service (high level of participation). For such services, customers have essential production roles that, if not fulfilled, will affect the nature of the service outcome. All forms of education, training and health maintenance fit this profile. Unless the customer does something (e.g. studies, exercises, eats the right foods), the service provider cannot effectively deliver the service outcome. Similarly, an organization seeking training services for its employees will need to help define the nature of the training, identify the right employees for the training, provide incentives for them to learn and facilitate their use of the training on the job. If the organization does not do this, it and the employees involved will not receive the full benefits of the service.

Table I captures the three levels of participation required of service customers and provides several examples of each type for both end consumers and business-to-business customers. The effectiveness of customer involvement at all of the levels will impact organizational productivity and ultimately quality and customer satisfaction.

Customers’ roles in service experiences
Within the levels of participation just discussed, customers can play a variety of roles. Through a review of literature which has contributed to our understanding of customer participation (see Table II), we have identified three of these:

1. the customer as productive resource;
2. the customer as contributor to quality, satisfaction and value; and
3. the customer as competitor to the service organization.

These roles are not mutually exclusive, meaning an individual’s co-productive behaviours in a specific situation may apply to more than one of the three roles. Elements of each role may be at play in a given service transaction. A description of these roles and their implications follows. Afterwards, the discussion of two empirical research studies further illustrates customer participation levels and the roles customers can play in service delivery.
Lovelock and Young (1979) Service firms should be encouraged to involve customers more in production in order to increase productivity

Langeard et al. (1981) Using seven service dimensions to discriminate among groups, authors segmented consumers according to their willingness to participate as service co-producers

Bateson (1983; 1985) Demonstrated empirically that, across several service industries, a portion of customers finds self-service intrinsically attractive. Also found a portion of customers who are not at all interested in self-service

Mills, Chase and Margulies (1983) Improved service performance can be attained by viewing the client/customer as a “partial” employee

Bowen and Schneider (1985) Advocated the employment of organizational socialization tools to provide customers’ “realistic previews” of their forthcoming service experience

Silpakit and Fisk (1985) More clearly defined the concept of customer participation. Proposed a theoretical framework for “participatizing” the service encounter, i.e. maximizing the consumer’s participation in the service

Mills and Morris (1986) Advocated viewing clients as “partial” employees of service organizations; this perspective guided development of a model of client involvement stages

Larsson and Bowen (1989) Advocated use of script theory to socialize customers as “partial” employees of the service organization, so that the firm can reduce uncertainty in service operations by clarifying appropriate customer behaviours

Kelley, Donnelley and Skinner (1990); Kelley, Skinner, and Donnelley (1992) Suggested organization socialization process as means for customers to learn participation roles. Empirically assessed the level of organizational socialization of customers in a financial services setting. Higher levels were found to be positively related to several factors, including customer satisfaction

Lusch, Brown and Brunswick (1992) Proposed a model of internal/external exchange decision making, to explain why some consumers/organizations choose to produce a service for themselves (internal exchange), while others hire someone or some firm to provide the service for them (external exchange)

Dabholkar (1996) Reinforced Bateson’s findings that some service customers are intrinsically motivated to self-service
Customers as productive resources
For over a decade, researchers have advocated that organizations view service customers as “partial” employees (e.g. Bowen, 1986; Mills and Morris, 1986; Mills, Chase and Margulies, 1983). This perception expands the boundaries of the service organization to incorporate service recipients as temporary members or participants. It recognizes that customers contribute inputs, much like employees, which impact the organization’s productivity both via the quantity and quality of those inputs and the resulting quality of output generated (Mills et al., 1983). For example, in contributing information and effort in the diagnoses of their ailments, patients of a healthcare organization are part of the service production process. If they provide accurate information in a timely fashion, physicians will be more efficient and accurate in their diagnoses. Thus, the quality of the information patients provide can ultimately affect the quality of the outcome. Furthermore, in most cases, if patients follow their physician’s advice, they will be less likely to return for follow-up treatment, further increasing the healthcare organization’s productivity.

Customer participation in service production raises a number of issues for organizations. Because customers can influence both the quality and quantity of production, some experts believe that the delivery system should be isolated as much as possible from customer inputs in order to reduce the uncertainty customers can bring into the production process. This view reasons that the less direct contact there is between the customer and the service production system, the greater the potential for the system to operate at peak efficiency (e.g. Chase, 1978). The introduction of ATM machines and automated customer service telephone lines in the banking industry are both examples of ways to reduce direct customer contact in that industry, resulting in greater efficiencies and reduced costs.

Other experts believe that services can be delivered most efficiently if customers truly are viewed as partial employees and their participative roles are designed to maximize their contributions to the service creation process. The logic in this case is that organizational productivity can be increased if customers learn to perform service-related activities more effectively (e.g. Mills et al., 1983). The extreme case would be full self-service where the customer produces the service for him or herself with very little intervention or support from the organization’s employees. This case is similar to Bateson’s (1983) “full participator” group uncovered in his empirical study of the self-service customer.

Customers as contributors to quality, satisfaction and value
Another role that customers can play in services delivery is that of contributor to their own satisfaction and the ultimate quality of the services they receive. Customers may not care that they have increased the productivity of the organization through their participation, but they probably do care a great deal about whether their needs are fulfilled. Effective customer participation can
increase the likelihood that needs are met and that the benefits the customer is seeking are actually attained. This is particularly apparent for services such as health care, education, personal fitness, weight loss, and others where the service outcome is highly dependent on customer participation. In these cases, the customer is an integral part of the service and unless he/she performs his/her role effectively, the desired service outcome is not possible. The same is true for an organizational customer purchasing management consulting services. Unless the organization uses or implements the advice it has purchased, it cannot expect to get the full value of the service. Recognizing this, many management consultants now get involved in teaching customers to use the information they provide.

In addition to contributing to their own satisfaction by improving the quality of service delivered to them, some customers simply enjoy participating in service delivery. These customers find the act of participating to be intrinsically attractive (Bateson, 1983, 1985; Dabholkar, 1996). They enjoy using the computer to obtain airline tickets, or they may like to do all of their banking via ATMs and automated phone systems, to interact with service providers through the Internet, or to pump their own gasoline. In some cases, there is a price discount advantage for self-service, but other times, customers may be motivated by convenience, a sense of greater control over the service outcome, timing of delivery, or simple enjoyment of the task (Dabholkar, 1996).

Because service customers must participate in service delivery, they frequently blame themselves (at least partially) when things go wrong. If customers believe they are partially (or totally) to blame for the failure, they will be less dissatisfied with the service provider than when they believe the provider is responsible and could have avoided the problem (Bitner, 1990; Folkes, 1988; Hubbert, 1995).

Customers as competitors
A final role played by service customers is that of potential competitor. In many situations, customers (whether individuals or companies) have the choice of purchasing services in the marketplace or producing the service themselves, either fully or in part. Customers in a sense are competitors of the companies that supply the service. The decision whether to produce services for themselves (internal exchange) versus have someone provide the service for them (external exchange) is a common decision for consumers (Lusch, Brown and Brunswick, 1992). For example, a car owner who needs maintenance on his car can choose to do all his own maintenance (assuming he has the skills), to have someone else do all the maintenance tasks, or to do some tasks himself (e.g. changing oil) while reserving more complex tasks for a car maintenance shop. At one extreme, the car owner does all of his own maintenance, while at the other he pays to have someone do everything for him. Parallel examples can be imagined for child care, landscaping, home maintenance, and other services needed by households. Bateson's (1983) "full participator", if he/she possesses
the motivation and the needed skills, can be regarded as a prime candidate to engage in internal exchange and produce the service without the aid of a service provider. Similar internal versus external exchange decisions are made by organizations. Firms frequently choose to outsource service activities such as payroll, data processing, research, accounting, maintenance and facilities management. They find that it is advantageous to focus on their core businesses and leave these essential support services to others with greater expertise.

**Empirical research**

Here we discuss two empirical studies that illustrate the customer participation concepts just discussed. The level of customer participation required to achieve an optimal service experience in each context is identified and described. The nature of each of the three customer roles and how they apply in these settings are explored. The examples are based on research studies within these contexts and empirical findings are presented where applicable. Detailed analysis and results are presented elsewhere.

**Weight Watchers International**

High levels of customer participation are essential for success in the Weight Watchers programme (Table I). Weight loss is achieved only when members actively work to co-create the service product. Weight Watchers acknowledges this reality and focuses the entire programme on developing customer skills, i.e. teaching members how to make appropriate food choices to lose weight and maintain weight loss. The food plan, supporting information and materials, knowledgeable leaders, and weekly group meetings are attributes of the programme. Nevertheless, it is up to the member to follow the prescribed guidelines. Attending weekly meetings takes time and effort, but additional physical and mental inputs are required. Members have the freedom to customize the food plan completely. This means they are responsible for planning their meals and preparing their food. Many new members face the challenge of changing the types of food they purchase and the ways food is prepared. It is up to the member to select the appropriate food options and to limit portion size. Thus, this service cannot be created apart from the customer’s active participation. His/her inputs are mandatory, and together with those provided by Weight Watchers, co-create the service outcome.

All three customer roles apply to members of Weight Watchers. Members of the programme contribute inputs that directly impact the organization’s productivity and success rate. Obviously, Weight Watchers’ success rate is the sum total of the degree of success achieved by individual members. Success (weight loss) ultimately depends on whether members follow the recommended food plan and guidelines. Therefore, the programme is designed to enhance members’ contributions to the service creation process. Members receive an extensive education about weight loss and specifically Weight Watchers’
philosophy and instructions for losing weight. For example, at his/her first meeting, a new member of Weight Watchers of Arizona receives a booklet that introduces the programme and its philosophy[2]. Topics include: welcome to Weight Watchers; what should I know before I begin the programme?; what can I expect from the Weight Watchers programme?; nutritional content of the food plan; behavioural support; and activity plan. A video provides an overview of the programme and explains the basics of the food plan. Other materials outline the food options and facilitate members' documentation of food selections and physical activities. Thus, new-member orientation is extremely thorough. Training is supported by well-developed and easy-to-use materials because members rely on these as they create the service between the weekly meetings. Information, instruction, and user-friendly materials encourage and assist members to perform service-related activities more effectively. Motivated members who utilize these numerous tools of the "customer job" will be more knowledgeable, need less assistance, contribute more positively to weekly meetings and, perhaps, experience fewer setbacks. Essentially, they will be higher-level performers in the client/employee team (Mills et al., 1983), and provide quality inputs which will serve to raise Weight Watchers' service delivery productivity.

Customers have a role in their own satisfaction and the ultimate quality of the services they receive. Results from a study of new members of Weight Watchers provide empirical support for this role. Participants were 283 females who were just joining Weight Watchers of Arizona (Hubbert, 1995). The first of two questionnaires assessed expectations and was administered immediately following new-member orientation to the Weight Watchers programme (orientation session, video presentation, and written materials). The second survey followed one month later and asked the women about their experiences, weight loss outcomes, attributions, and satisfaction with the amount of weight lost and with Weight Watchers.

It was believed that in this highly participatory service, members would recognize the significance of their role and would attribute some of the credit for success to themselves. The study found that members do indeed attribute success in this context both to themselves and to Weight Watchers. It was also anticipated that members would distinguish between satisfaction with the outcome (the number of pounds lost) and satisfaction with the provider (Weight Watchers). The results supported this hypothesis (see Hubbert, Bitner and Kleine, 1996 for details on this particular finding). While these two measures of satisfaction were correlated, they had different patterns of antecedents and consequences.

Finally, members of the Weight Watchers programme are clearly potential competitors to the Weight Watchers organization in that these members may choose instead to produce the service completely on their own. This role grows more likely as members become more knowledgeable about losing weight. The study results provide empirical support for the importance of making
programme benefits salient to customers: the construct “satisfaction with Weight Watchers” was a significantly stronger predictor of “plans to continue in the programme” than was the construct “satisfaction with the amount of weight lost”. Thus, Weight Watchers must emphasize its contribution to the service outcome. For example, members are strongly encouraged to attend the weekly meetings led by empathetic leaders (all are former members). Leaders address topical issues, provide tips, identify and reward successful members, and offer support and encouragement. Questions are addressed and challenges are discussed. Camaraderie develops as members commiserate, encourage, and offer suggestions to one another. An ongoing challenge for Weight Watchers, like many other service providers, is to accentuate elements that members cannot or would find difficult to produce themselves: empathetic and encouraging leaders, accountability, and esprit de corps.

Center for Women’s Health Services
The second customer participation study focused on a specific medical procedure, mammography exam screening (Faranda, 1994). For this procedure, moderate levels of patient participation are called for to render X-rays which accurately depict breast tissue for the diagnosing physician. These moderate participation activities help the patients to understand the procedure better and to weather the process with less discomfort and anxiety. For example, in the days leading up to the mammography screening, patients read and adhere to written instructions sent by the clinic. They learn that it is best to schedule a mammogram only when between menstrual cycles. Prior to the exam, patients must refrain from consuming products that contain caffeine and from certain medications. On the day of the exam, patients must not apply fragrances, talc or deodorant. During the exam, the patients must hold the place at which the breast and body are set by the technologist for each of the four standard X-ray shots. Failure to follow instructions in any of the above areas may hamper or prevent the physician from rendering judgement on the health of the breast. The patients’ inputs greatly enhance the probability of a smoothly performed exam and of results that are useful to the evaluating physician.

Two of the three customer roles apply to mammography screening. Compliance with instructions is required to ensure that the exam goes smoothly and quickly. Also, we can see that patients’ effort inputs improve the organization’s service delivery productivity and success rate. Thus, patients serve as productive resources for the organization.

Mammography patients also contribute directly to the quality of the service they receive and their satisfaction with the service. Unless patients follow the specific regimen (described above) several days prior to the exam and follow instructions during the exam, there is a high probability that the X-rays results will be poor, necessitating a retake of the pictures. This generally occurs on the spot, as development of the X-rays is ten minutes or less. Thus, the exam is
prolonged, potentially raising the patient’s discomfort level and anxiety regarding the results.

Providers of mammography services can facilitate the customer’s contributions to her own satisfaction by managing her expectations. By educating new patients about the process – including the vital necessity of her own efforts and compliance with instructions – providers enhance the likelihood of customer satisfaction. Empirical evidence is provided by the laboratory experiment designed to determine the effects of providing women with a “realistic service preview” of a mammography screening experience on their satisfaction with the service and the provider (Faranda, 1994). It was believed that patients who were “trained” effectively through a realistic preview would be less anxious, would perceive that they had greater control, and would ultimately be more satisfied. The experiment utilized a role-playing methodology, and led subjects through a vicarious service experience at a fictitious women’s health clinic. Subjects were 134 women who had never experienced a mammogram and who had little knowledge about the procedure. Half the women were given a realistic preview of the process, while the other half received no preview. The preview itself consisted of detailed, written information about mammography (including, among other topics, what is mammography, how the procedure works, instructions to follow before the procedure, the role of mammography, and some common misconceptions), and a short video illustrating the entire procedure.

After the preview (or no preview), women in the experiment answered questions that assessed the accuracy of their expectations, their sense of control, and their level of anxiety relative to mammography. The women then read one of three versions of an actual mammography experience and were asked to imagine themselves as the woman in the story. One version of the story followed the realistic preview exactly, another version included several blunders on the part of the fictitious provider, and the final version enhanced the service experience, making it even better than the realistic preview portrayed it to be. After reading the story, and imagining that the events had actually happened to them, the women responded to questions regarding their satisfaction with the mammography screening process.

Results of the study showed that those women who had been oriented through the realistic preview did indeed have more realistic and accurate expectations for the mammography experience than did those who had no preview. Second, the women who saw the preview reported significantly less anxiety and significantly greater perceptions of control over the process than did women who had no preview. Finally, across all three scenarios, women who received the preview were more satisfied with the actual service experience. The realistic preview thus affected potential mammography patients’ pre-service feelings (anxiety and control), as well as their satisfaction with the service.
The role of customer as potential competitor does not apply to the provision of this particular service, nor is it appropriate. Despite the fact that breast self-examination is considered an integral part of breast care, it is not possible for a patient to produce the mammography screening procedure herself. In fact, mammography screening providers have a role in educating potential patients by strongly encouraging women not to use self-examination as a substitute for physician examination and mammography screening and by emphasizing that the benefits of the service cannot be self-produced.

**Implications and conclusions**

The two contexts described here both demonstrate different levels of customer participation and a specific application of customers’ roles. Apparent in both studies are the benefits of customer education, effective and realistic expectation setting, and other efforts by providers to facilitate customers in their roles. These studies exemplify the fact that the issue of customer participation in service delivery raises highly relevant and complex questions for both management practice and research. By locating itself in the typology shown in Table I, an organization can begin to see what is required of its customers. By clearly defining the roles it expects its customers to play, an organization can delve further into the issues. Thinking of its customers in these ways will lead the organization to ask what types of information and education it may need to share with its customers, and how it might develop approaches for training and rewarding its customers for effective participation (Bowen, 1986; Goodwin and Radford, 1993; Kelley, Donnelly and Skinner, 1990). Approaches for monitoring the quality of customer contributions, providing feedback to guide improvement or offer encouragement, and rewarding customers for effective participation can be implemented.

Researchers can also use the frameworks to motivate questions relevant to the different levels of participation and the participative roles customers play. For example, accurate expectations are believed to affect service customers’ motivations and abilities to perform their participatory roles better (Schneider and Bowen, 1995). Empirical evidence of the realistic service preview as a tool to clarify role expectations has been presented here (Faranda, 1994). Additional research which examines and compares this and other methods by which service firms might foster the development of realistic customer expectations (i.e. teach customers their roles), would contribute to our understanding of the usefulness of the “partial” employee perspective. Also, an extension of the earlier work of Bateson (1983, 1985) and Langeard et al. (1981) would provide insights into the effects of customers’ willingness to participate on providers’ desired levels of client participation across service categories. Such findings would surely have segmentation implications. Finally, an examination of the moderating influence, if any, of participation levels on postpurchase behaviours such as repurchase and word-of-mouth, would be of interest.
Notes
1. The discussion of the two frameworks is adapted from Zeithaml and Bitner (1996).
2. Weight Watchers of Arizona, Inc., a franchise of Weight Watchers International, Inc., provided the context for the study.

References