

CRM CAPABILITY AND SERVICE INNOVATION IN HEALTHCARE: EVIDENCE FROM INDIA

Payal Sanan

Amity Business School, Amity University, Mumbai, India

Correspondence: mehandiratta.payal@gmail.com

ABSTRACT

This study aims to investigate the constituents of customer relationship management (CRM) capability that allows to exhibit customer service flexibility (CSF) and affects innovation in healthcare. In doing so, it qualitatively develops and identifies the dimensions of CRM capability through a case study in a public healthcare setting in India and provides a framework of CRM, CSF, and service innovation. The findings of the study suggest that CSF is a mediating mechanism between CRM capability and service innovation which is long ignored in the healthcare literature. The study contributes to theory and practice-oriented knowledge on how the CRM capabilities can improve the public healthcare and facilitates key strategies for flexible deliveries and innovative services.

KEYWORDS

CRM capability, customer service flexibility, service innovation, healthcare

INTRODUCTION

Recent research has extensively examined how healthcare in emerging markets has grown and become an important sector within the service economy [1,2]. Several reports indicate that within healthcare, the relationship with the patient needs a constant integration with recent technologies to capture accurate data. Another report by McKinsey reveals that relationship oriented strategies are crucial in the Indian healthcare sector in order to sustain relationships [3]. The present study argues that flexibility in service provisioning is required as an inbuilt mechanism to cope with uncertain demand in healthcare, providing innovative services and enhanced experience. For example, Fleerackers and Bilgeri [4] argue that CRM capabilities are the foundation of the adaptability of a service delivery system and develop the capabilities for understanding customer preferences and needs. In healthcare, CRM capabilities indicate the utilization of resources and capabilities to develop

sustained relationships with patients for their healthier lives [5]. There is however, a scarcity of research investigating whether CRM capabilities help with developing flexible capabilities and with the challenges of resource constraints in conducting service innovation.

Furthermore, numerous studies have recognized that customer service flexibility (CSF) provides adaptation techniques to demand uncertainties and introduces new services rapidly [6]. Healthcare organizations operating in emerging markets must have flexibility and the ability to cope with dynamic customer requirements as well as providing innovative solutions to improve healthcare delivery mechanisms [7]. Despite this, there is limited research examining whether CRM capabilities strengthen CSF mechanisms to enhance service innovation.

Moreover, studies suggest that CRM capabilities are nested within an intricate organizational system of interrelated and

interdependent resources that are used to deliver customized services. The bundle of such resources would be redesigned and improved to enhance those services [8]. Prior research has recognized the benefits of developing customer relationships. For example, in healthcare, superior relationships with the patients as customers enable productivity and sustainability [9,10]. Several authors have emphasized the importance of CRM capability as an emerging paradigm in marketing and its performance outcomes [14]. Despite there is limited knowledge on the constituents of CRM capabilities in healthcare.

This study attempts to address the research gaps in the extant CRM and service innovation literature. First, this article explores how CRM capabilities are developed in healthcare. Second, it aims to tackle the conditions under which public healthcare in an emerging market develops the capabilities to cope with an uncertain environment and execute flexible operation of services. Accordingly, this study further investigates how CSF in an emerging healthcare market could affect service innovation.

THEORETICAL BACKGROUND

Many authors in the field of marketing and CRM contend that strong customer-related capabilities are one of the most important marketing capabilities that are selected and built to please customers and influence experiential value [15–17]. Organizations recognize the importance of resources for maintaining long-term relationships, prompt response to the diversified customer demand and providing a memorable experience [18]. CRM capabilities combine these valuable resources to cope with dynamic market conditions and customize services. Hence, CRM capabilities improve flexibility and facilitate the modification of services.

CRM CAPABILITY IN HEALTHCARE

The marketing literature has accumulated a broad body of knowledge on CRM capabilities [19], process of developing CRM [20], consequences of CRM [21], the content of CRM [22], and the mechanisms to implement CRM [23]. Over the last three decades, CRM has been recognized as an extensive strategy to obtain a competitive advantage, improve the relationship with customers and deliver effective services [11]. The primary focus of CRM was centered on relationship marketing [24], management of network between market and society [25], cooperative and collaborative relationships between buyers and sellers [26], and the utilization of organizational

structure and cultural changes to improve operational efficiency. CRM capabilities reflect the skills and knowledge to identify prospective customers, maintain relationships and leverage those relationships into profit [14]. CRM capability increases the ability of organizations to translate customer data into customer relationships through the active use of customer information [11].

The importance of CRM capability has attracted significant attention in several management disciplines including manufacturing, retailing, supply chain and services (e.g., banking, insurance, hospitality) [13,27]. However, there is a limited focus in the literature on developing CRM capabilities in credence services like healthcare. CRM in healthcare essentially means fundamental changes in service provisioning in order to create a long-term relationship and providing assurance of quality and efficiency in services [28]. Some studies suggest that due to complexity in the design of services, implementing CRM in healthcare is a difficult process and requires a better understanding of the resources and capabilities [29]. Customers prefer hospitals with efficient and quality healthcare service delivery, as well as recommend services by evaluating the experience [30].

CUSTOMER SERVICE FLEXIBILITY

Customer service flexibility (CSF) is referred to as the ability to adjust the service capacity to deliver customized services rapidly [31]. Recent studies emphasize that customer service flexibility is essential in customer value creation [32,33]. In a healthcare delivery environment, building and sustaining a service-oriented culture is important for overall performance [34]. Customers' changing needs and complaints about healthcare are repeatedly caused by the need for personalized care and customized service, which induces variability in the service delivery environment [5,35]. As a result, service deliveries become more customer-centric, adaptable and responsive, which facilitates responding to customer requirements and brings about changes in service design. Consequently, healthcare organizations develop the abilities to innovate and redesign services.

SERVICE INNOVATION

Service innovation is referred to as "a set of practices to create value through improvements or new service proposals, service processes, and models of service deliveries" [36]. This is one of the strategies creating new services, and exists in order to respond to a customer's needs, and can achieve competitive advantage [37].

Some studies emphasize that service innovation bring about the changes in current service offerings and thus affect customer emotions and attitudes [38]. As a prerequisite of service innovation, it is crucial to close the gap between service design and standards that allows better managerial perceptions of customer expectations. In this scenario, public healthcare organizations can be positioned in a successful innovation system, providing a quality of customer experience and affecting customer emotions.

DESIGN AND CONTEXT OF THE STUDY

The context of the study is selected as in public healthcare in India for the following reasons. First, the Indian healthcare sector is growing at tremendous pace and is expected to reach \$USD280 by 2020 [39]. India is a land full of opportunities in healthcare sector and public healthcare remains a dominant force. Second, similar to other emerging healthcare markets, Indian public healthcare organizations have made remarkable efforts in service innovation and providing quality of service to the patients [39]. Third, the government has emphasized customer experience quality in public healthcare and indicated that concerted efforts are required to increase the quality of experience [40].

Against this background, a case-based approach is undertaken for an in-depth understanding of the underlying dynamics of development and execution of CRM capabilities [41]. The case study is conducted in a regional level public healthcare organization which offers a range of clinical and para-clinical services, including Surgery, Neonatology, Gynecology, Ophthalmology,

Oncology, Cardiology, Urology, Neurology, Otolaryngology, Radio diagnosis, Pathology and Microbiology, to the community. The organization has a bed capacity of 3250 with a 98 % bed occupancy rate, and the number of employees is approximately 2570 at various levels. The reason why this organization was chosen as sample case was the phenomenon of significant efforts towards innovative services and customer experience [42].

DATA COLLECTION

This study adopted a qualitative method to answer the research question. Qualitative methods provide an in-depth mechanism to explore the phenomena under study [43]. The case study consisted of in-depth interviews with healthcare professionals from the public healthcare organization and document analysis [44]. More specifically, the study focused on extricating the dynamics of CRM capability. An interview schedule was developed from preliminary interviews and contacts in the organization. The semi-structured guide deliberately included questions concerning experience quality, utilization of resources for CRM practices, and employee willingness for relationship management to obtain an overview of CRM capability. In the second stage, further questions were added to understand the dimensions of CRM capability in the public healthcare context. The author conducted 56 interviews over an 8-week period between September and October 2022. Typically, interviews lasted from 40 to 60 minutes, with some interviews conducted multiple times for clarity.

The author approached the management of the hospital (RIMS, India) for ethical clearance. However, they opined that it is not required, as the study intends to capture the managerial perceptions and it has no clinical interventions.

TABLE 1:

	Level	Experience	No. of Interviewees	No. of Interviews	Focus area
Stage I	Senior medical professionals	>15 years	8	11	Relationship strategies in healthcare
	Middle/supervisory	10-15 years	6	9	
Stage II	Senior medical professionals	>15 years	6	10	Dimensions of CRM in healthcare
	Middle/supervisory	10-15 Years	7	12	
	Lower level employees	5-10 Years	10	16	
Stage III					Validation

	Senior medical professionals	>15 Years	4	5	
	Middle/supervisory	10-15 Years	5	6	
Total			56	68	

DATA ANALYSIS

A set of interview proceedings were transcribed and analyzed using NVIVO 10 software [45]. Previous studies have suggested that NVIVO 10 provides an environment [45] to the important themes can be observed within the descriptions of the informants regarding the phenomenon under study [46]. The percentage agreement on the presence of themes was calculated using the formula

proposed by [47]: $[2x \text{ (no. of times both coders saw it present)}] / [(no. \text{ of times the first coder saw it present}) + (no. \text{ of times the second coder saw it present})]$. The dimensions of CRM capability were identified and validated through the constant matching with the statements of the informants (35,48). The findings of the thematic analysis contributed to the following three dimensions of the CRM capability in public healthcare.

TABLE 2: QUALITATIVE INTERVIEW THEMES

Dimensions of CRM capability	Percentage agreement	Sample Quotes
Clinical Capability	71.6	"...The clinical knowledge of medical professional can convert medical data into wisdom for patients, and improve performance...For better decisions regarding patient care and diagnosis, the data about the patient is interpreted by clinicians, nursing staff, and para-medical technicians to make sense out of such vast medical records of patients and properly incorporated in the clinical decision-making process".
Service Capability	69.3	"...standardized practices and intense competition with private players for high-quality services, [...] and changing demands are major reasons for customer-oriented services. The service capability enhance relationship with customers and a quick response to them".
IT Capability	62.3	Several IT-based services are implemented...patient registration, diagnostics, clinical information system, medical records, telemedicine, and text-mining for patient feedback analysis. IT provides healthcare organizations to serve patients better at different levels.

SYNTHESIS OF FINDINGS

CLINICAL CAPABILITY

Clinical capability is defined as the ability of healthcare organizations to provide quality of clinical services and treatment modalities [49]. It refers to the degree to which organizations adopt standardized procedures for treatment. Quality of clinical care, as a product of hospitals, attracts customers and retains customers. Quality of treatment and process of care increase the image of a hospital and gives a unique competitive advantage over other service providers and competitors. Customers are

pleased during service consumption as they are assured of better care and early recovery, thus the encounters are valued by them [11]. Therefore, organizations essentially need to develop excellent clinical practices and treatment modalities to attract new customers and repeat customers. Clinical capability is the result of complex clinical processes that require training and knowledge codification. Healthcare employees need to have a candid configuration of organizational capabilities that conforms to standardized practices resulting in positive patient outcomes. Thus, clinical capabilities enrich value, thereby contributing to improved relationships with customers. Hence it is proposed that:

P1a: Clinical capability (CLC) positively influences CRM capability.

SERVICE CAPABILITY

Services represent a wide range of intangible product offerings which are valued by customers [33]. Service is referred to as customer-determined benefits [11]. Thus, it is inherently relational and customer oriented. Many authors suggest that goods and products are valued for the services they provide (50). The healthcare delivery systems are focused toward developing service capabilities. Given the turbulent environment of the healthcare sector, service capability occupies a prominent position in developing a superior relationship with customers. The benefits of service capability include increased customer relationships and satisfaction, customer retention, positive impact on healthcare experience, and prompter response to varied needs. Hence, in the current volatile healthcare service environment, service capabilities positively influence relationship capabilities and play an important role in responding to customers' requirements. Thus, it is proposed that:

P1b: Service capability (SC) positively influences CRM capability.

IT CAPABILITY

Information Technology (IT) has been widely employed in healthcare service operations. With technology infusion, healthcare organizations provide tremendous support for effective and efficient service deliveries as well as facilitate better management of customer relationships [51]. Technology allows immediate access to clinical information and aids in providing better services, thereby strengthening customer-related capabilities. CRM in healthcare calls for clinical information intensive strategies which utilize computer technologies in relationship building and establishing the linkage of technology deployment to targeted businesses initiatives [11]. Advances in information technology equip healthcare organizations with the capability to record, analyze and disseminate the required information in ways that enhance the ability to respond to individual need and therefore attract and retain customers. Hence, IT capabilities of healthcare organizations facilitate service consumption, increase interaction quality, and influence relationships with customers. Hence, it is proposed that:

P1c: IT capability (ITC) positively influences CRM capability.

THE MEDIATING MECHANISM OF CSF

CRM capabilities support a rapid adjustment as per customer requirements. Based on CRM capability,

organizations increase the attentiveness for adaptation and opportunities for customization in operations [52]. CRM capability allows the capture of accurate and timely requirements of customers pertaining to fast-changing needs. Thus, organizations possessing CRM capabilities are adaptive to environmental changes whilst simultaneously responding to customer needs. The utilization of CRM capabilities facilitates coping with uncertain customer requirements and allows customer-centric customized delivery [8]. Therefore, the commitment of the service provider to its customer relationships generates CSF. Additionally, building a stronger relationship with customers helps to understand customer preferences, which provides greater opportunity to recover and appropriate ways to respond to them flexibly. Therefore, the author proposes that:

P.2a CRM capability positively influences customer service flexibility (CSF).

CSF creates a basis that supports the promise of improvements in services. CSF concerns individual demand and response awareness of customers, thus indicating the ability to identify new forms of value. CSF involves rapid modification of service capacity and the introduction of new services rapidly [53]. Combining the functional characteristics of services, CSF attempts to improve on service processes and new service proposals to fulfil customer experience. CSF allows the organization to learn about customer preferences and analyze customer insights. Increased responsiveness and the degree of customization may facilitate the redesign of services. Organizations that exhibit CSF are in a better position to improve their ability to innovate services that meet customers' requirements (54). Thus, the author proposes that:

P.2b CSF positively influences service innovation.

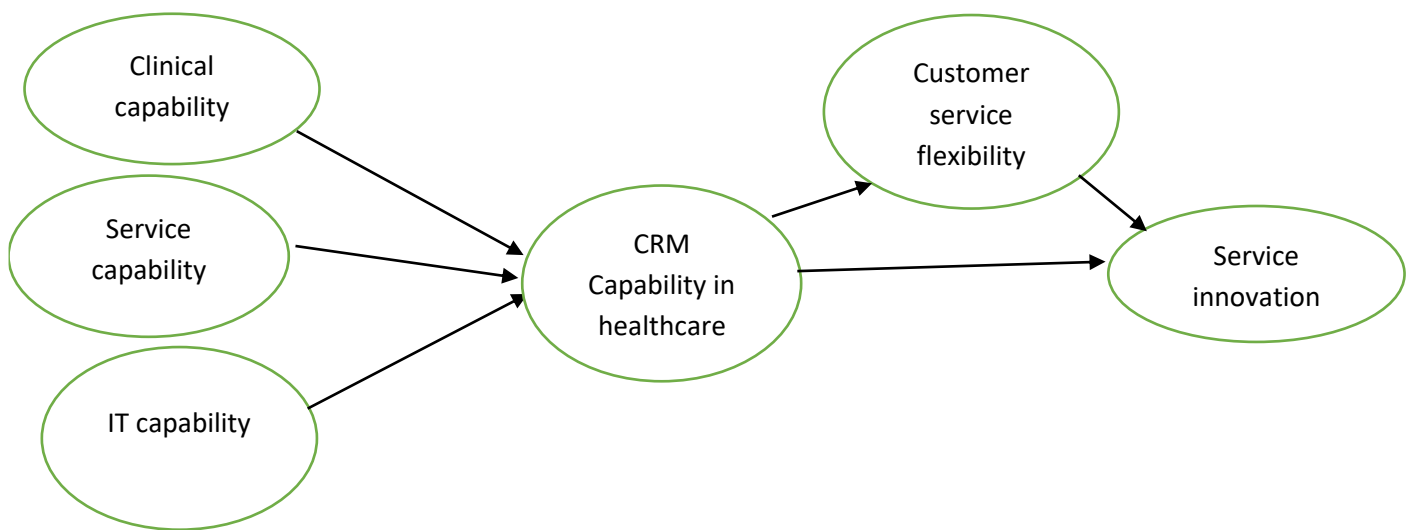
DISCUSSIONS AND IMPLICATIONS

The present study makes an attempt to investigate several dimensions of CRM capability in public healthcare. As a reflection of organizational skills and knowledge, the dimensions of CRM capabilities routinely establish, maintain and upgrade relationships with customers. CRM has received much attention from researchers and practitioners in terms of its integration with marketing and technology-based services. An array of CRM outcomes is also studied. However, very few studies have established the constituents of CRM capabilities, particularly in

healthcare services. This study explored and identified three specific dimensions of CRM capabilities. Service capability is the most important dimension of CRM capability focusing on a service-oriented culture in public healthcare. The second important dimension was found to be IT capability, which indicates the growing importance of technology-based services in public healthcare. Then, clinical capability was established as an influential factor of CRM capability, which is the treatment and diagnostic

capacity of the organization. Furthermore, the framework of CRM capability, customer service flexibility, and service innovation was propounded (Figure 1) The results explain that CRM capabilities contribute to flexible capabilities of organizations in order to realize the needs of customers, provide a customized response to customers, and recover them quickly.

FIGURE 1: AN INTEGRATIVE FRAMEWORK OF CRM CAPABILITY, CUSTOMER SERVICE FLEXIBILITY, AND SERVICE INNOVATION IN HEALTHCARE: AN INTEGRATIVE FRAMEWORK



Note: (Author's Proposition)

IMPLICATIONS FOR THEORY

The study has several implications to theory. The current study contributes to the extant literature by specifying what constitutes CRM capability in public healthcare. Second, the findings of this study explain how marketing resources [29] are helpful in overall performance. The author argue that the dynamics of CRM capability make the organization customer-oriented, developing cross-functional coordination, and facilitating remaining competitive with private healthcare providers. Hence, the author posit that CRM capabilities make organizations market-oriented [55], in turn, enabling flexible service deliveries. Third, goes beyond the established framework (e.g., [21,56,57] in proposing an integrative approach to explain service innovation, and argues that CSF mediates the linkage between CRM capability and service innovation.

IMPLICATIONS FOR PRACTICE

A major finding of potential interest to healthcare practitioners and policymakers is that successful service innovation is achieved not only by the resources, but also capability to develop a superior relationship with customers. The findings indicate that such capabilities could be a function of flexible response mechanisms subsequently increasing service innovation. Hence, this research guides to develop flexible capabilities in order to combat uncertain situations and renew the system as fast as possible. Management should also pay attention to improving the quality of customer-interactions in various encounters (e.g., out-doors, diagnostic centers), providing technology-based services for reliable, convenient and quality encounters, the clinical competence of medical employees, and the impact of the overall service environment. From the patient's perspective, CRM capabilities would improve the level of trust towards public healthcare delivery systems, specifically in developing

countries like India. Such an improved service and superior relationship is likely to generate a responsive delivery system that increases the revisit intentions and positive word-of-mouth regarding public healthcare. Healthcare managers and practitioners who are concerned with customer relationship management must take an early lead in the process of building CRM capabilities. Therefore, healthcare practitioners and policymakers need to focus on three CRM capability dimensions in order to attain customer service flexibility and, in turn, increased service-innovation. This subsequently improves physical and mental health, customer satisfaction, loyalty, and experience.

LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

This study has certain limitations. First, the study indicated that CRM capabilities were significantly associated with customer service flexibility and service innovation in a public healthcare context. But there may be a limit to the benefits of CRM capabilities on executing flexibility practices. Future studies could compare and identify the different organizational capabilities under the dynamic conditions. The environmental studies could also be captured to explore the phenomena. Second, this study reveals three specific capabilities as clinical capability, service capability, and IT capability as constituents of CRM capabilities. However, the other dimensions of CRM capabilities may also be explored for superior relationships with customers. Third, previous studies suggest that the concept of customer relationships and customer profiles in healthcare, particularly in public healthcare, are different than their counterparts in private organizations, as well as other service sectors (e.g., restaurants, tourism, airlines). Therefore, the other complex parameters in the public healthcare domain remain unexplored, which needs further investigation.

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