# Chapter 3.23 Self-Service Systems: Quality Dimensions and Users' Profiles

**Călin Gurău** Montpellier Business School, France

### ABSTRACT

The evolution of information technology applications has changed the landscape of the service industry, offering the possibility of customer empowerment through self-service applications. Considering the main three streams of research already applied in the study of self-services, this chapter investigates customers' perceptions about eight dimensions that characterise the quality of the self-service experience. On the other hand, the study attempts to analyse the influence of the self-service users' profile (gender, Internet usage experience, and online self-service usage experience), and to provide specific insights about the needs and wants of various categories of customers.

### INTRODUCTION

In the last 15 years, the evolution of information technology applications has changed the landscape of the service industry. The implementation of self-service technology has created new service channels and procedures. Nowadays, clients can

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conduct bank transactions through automated teller machines (ATM) or on the Internet (online banking), make reservations or purchase tickets through online kiosks, check-in automated hotels, or use self-scanning systems in retail stores (Bobbitt & Dabholkar, 2001). The integration of self-service technology with Internet applications has increased even more the convenience of information-rich services; the customers can now access the service from their homes or offices, 24 hours a day, without geographical limitations.

On the other hand, the introduction of effective self-service systems allows companies to automate the repetitive elements of services, concentrating their resources and personnel on more personalised aspects of the company-customer relationship, and thus providing more added-value to their clients. However, the implementation of this strategy requires more than the introduction of self-service applications. These self-service systems need to be tied-in with employee-related policies and procedures. These internal procedures must insure that the customer can rely on virtual assistance when using a self-service interface and that can feel comfortable in a range of transactions without human intervention (Kotler, Armstrong, Saunders, & Wong, 2002).

The production and consumption of services have specific characteristics that permit **customer empowerment** but, on the other hand, create challenges related with customer satisfaction and with customer's perception regarding service quality. By comparison with products, the services are (Zeithaml, Bitner, & Gremler, 2002a):

- 1. **Intangible:** Services cannot be seen, tasted, felt, heard, or smelled. This makes evaluating service quality very difficult and potential consumers look for visible indicators of quality.
- 2. **Inseparable:** Services are produced and consumed at the same time and cannot be separated from their providers. Provider and client must interact for the service to occur and therefore both parties become part of the service provided.
- 3. Variable: As consumer and producer are both part of the service, the quality of services may vary greatly depending on who provides them and when, where, and how they are provided. Marketers must therefore take steps towards achieving quality control amongst their service providers.
- 4. **Perishable:** Services must be consumed as they are provided and cannot be stored for later use. This becomes a problem if demand fluctuates and service opportunities are missed. Marketers must develop strategies to either keep demand constant or provide the equivalent supply of service to match the fluctuating demand.
- 5. **No transfer of ownership:** Services cannot be owned by the user. Marketers therefore should develop strategies to enable consumers to recall the quality of service they received.

The introduction of online self-services has changed the way in which companies relate to their customers. This new technology eliminates firm's personnel from the service interface, replacing it with software applications that can be accessed through real-time Internet connection. On the other hand, the **self-service system** gives additional responsibilities to the customer, who will initiate, generate, and consume the service interacting directly with software applications. However, this additional responsibility is not necessarily perceived as negative by the involved customers. In fact, many studies have shown that customers, and especially online service users, enjoy having a greater degree of control over the service they require. The self-service systems might permit a better customisation of the online service, resulting in improved satisfaction for the user.

On the other hand, the lack of a direct relationship with an employee might represent a disadvantage for customers that prefer direct human interactions. The dialogue with an employee might add a personal quality to the service provided, and can provide quick and flexible solutions when things do not go as planned. All these factors, together with the propensity of customers to adopt a new technology, can significantly influence the adoption and frequency of use of a specific online self-service.

The purpose of this exploratory study is to identify the quality dimensions that influence customers' perceptions about online self-service systems. On the other hand, considering that these perceptions can vary from one customer to another, the research attempts to identify the sociodemographic characteristics that influence the perception of online self-service quality dimensions and their practical use, creating the basis of a general customer profiling. After a brief but comprehensive presentation of the streams of research that are relevant for the study of selfservice systems, the chapter presents the research objectives of this research project, as well as the methodology applied to collect primary and secondary data. These results obtained from data analysis are then presented and discussed in direct relation with the defined research objectives. The chapter ends with a summary of the main findings and with propositions for future research.

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