4. Service innovation from the frontlines in customer-centric organizations

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Meta-analyses of the literature on service innovation, defined as the introduction of new or enhanced offerings that increase customer value (Ordanini & Parasuraman 2011; Dotzel, Shankar, & Berry 2013), show two consistent themes despite the significant heterogeneity of findings across studies (Saeed et al. 2015; Storey et al. 2016). First, there is compelling evidence that service innovation, just like product innovation, contributes to firm performance (Saeed et al. 2015; Calantone, Harmancioglu, & Droge 2010; Rubera & Kirca 2012). Second, unlike for product innovation, frontline involvement is among the “top-10” antecedents of commercial success from service innovation and customer involvement is critical for gaining competitive advantage from service innovation (Storey et al. 2016). In a meta-analysis of 232 studies, Saeed et al. (2015) distinguished between two meta-orientations that differentially influence a firm’s capabilities for innovation—an inside-out orientation that engages strategic firm-specific resources, and outside-in orientation that engages external market- and customers-specific resources. Referring to these alternate orientations, Storey et al. (2016, p. 541) concluded that “product firms succeed by creating knowledge internally (inside-out), whereas service firms succeed more often by utilizing external knowledge and capabilities (outside-in).”

The preceding findings suggest that competitive advantage through service innovation in customer-centric organizations is likely to rest on its frontlines including customer contact employees, often referred to as frontline employees (FLEs), who act as boundary spanners to connect the organization to its customers. Frontlines contribute to a firm’s outside-in capability and generate novel service ideas from customer interactions. Although the boundary-spanning role of frontline employees is well recognized, much previous research has theorized frontline activities using a demands-control or conservation of resources framework. Specifically, prior research has focused on a distinctive feature of frontline positions as “caught in the middle” of organizational imperatives that direct frontline activities toward increasing revenue and profitability, and customer
demands on frontlines to ensure attention to their needs/problems and resist organizationally scripted tactics that make the value exchange less favorable (Singh 2000; Coelho, Augusto, & Lages 2011). Individuals who fill boundary-spanning frontline positions are exposed to heightened role stressors, including burnout, ambiguity and conflict. An extensive literature conceptualizes the nature of frontline stress, its antecedents and performance outcomes, as well as the strategies used by the frontlines to cope (Brown & Peterson 1993; Singh, Verbeke, & Rhoads 1996; Harris & Reynolds 2003; Bettencourt & Brown 2003; Zablah et al. 2012). While the study of frontline role stress has provided several theoretically and managerially useful insights to understand the threats that diminish the effectiveness of organizational frontlines, less attention has been afforded to the opportunities that are latent in organizational frontlines and can be leveraged for innovation and change.

This chapter theorizes service innovation processes from the perspective of frontlines in the context of customer-centric organizations. Three aspects of our contribution are noteworthy. First, our work is motivated by the evidence that frontlines assume greater significance in customer-centric organizations. We compare customer-centric contexts with operations-centric organizations as stylized contexts to contrast the key differences and draw implications for service innovation. This proposed conceptualization of organizational contexts as contrasting idealized prototypes has parallels in similar expositions in the literature for exploration versus exploitation (March 1991), productivity versus quality (Singh 2000), product versus process innovation (Adner & Levinthal 2001) and goods versus service innovation (Karniouchina, Victorino, & Verma 2006).

Second, our conceptualization focuses on understanding how organizational frontlines contribute to service innovation. To situate the proposed conceptual development firmly on the frontlines, we explore the nature of frontline roles that are relevant for service innovation processes. Specifically, we build on prototypical features of customer-centric versus operations-centric organizations to theorize frontline role characteristics that pertain to four distinct features: (1) knowledge- versus expertise-related, (2) relations- versus solution-oriented, (3) creativity- versus reliability-focused, and (4) internal- versus external-representation. In developing these frontline role characteristics, we employ contrast as a rhetorical device to highlight the distinctions that underlie choices and trade-offs in leveraging organizational frontlines for effectiveness. We neither rule out nor discount the potential, and often managerial interest, of designing frontline roles that combine dissimilar features into a coexisting structure for managing organizational frontlines. Instead, our goal is
to conceptualize novel features of frontline roles that are central to service innovations and to permit a systematic analysis of the design choices and trade-offs they entail.

Third, we theorize a taxonomy of innovation modes in service organizations by intersecting frontline role characteristics with frontline networks. Consistent with the distinction between inside-out and outside-in capabilities of service organizations (Storey et al. 2016), we draw from a recent taxonomy of frontline networks for service innovation (Ozkok et al. 2019) to focus in this chapter on (a) frontline internal networks, involving networks that connect customer-facing frontlines with internal-facing employees (e.g., back-room operations), and (b) frontline external networks, involving networks that connect customer-facing frontlines with their diverse range of customers. A key feature of Ozkok et al. (2019) is that a taxonomical analysis requires frontline internal- and external-networks to intersect for a joint consideration of their simultaneous occurrence. This feature permits us to juxtapose the customer-centric (outside-in) and operations-centric (inside-out) features of our conceptual development and theorize the nature of frontline role characteristics when internal- and external-networks of frontlines are simultaneously analyzed. We show that this simultaneous analysis provides a rich foundation for guiding future research and managerial practice.

Our chapter is organized as follows. First, we define, compare and contrast customer- versus operations-centric organizations. Second, building upon the two prototypical structures, we conceptualize and present frontline employees’ boundary spanning role characteristics relevant for service innovations. Third, utilizing a frontline network taxonomy, we theorize how frontline roles can be juxtaposed for different types of network structures. Lastly, we discuss key implications of frontline roles and networks for service innovations in customer- and operations-centric organizations.

4.1 CUSTOMER- VERSUS OPERATIONS-CENTRIC ORGANIZATIONS: DEFINITIONS AND DISTINCTIVENESS

Customer-centric logic is a design preference for organizing around superior end-to-end customer experiences. For Lee et al. 2014 (p. 250), a customer-centric structure is “an organization design that aligns each business unit with a distinct customer group.” A focus on organizational structure is an indication of attending to designing organizations that respond to a coherent, overarching strategic logic (Shah et al. 2006; Weill...
Further, a design focus ensures that internal competition for resources is aligned with the strategic logic of the organization. For example, a customer-centric logic directs strategic assets of a service organization to be deployed for harnessing market and customer data, obtained typically through frontlines of customer contact (Galbraith 2005; Smith & McKeen 2008; Treacy & Wiersema 1993), and utilizing the extracted knowledge as input into quality and innovation initiatives, often involving co-creation processes with customers. In fact, customer-centric designs use integrated solutions and customer-driven interactions as valuable innovation mechanisms. As a result, the structure enables positive customer outcomes such as loyalty and satisfaction that in turn increase revenue growth and enable the firm to command premium pricing.

Customer-centric logic is different from, but related to, customer orientation. The literature on market-orientation conceptualizes customer- and competitor-oriented approaches as means for collecting and disseminating market intelligence across departments as well as for generating effective responses (Kohli & Jaworski 1990). Customer-oriented behaviors include prioritizing customer needs first and developing long-term customer relations. However, customer-oriented behaviors often relate more closely with organization culture and employee values in general rather than with organization design or governance structures that focus on structural, control and coordination choices to achieve overarching strategic objectives.

A customer-centric logic can be usefully contrasted with an operations-centric logic. An operations logic gives design priority to product/service groups (Lee, Sridhar, & Palmatier 2015), efficiency and economies of scale (Weill & Woerner 2018). Often, the key coordinating mechanism is process improvement and efficiency across product/service functional groups (Shah et al. 2006). Process-related knowledge becomes a strategic asset for efficiency goals, and product development activities are key innovation drivers. To improve innovativeness, organizations systematize and streamline process knowledge for reliable processes. As a result, profitability is sought by reducing costs through effective internal coordination and modular, operations-centric design, thus achieving cost containment through resource savings and operational efficiencies (Jayachandran et al. 2005).

Table 4.1 provides a stylized contrast between customer- and operation-centric approaches to contextualize our contribution by building upon well-studied parallels in the literature, including revenue versus cost focus, and quality versus productivity orientation (Rust, Moorman, & Dickson 2016). To develop these contrasting approaches, Table 4.1 summarizes seven distinct features including organizational structure, core capabilities, strategic assets, coordinating mechanisms, innovation drivers, innovation emphasis, and performance outcomes. For each feature, we specify the
Table 4.1  Customer- versus operations-centric organizations: definitions and distinctiveness

<table>
<thead>
<tr>
<th></th>
<th>Operations-Centric</th>
<th>Customer-Centric</th>
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<tbody>
<tr>
<td><strong>Organizational Structure</strong></td>
<td>Organizations emphasize modular and agile operational capabilities and align specific operations with a relevant business unit.</td>
<td>Organizations organize around end-to-end customer experiences and align customer segments with a relevant business unit.</td>
</tr>
<tr>
<td>Weill &amp; Woerner 2018; Lee et al. 2014</td>
<td><strong>Product/Service Operations</strong></td>
<td><strong>Customer Segments/Solutions</strong></td>
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<td></td>
<td>Weill &amp; Woerner 2018; Lee et al. 2014</td>
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<tr>
<td><strong>Core Capabilities</strong></td>
<td>Managers oversee divisions and organize them around serving segments most efficiently and with a view to achieving economies of scale; internal competition for resources exists.</td>
<td><strong>Customer Relationships</strong></td>
</tr>
<tr>
<td>Weill &amp; Woerner 2018; Lee et al. 2014</td>
<td><strong>Operational Efficiency</strong></td>
<td>Relationship managers set goals based on customer priorities with a view to achieving economies of scope; internal competition for resources is minimized by customer-centric norms.</td>
</tr>
<tr>
<td><strong>Strategic Assets</strong></td>
<td>Organization monitors and reports process-related knowledge for simplicity and standardization.</td>
<td><strong>Market (Customer) Knowledge</strong></td>
</tr>
<tr>
<td>Lee et al. 2014</td>
<td><strong>Process Knowledge</strong></td>
<td>Organization harnesses and acquires customer and market feedback for input into quality and innovation initiatives.</td>
</tr>
<tr>
<td><strong>Coordinating Mechanism</strong></td>
<td>Shared insights about resources and process improvement knowledge drive coordination among product/service functional units.</td>
<td><strong>Relational Control</strong></td>
</tr>
<tr>
<td>Lee et al. 2014; Shah et al. 2006</td>
<td><strong>Process Control</strong></td>
<td>Shared insights about customer relations and customer priorities enable coordination among customer service units.</td>
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Table 4.1 (continued)

<table>
<thead>
<tr>
<th>Innovation Drivers</th>
<th>Operations-Centric</th>
<th>Customer-Centric</th>
</tr>
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<tbody>
<tr>
<td>Smith &amp; McKeen 2008; Treacy &amp; Wiersema 1993</td>
<td><strong>Operations-driven</strong> Incremental process and product improvements is the focus of innovation; operational excellence with highly systematic and standardized processes underpins organizational innovativeness.</td>
<td><strong>Customer-driven (Co-creation)</strong> Customer relationship depth and value is the focus of innovation; customer intimacy within a highly responsive and open service process underpins organizational innovativeness.</td>
</tr>
<tr>
<td>Innovation Emphasis</td>
<td><strong>Improve Reliability/Efficiency</strong> Organizations utilize data analytics tools to systematize and streamline complex business processes.</td>
<td><strong>Improve Solutions/Experiences</strong> Organizations use knowledge assets to harness and integrate solutions to improve customers’ experiences.</td>
</tr>
<tr>
<td>Weill &amp; Woerner 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance Outcomes</td>
<td><strong>Cost Containment</strong> Internal coordination and modular, operation-centric designs drive cost reductions; process inefficiencies and resource use are monitored in the organization measurement and accountability systems.</td>
<td><strong>Revenue/Margin Growth</strong> Customer satisfaction is increased as a result of improved customer experience which drives premium price and revenue growth; quality of service is monitored in the organization measurement and accountability systems.</td>
</tr>
<tr>
<td>Lee et al. 2014; Jayachandran et al. 2005</td>
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prototypical representation within a customer-centric organization and contrast it with the corresponding representation within an operations-centric organization. These representations are deliberately stylized to clarify and sharpen distinctions, while we recognize that organizational design in practice is nuanced and hybridized.

The key distinction for organizational structure is that customer centricity is a design choice centered around customer needs whereas operational centricity is centered around service process effectiveness and efficiency. For example, store services at electronics retailer Best Buy are organized and aligned with customer segments. The in-store service teams are structured to engage with different segments, such as how Best Buy’s Geek Squad works with customers who have relatively low technical knowledge but can afford high-priced items. Geek Squads create bundles of products, assist in sales and conduct installation procedures at customers’ homes (Galbraith 2009). In terms of core capabilities, the operations-centric companies prioritize operational efficiency whereas customer-centric organizations privilege customer relationships. Operations-centric companies favor standardization and efficiency as part of their process knowledge while customer-centric organizations value market (customer) knowledge as their key strategic asset. For example, Toyota is a company identified with operational excellence that embraces a focus on continuous process improvements with shared resources and quality programs.

In terms of innovation, the distinctions between the two prototypical companies arise in the context of innovation drivers and emphasis. Companies like Toyota improve the reliability of their products by deploying high technology and data mining techniques to identify opportunities for reducing operational footprint. Certain operations-centric companies focus on innovating through faster delivery (food or courier services) or lower price points (e.g., the discount grocery chain Aldi). In contrast, customer-centric companies innovate by harnessing customer knowledge, often actively engaging customers to co-create a product or service. Their innovation emphasis is in improving customer experiences. Intuit, for example, focuses on service process designs that “delight customers.” Amazon is another example of a firm that adaptively redesigns its online retail store and invests heavily in service innovations to improve the customer journey. As a result, the performance outcomes of customer centricity and operations centricity differ. Operations centricity allows for cost containment, improves process efficiencies and delights customers with faster and affordable standard services. In contrast, customer centricity aims at revenue growth with customer satisfaction through high-quality customer conversations and delights customers with premium pricing and top-notch, customized services.
Several examples illustrate the distinctions summarized in Table 4.1. Gulati and Puranam (2009) report that up until 2001, Cisco was organized around an operations-centric logic wherein departmental functions aligned with specific product groups. Subsequently, a restructuring effort centralized marketing and engineering groups to avoid overlap in employee roles and improve efficiency. The new structure for operational efficiency negatively affected customer satisfaction ratings as well as customer responsiveness. As a result, Cisco further reorganized to establish customer-focused departments to enhance customer-focused strategies (Gulati & Puranam 2009). As illustrated by the Cisco example, organizations may alternate between customer- and operations-centric logics depending on shifting strategic priorities. The key insight here is that these logics imply starkly different design choices along the seven features identified in Table 4.1.

Lee, Sridhar, and Palmatier (2015) caution that not every company can be designed in accordance with a customer-centric logic and doing so does not inevitably create financial success. While customer centricity enables unique and improved outside-in knowledge flows, this design can lead to the duplication of sales or service departments and inter-unit communication challenges which may impede performance, especially for an organization that prioritizes efficiency and cost containment. In markets where competition is intense and the product or service offerings are largely standardized, a preference for customer-centric design may impose unacceptable levels of risks.

In the next section, we clarify the distinctive frontline role characteristics that correspond to the contrast between customer- and operations-centric organizations. As noted, past research has tended to emphasize frontline role characteristics that are rooted in demands-control or role stress theories (Brown & Peterson 1993; Singh, Verbeke, & Rhoads 1996; Harris & Reynolds 2003; Bettencourt & Brown 2003; Zablah et al. 2012). Thus, our development advances past research by proposing novel frontline role characteristics that are aligned with design consequences of customer-versus operations-centric organizations and, in turn, influence the nature of service innovation.

4.2 FRONTLINE ROLE CHARACTERISTICS, ORGANIZATIONAL CENTRICITY AND SERVICE INNOVATION

Table 4.2 presents our conceptual representation of frontline role characteristics that are relevant for service innovation in customer- versus
<table>
<thead>
<tr>
<th>Organization Structure</th>
<th>FLE Roles</th>
<th>Conceptual Definition</th>
<th>Prototypical Role Activities &amp; Behaviors</th>
<th>Reference Articles</th>
</tr>
</thead>
</table>
| Customer-Centric       | Knowledge Broker        | Accessing external knowledge dispersed in organizational and customer networks to create customer value | ● Developing relationship knowledge  
● Cross-functional networking  
● Developing knowledge breadth  
● Curating “know-who” knowledge  
● Coordinating diverse customer tasks | Lee et al. 2014;  
Rapp et al. 2014;  
Verbeke, Dietz, & Verwaal 2011. |
| Operations-Centric     | Expert Advisor          | Accessing internal knowledge from individually gained expertise to create customer value | ● Developing in-depth personal knowledge  
● Building distinctive expertise  
● Curating “know-what” knowledge  
● Communicating and listening capabilities  
● Coordinating specialized customer tasks | |
| Customer-Centric       | Relational Partner      | Establishing and maintaining trusted relationship with customers                      | ● Building long-term relationships  
● Developing interpersonal trust  
● Empathizing with customer interests  
● Prioritizing relational work  
● Building diverse product and service solutions knowledge | Singh 2000;  
Parasuraman 1987;  
| Operations-Centric     | Solution Provider       | Providing and supporting available solution options to customers                      | ● Developing effective solutions  
● Showing solving competence  
● Prioritizing solving work  
● Developing creative and customized solutions  
● Innovating and improvising skills  
● Building knowledge generation skills  
● Immersing in customer problems | Marinova, Singh, & Singh 2017;  
Dixon et al. 2017;  
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<th>Reference Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations-Centric</td>
<td>Reliable Problem-solver</td>
<td>Using established and proven ways to solve customer problems</td>
<td>● Developing well-tested and reliable solutions</td>
<td>Parasuraman 1987; Schmitt &amp; Ganesan 2014.</td>
</tr>
<tr>
<td></td>
<td>Customer-Centric</td>
<td>Representing customers’ interests and goals within the organization</td>
<td>● Developing outside-in skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organizational Agent</td>
<td>Representing organizational interests and goals to customers</td>
<td>● Identifying with the organization</td>
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Table 4.2 (continued)
operations-centric organizations. To guide our discussion, Table 4.2 provides definitions for each conceptualized frontline role characteristic and includes activities and behaviors that are prototypical of each role, along with references to relevant prior studies. Building on the disparities between customer- and operations-centric organizations outlined in Table 4.1, Table 4.2 develops the contrasts for frontline roles that are likely to be supported in these disparate organizations. Our intuition is that frontline roles are constituted in a way that reflects the centricity of an organization. In this sense, frontline roles are activity and behavioral manifestations of an organization’s distinctive emphasis and focus (as per Table 4.1).

Moreover, frontline roles are a pluralistic construct. Many different frontline roles can be conceptualized and constituted, each emphasizing a coherent and unique set of prototypical activities and behaviors. Consistent with this pluralistic notion, Table 4.2 develops four different conceptions of frontline roles, such that each conception is associated with a unique set of prototypical activities and behaviors. For each conception, we specify the contrasting constitution of the focal frontline role in a customer-centric versus an operations-centric organization. For example, regarding the frontline role that relates to accessing and using knowledge, a customer-centric organization is likely to constitute this frontline role as a “knowledge broker,” while an operations-centric organization is likely to constitute this role as an “expert advisor” (Table 4.2, rows 1 and 2). We discuss our conceptions and constitutions of frontline roles in customer- and operations-centric organizations next and develop their implications for service innovation.

As a precursor to discussing each frontline role characteristic, it is useful to consider the theoretical foundations in the research on boundary-spanning frontline roles for organizational learning and knowledge. In an early contribution, Aldrich and Herker (1977) sought to theorize boundary spanning roles that enable effective organizational change in response to shifts in the market and technological environment. Nonaka and his colleagues advanced this line of inquiry by developing the concept of *Ba*—shared space of emerging relationships between the organization and its customers—as the central site of new knowledge generation and value creation (Nonaka 1994; Nonaka & Takeuchi 1995; Nonaka & Konno 1998). Frontlines are a key site for *Ba*’s emerging relationships. Taking a pragmatic knowledge-in-practice approach, Carlile (2002, p. 442) enriched this theoretical work by problematizing the “representing, learning about, and transforming knowledge to resolve the consequences [for learning/innovation] that exist at a given [organizational] boundary.” The frontline–customer boundary is a crucial boundary for generating new knowledge to drive service innovation within the organization. Within the
marketing literature, the significance of frontline roles is developed as a key feature of bottom-up research that is rooted in market-based and situated learning theories that give prominence to individual agency, open systems (autonomy), and customer interactions as a source of generating and motivating new knowledge from customer contacts (Slater and Narver 1995; Sinkula, Baker, & Noordewier 1997; Selnes & Sallis 2003; Cadwallader et al. 2010; Santos-Vijande, López-Sánchez, & Rudd 2016). This literature shows that the volume and radicalness of service innovation can be traced to frontline knowledge generation and absorption as key sources of learning (Ordanini & Parasuraman 2011).

Building on the preceding theoretical foundation, we conceptualize four distinct frontline role characteristics that are relevant for service innovation in customer- and operations-centric organizations (Table 4.2). Role theory is a well-developed framework to conceptualize how organizations design jobs with specific expectations to achieve goals and track their performance relative to expectations to permit goal regulation (Mohr & Bitner 1991). Role expectations typically involve activities and behaviors that role occupants are directed to engage in, so as to achieve performance goals (Biddle 1986). Within role theory, we discuss each of the four proposed frontline characteristics in turn.

4.2.1 Creative—Reliable Problem Solver

Organizations may design role expectations to emphasize either creative or reliable problem solving in customer interactions. As defined in Table 4.2, a focus on creative problem solving implies giving more attention and emphasis to generating and testing new ways to solve customer problems.

Frontline effectiveness in problem-solving, which has been extensively studied, has several features that make it especially salient in customer-centric organizations. First, frontline problem solving cannot be scripted easily and often involves on-the-spot improvisations by frontline employees to address specific service issues as they arise (Heritage & Maynard 2006). Second, these activities tend to be emotionally charged and marked by customer frustration, which increases the potential for miscommunication and misperception unless the frontline employee is adept at creatively diffusing frustration and returning the focus toward problem solving (Groth & Grandey 2012; Smith & Bolton 2002). Third, customers perceive the solving of frontline problems as critical events that leave enduring memory traces and such events trigger a recalibration of relationships with the service provider (Bitner, Booms, & Mohr 1994). For these reasons, customer-centric organizations such as Southwest and Nordstrom invest significant resources to improve frontline problem solving (Spector &
McCarthy 2005) and to develop reputation for exemplary and creative customer problem solving, which in turn result in consistently high customer satisfaction (CSAT) ratings (ACSI 2014; Anderson & Sullivan 1993; Mittal & Frennea 2010; Oliver 2010). Alternatively, organizations may set expectations that frontline employees deploy established and proven ways to solve customer problems.

Reliable problem solving is particularly relevant for operations-centric organizations. First, reliability in problem solving is a critical aspect for evaluating service quality which implies frontlines have to accurately understand root causes of problems and offer well-tested solutions to the customer (Parasuraman, Zeithaml, & Berry 1998). To accurately deploy a trustworthy solution, an FLE is expected to master organizational knowledge thoroughly, so as to quickly match the problem to appropriate and optimal solutions among many possible “standard operational procedures.” For example, United Parcel Systems (UPS), a global carrier that describes itself as a “problem solver” organization, achieves reliability and speed by utilizing frontline knowledge for efficient routing and delivery issues (United Problem Solver 2018). Similar to UPS, service firms such as airlines, utility firms, and information technology companies organize to deliver “defect-free” services via strict operational guidelines that ensure speedy and efficient execution. Thus, an operations-centric focus aims to deliver low service failure rates and reliable service quality, leading to increased customer satisfaction and cost-effectiveness.

4.2.2 Customer Advocate—Organizational Agent

Role expectations may be designed to promote a customer advocacy role so that the frontlines give priority to representing customers’ interests and goals within the organization. Interactions with customers enable such FLEs to curate market customer knowledge (Vargo & Lusch 2004), and to distribute this outside-in knowledge via their internal network of formal and informal connections (Bowen 2016; Ostrom et al. 2015). Within customer advocate role activities, FLEs also develop outside-in skills such as the ability to empathize with customers and the problems they face, along with an ability to coordinate within firm (Dixon et al. 2017). Many sales personnel demonstrate strong customer advocacy behavior, which shapes an opinion that “sales owns the customer” (Shah et al. 2006, p.115; Dixon et al. 2017). As a result, the FLE as customer advocate establishes a set of priorities among customer needs, helping organizations design better solutions to bolster customer satisfaction.

By comparison, the “organizational agent” role is rooted in operation-centric logic, which envisages frontlines as serving the function
of agents of the organization: to present and propose the company’s solutions to its customers. To illustrate, Virgin Australia Chief Customer Officer Hassell trained 300 Virgin staff as “change champions” to assist customers in adopting the company’s solution for self-service booking technology (Walters 2013). Likewise, sales roles are often characterized by a focus on informing, influencing, and persuading customers to buy the company’s products/services (Weitz & Bradford 1999). In this sense, frontlines are expected to gain expertise by curating organizational knowledge and deploying their expertise to serve as informational and change agents in order to propose consistent and efficient service solutions.

4.2.3 Knowledge Broker—Expert Advisor

In customer-centric organizations, FLEs often act as knowledge brokers, who access relevant knowledge from a diverse network of inside actors to configure service solutions that are personalized for individual customers. As such, frontline employees are expected to develop awareness about “know-who” knowledge. Sales staff are the prevalent example of knowledge brokers in customer-centric companies (Verbeke, Dietz, & Verwaal 2011). Effective sales employees act to broker internal knowledge, adapting ideas to individual clients’ wants and needs, and championing a customer-centric approach to solutioning. As a result, knowledge brokers create long-term value for the organization by capitalizing on their ability to integrate and recombine a diverse set of knowledge assets.

In contrast, an “expert advisor” frontline role is characteristic of operations-focused organizations; it sets expectations for efficient boundary-spanning by emphasizing in-depth knowledge and “know-what” product/service expertise to develop appropriate customer solutions. Expert advisors are expected to be largely self-sufficient in developing customer solutions, and to contain unnecessary coordination costs. They are also expected to develop sophisticated “micro-selling” skills, along with an ability to deeply understand customer needs and to present them with appropriate products or services (Verbeke, Dietz, & Verwaal 2011, p. 409). By virtue of their individual expertise, frontlines in operations-centric organizations are expected to act as efficient specialists who are well suited when customers’ problems are also correspondingly specialized to facilitate a match. Overall, “expert-advisor” frontlines help the service organization reduce internal coordination costs and streamline solutioning processes.
4.2.4 Relational Partner—Solution Provider

Frontlines roles that emphasize long-term relationships with customers are characterized as relational partners, as typical of customer-centric organizations. Relational partners prioritize the establishment and maintenance of trusted relationships with customers. For example, the apparel firm Zappos began as an online shoe retailer and developed into a premier customer-centric organization known for its excellent customer service culture. Employees at Zappos call centers are encouraged to develop intimate and beyond-the-call-of-duty connections with customers (Feloni 2016). Customer-centric organizations such as Zappos believe that relational work is the company’s distinctive mechanism to develop customer-driven innovative services.

Frontlines are expected to be solution providers in operations-centric organizations as well, where the structure emphasizes modular and agile operational capabilities. Operations-centric companies expect FLEs to build in-depth knowledge of available products and services and to demonstrate effective solution-provision capabilities. In this context, frontlines give lower priority to empathy and rapport building, while giving higher attention to constructing solutions with high efficiency and agility. Several recent studies show that within several service contexts, empathy is overrated and efficiency in providing customer solutions poorly understood (Walters 2013; Marinova, Singh, & Singh 2017). A recent global, cross-industry survey revealed that it was not “empathetic” FLEs who delivered the most effective service recovery but instead “controller” type FLEs, or those who direct customer interactions for the fastest delivery of effective solutions (Dixon et al. 2017). In today’s business environment, customer information is extensive and distributed, thus the integration of service information and ability to prescribe the most appropriate solution is at the core of operations-centric organizations.

In summary, customer-centric organizations set frontline role expectations to build knowledge brokering and cross-functional networking, and to prioritize relational work with customers. Furthermore, these tasks require diverse knowledge obtained typically via cross-boundary activities to curate “know-who” knowledge from internal networks (Rapp et al. 2014; Verbeke, Dietz, & Verwaal 2011). The greater the priority given to customer needs and demands, the more crucial it is for frontlines to engage in improvising and innovating during customer interactions. By comparison, operations-centric structures emphasize time management, standardization, as well as cost minimization and resource utilization, all of which encourage highly specialized customer tasks with limited cross-functional networking activities. Furthermore, the expectations of operations-centric organizations for reaching optimal solutions and processes may require
frontlines to develop effective problem-solving skills, typically by leveraging codified organizational knowledge and acting as organizational agents to share prescribed solutions with the customer.

4.3 FRONTLINE ROLES AND SERVICE INNOVATION NETWORKS: A PROPOSED TAXONOMY

Frontline roles shape the nature and processes of innovation in service organizations. Changes in customer and process knowledge are often prerequisites for developing new and improved service offerings (Menor, Tatikonda, & Sampson 2002). Frontline roles are instrumental in enabling this change. A key feature of frontline roles is that they are located at the boundary of the organization, with significant customer contact and as a result involve a unique network structure of external and internal actors. This network permits knowledge to travel and transfer, thereby promoting service innovation. As such, frontline roles when analyzed in the context of frontline networks provide useful insights for understanding innovation processes in service organizations.

In a recent article, Ozkok et al. (2019) conceptualize a taxonomy of frontline networks that involves *domains* and *flows* as the distinct constitutive constructs. In this taxonomy, *domains* indicate the distinct and substantively meaningful category of agents or stakeholders that are connected to frontline employees including (a) customers and (b) internal-facing employees (within the same organization). As such, the taxonomy differentiates domain networks that involve FLE-customer interactions from those that involve FLE interactions with *internal facing employees* (IFEs); the latter are abbreviated as FLE-IFE interactions. Their taxonomy also recognizes that the frequency and number of interactions within these domain networks may be spontaneous/uncertain, or planned/predictable, or both. Within the taxonomy, crucial attributes of the domain networks are the *closeness* or *number* of connections (i.e., ties) at each node, referred to as “connectedness.”

Ozkok et al. (2019) also develop conceptual support for the assertion that a high level of *connectedness* is likely to have a positive impact on service innovation: an increase in the velocity of knowledge shared (i.e., higher frequency of conversations, shorter pathways between customers and FLEs, and fellow FLEs) enhances real-time search for, and testing of, new ideas for service modifications and improvements.

The framework also recognizes network *flows* which indicate the distinct content that network connections carry (i.e., knowledge and
self-governance activities). For knowledge exchange networks, the level of flow refers to expertise shared within the network reflected in, for example, providing guidance, help and advice to others. In self-governance networks, the level of flow refers to the extent of task-related activities and is reflected in attributes such as the negotiated responsibility between network members for assigning and executing tasks.

Ozkok et al.’s (2019) taxonomy intersects frontline network domains and flows to yield different combinations that reflect distinct ways of characterizing service organizations based on frontline networks for service innovation. For instance, they theorize that a “customer-connected knowledge network” may refer to a service organization that selectively optimizes frontline networks by emphasizing customer connectedness and knowledge flows, while paying less attention to inside-facing connectedness and governance activities flows. Conversely, an “internally-connected governance network” optimizes selectively by giving priority to inside-facing connectedness and flows of governance activities. Lastly, Ozkok et al.’s taxonomy suggests that some service organizations may optimize frontline employee networks by combining features within domain or within flow networks, missing the gains from optimizing across domains and flows. For instance, a connectedness combination may emphasize connectedness in both customer and inside-facing networks but pay less attention to the flows enabled on these networks. Likewise, a flow combination may prioritize the flows of knowledge and governance activities but place less emphasis on the connectedness within frontline employee networks.

We build on the preceding taxonomy to examine frontline roles that are relevant for innovation in different service organizations that exist along a continuum ranging from customer-centric to operations-centric. Consistent with our chapter’s objectives, we adapt from the Ozkok et al. taxonomy the domain attributes (i.e., the distinction between FLE-customer and FLE-IFE networks), while focusing on knowledge flows as they relate directly to innovation. Knowledge flows are more directly relevant to service innovation and the FLE context, but for a more complete picture, future research should consider both knowledge and governance activities within frontline networks.

4.4 INTERNAL/EXTERNAL FRONTLINE NETWORKS, FRONTLINE ROLES AND SERVICE INNOVATION

To guide our discussion that follows, we distinguish dense versus sparse frontline networks to indicate high versus low network connectedness,
respectively. We conceptualize that the degree of connectedness privileges different frontline roles. For example, a dense FLE-customer network will often privilege Relational Partner and Creative Problem Solver role behaviors because the number of ties and frequency of contact imply forging long-term, trusting, and empathetic relationships as well as developing creative and customized solutions. If we consider sparse FLE-IFE networks, the Organizational Agent and Knowledge Broker role behaviors are likely to be relevant, since loosely connected employees often turn to employee networks for help or advice as well as for organization knowledge to share with customers as needed. We combine dense–sparse FLE-customer and dense–sparse FLE-IFE networks along with frontline innovation-relevant roles to predict distinct service innovations for each network-role structure. In Table 4.3, we use four quadrants to represent how each combination might be consistent with radical, customer-centric, operations-centric, and incremental service innovations.

Quadrant 1 represents a combination of dense FLE-IFE networks and dense FLE-customer networks. The roles privileged by these dense network domains are: (a) Relational Partner/Creative Problem Solver at FLE-customer boundary and (b) Customer Advocate-Expert Advisor at FLE-IFE boundary. The network structure in Quadrant 1 enables FLEs to focus on developing creative and customized solutions for their customers. High connectedness at the FLE-customer boundary supports the development of trust and long-term relationships with customers. In terms of the IFE boundary, a high level of connectedness is likely to facilitate sharing customers’ priorities with internally facing employees, creating in-depth, organization-wide knowledge that enables the development of more radical service solutions. The domain-role structure in Quadrant 1, in other words, allows for new ideas to flow from the market into the organization, cross-pollinate, and lead to experimentation by closely connected internal and frontline employees.

An example of this structure along with FLE role activities is apparent in the hospitality industry; the membership-oriented Soho House & Co brands itself with creating “homes from homes” and targets customers from creative industries (Soho House 2018) (Table 4.4). To create a relaxing and exclusive home setting, the Director of Soho House North America sees FLEs as custodians of its customer-centric culture — “If you’re a member we want the atmosphere to feel the same wherever you are and that comes down to the staff” (Williams 2016, para. 11). The global house chain won several innovation awards for restaurants and hotel designs, in which teams of employees were the source of creative input. Furthermore, as the hotels embed technology into their designs,
Table 4.3  FLE roles in knowledge networks: a proposed taxonomy

<table>
<thead>
<tr>
<th>Dense FLE-IFE networks</th>
<th>Sparse FLE-IFE Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEs as Customer Advocate/Expert Advisor (at the FLE-IFE boundary)</td>
<td>FLEs as Organizational Agent/Knowledge Broker (at the FLE-IFE boundary)</td>
</tr>
</tbody>
</table>

**Dense FLE-customer networks**

- **Quadrant 1**
  - FLEs focus on developing creative and customized solutions; build knowledge generation skills to forge long-term, trusting, and empathetic relationships with customers.

- **Quadrant 3**
  - FLEs focus on developing creative and customized solutions; build knowledge generation skills to forge long-term, trusting, and empathetic relationships with customers.

**Sparse FLE-customer networks**

- **Quadrant 2**
  - FLEs focus on prioritizing and developing efficient solutions to problems; immerse in organizational knowledge and developing skills in application.

- **Quadrant 4**
  - FLEs are solution providers and reliable problem solvers at customer boundary to share organization’s standardized solutions with customers.

**FLEs as Relational Partner/Creative Problem Solver** (at FLE-customer boundary)

FLEs focus on sharing curated knowledge about customer priorities within the organization; build in-depth personal knowledge about customers and communicating and listening capabilities.

**Foundation for radical service innovations**

FLEs focus on building and coordinating internal relationships and depth of organization knowledge; share organization priorities with the customer from a position of strong organizational identity.

**Foundation for customer-centric service innovations**

FLEs focus on building and coordinating internal relationships and depth of organization knowledge; share organization priorities with the customer from a position of strong organizational identity.

**Foundation for operations-centric service innovations**

FLEs are solution providers and reliable problem solvers at customer boundary to share organization’s standardized solutions with customers.

**Foundation for incremental service improvements**

Note:  FLEs are frontline employees, and IFEs are internal facing employees.
Table 4.4  FLE networks in action—examples from service organizations

<table>
<thead>
<tr>
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</tr>
</tbody>
</table>

**Dense FLE-customer networks**
FLEs as Relational Partner/Creative Problem Solver (at FLE-customer boundary)

**Quadrant 1**
Example: Soho House Hotels
Illustrative network-level mechanisms:
- FLEs focus on building trusted relations and aim to satisfy each need and want of the customer.
- Soho’s FLEs keep a perfect balance at customer service with best quality and efficiency.
Mullen 2014; Wootton 2009

**Quadrant 2**
Example: Hilton Hotels
Illustrative network-level mechanisms:
- FLE-IFEs work together to educate guests about Hilton’s new service solutions focused on speed and reliability.
- FLEs step in when customers need further knowledge regarding services.
Forgione 2014; Lewis 2017

**Quadrant 3**
Example: Aman Resorts
Illustrative network-level mechanisms:
- FLEs’ priority is customer delight with “otherworldly” and discreet personalized service solutions (Perman 2014, para.1).
- Aman’s FLEs and IFEs thrive at anticipating guests’ needs by building long-term and cultivated relationships.
Perman 2014; Seligson 2016

**Quadrant 4**
Example: Best Western Hotels
Illustrative network-level mechanisms:
- Best Western’s frontline often consists more of interfaces that serve customer needs e.g., a virtual reality experience to visualize the hotel indoors and inform the customer for speedy transactions.
- FLEs interact with customers to demonstrate Best Western’s service solutions (e.g., a virtual reality tool, etc.) where efficiency is aimed at.
The World’s Most Innovative Companies 2018; Ting 2016

**Note:** FLEs are frontline employees, and IFEs are internal facing employees.
they maintain frontline employee role activities as valuable customer-facing relationship builders.

In terms of an organization that has dense FLE-IFE networks and sparse FLE-customer networks (Quadrant 2, Table 4.3), we are likely to observe operations-centric innovations emerge due to the focus on internal coordination mechanisms for cost containment. The sparse networks around customers privilege FLE roles that provide efficient solutions to customers. The customer feedback gleaned by FLEs is more likely to be of a systems nature (what worked and what didn’t at a broader level). Connectedness within the FLE-IFE network, therefore, will be less about generating novel, out-of-the-box innovations and more about modifying existing solutions for conserving organizational resources and improving speed and reliability. To illustrate, Hilton introduced digital keys or digital check-ins where contacts with FLEs are reduced to technology-mediated encounters (e.g., “Let yourself in with digital key” downloaded from an app) and a minimum amount of face-to-face contact (e.g., the customer checks in online but still has to collect her key from an FLE) (Forgione 2014; Lewis 2017) (Table 4.4).

In terms of dense FLE-customer and sparse FLE-IFE network domains (Quadrant 3, Table 4.3), the roles of organizational agent and knowledge broker are relevant at the internal-facing FLE boundary (i.e., FLE-IFE boundary). The distinctiveness arises from loosely coupled employee networks within an organization where FLEs often identify with organizational goals, share knowledge with customers while building customized solutions. As knowledge brokers, they access internal network knowledge assets as they require specific internal coordination for customer needs and wants. An example from the hospitality industry would be Aman Resorts where the FLE roles focusing on customer delight are characterized as “Aman junkies” (Perman 2014, para. 1). Indeed, “Aman junkies” will “do anything legal that does not violate the privacy of other guests” to delight customers (Seligson 2016, para. 2) (Table 4.4). The hotel encourages sharing personal stories and interests with customers; there are not many standard operating procedures for staff to consider. The loose employee network allows for more connectivity and socialization with customers. Therefore, any new ideas generated would most likely be customer-centric oriented and toward creating new ways to satisfy customers.

Finally, we turn to Quadrant 4 (Table 4.3), which contains organizations that have sparse boundary networks on both domains—customer and IFE—so these will tend to yield incremental innovations. FLEs are loosely connected to customers, focus more on developing organizational knowledge, and lack dense connections to internal members. Knowledge flows, to the extent that they occur, will tend to be mediated by the few connected brokers that exist (e.g., department managers). Service
innovations will occasionally still occur in this context, although the nature of these is likely to be aligned toward improving existing business opportunities, rather than toward exploring and creating new ones. Best Western Hotels and Resorts, for example, trains FLEs to interact with customers in an efficient manner such as by providing the customer with video and audio tools and informative spaces (Table 4.4) (The World’s Most Innovative Companies 2018). In terms of FLE and IFE connectivity, the organization facilitates the flow of information, via technological interfaces rather than through interpersonal contact (e.g., virtual reality tour of the hotel) (Ting 2016). The improvements are often around speeding up the service processes and while such innovations may be numerous, they are likely to be incremental.

4.5 DISCUSSION AND IMPLICATIONS

In this chapter, we conceptualize service innovation within customer-centric organizations by theorizing a framework rooted in organizational frontlines. A key feature of frontlines is that they are located at organizational boundaries. Their significant customer contact puts FLEs in a unique position to coordinate a network of external and internal actors. This permits knowledge to traverse actors internal and external to the organization, a key ingredient for generating novel and impactful service innovations. Theory building grounded in organizational frontlines provides useful insights for understanding different innovation regimes within service organizations, yet this perspective has been overlooked in past research. For the most part, earlier studies have theorized frontline roles and their performance from the perspective of role stress, with a focus on threats and with less attention directed toward the opportunities that are latent in organizational frontlines. Our reconceptualization suggests that frontlines should be leveraged for service innovation and change, and this chapter takes an initial step in this direction.

Three contributions of our chapter are relevant for understanding innovation opportunities enabled by organizational frontlines: (1) we define prototypical features of customer-centric versus operations-centric organizations to contextualize the study of organizational frontlines, (2) we theorize frontline role characteristics for stylized customer- and operations-centric organizations, and in doing so highlight four distinct role features including knowledge- versus expertise, relations- versus solutions, creativity- versus reliability, and internal- versus external, and (3) we explore the nature of frontline role characteristics and the modes of service innovation they favor when internal- and external-networks of frontlines
are simultaneously analyzed, thereby juxtaposing customer-centric (outside-in) and operations-centric (inside-out) features of organizations. Each offers a rich foundation for future theorizing and development.

In our idealized and prototypical development, customer- and operations-centricity are distinct choices for organizational design. They indicate a preference toward a particular configuration for value-creation, organizational structure, core capabilities, strategic assets, coordinating mechanism, innovation emphasis/drivers, and organizational performance. Drawing upon organization design theory, our framework highlights that a customer-centric organization is a design choice to privilege customer-first and relationship-oriented logics. Such organizations work toward harnessing market knowledge as strategic assets and leverage customer knowledge in innovation mechanisms that build outside-in capabilities. Consistent with these design choices, a customer-centric organization privileges performance goals that are customer-focused including service quality, customer satisfaction and lifetime value. Conversely, operations-centricity privileges process knowledge with a productivity-oriented logic. Given this design choice, innovation can be driven by simplifying and streamlining customer service. Therefore, the outcomes associated with this design manifest as efficiency improvements. In sum, this stylized comparison of customer- and operations-centric organizations gives a new impetus into design thinking in organizing for centricity choices and its implications for service innovation.

In our theorizing, coherence, control and coordination within an organization are facilitated when a preference for centricity is reflected in its expectations for frontline roles. Departing from boundary role stress theories, our theorizing introduces a novel conceptualization of frontline role characteristics. We theorize that customer-centricity designs entail a configuration of frontline role expectations that are characterized by knowledge brokering, relational partnering, creative problem-solving, and customer advocacy. Conversely, a design choice of operations-centricity has the consequential implication of configuring frontline role expectations to focus on expertise-based advising, solution selling, reliability, and agency aligned with organizational interests. This conceptualization of frontline roles reveals new insights for exploring new opportunities for service development.

Finally, we intersect the theorized frontline roles with frontline inside-out and outside-in networks to examine variability in modes of innovation that are likely to be observed in service organizations. Building on a taxonomy of frontline networks, we theorized that boundary spanners execute their roles within social networks that have different knowledge flows (what is exchanged) and different domains (who are involved).
Specifically, a customer-facing boundary network allows the absorption of market knowledge through role activities that enable outside-in knowledge flows. Similarly, an internal-facing boundary where front- and back-room employees interact permits organizational knowledge to cross-pollinate and integrate for an inside-out flow. Therefore, connectedness of domain networks provides an opportunity to emphasize prevalent FLE roles pertinent to centricity designs. Dense customer-facing (external) boundary networks are meaningful for creative problem solving and relationship partnering due to increased frequency and diversity of frontline–customer service encounters. Organizations that have dense customer boundaries often train and empower frontlines to handle highly connected customer network structures to mitigate negative customer outcomes. Similarly, internal network connectedness changes how frontlines act as knowledge and representation agents. That is, within internal networks that require more coordination and control mechanisms (i.e., dense FLE-IFE domain network), frontlines become the expert advisor to their colleagues and facilitate knowledge curation from customer preferences. Further, FLEs often act as customer advocates to transcend organizational knowledge generation and integration activities. If an organization’s internal networks become sparse in terms of internal communication activities, we expect to realize FLEs accessing the networks for sharing customer problems or insights as needed and focusing more on sharing organizational goals and priorities to the customer-facing side of the firm. Therefore, the degree of boundary connectedness and nature of frontline roles become mediating mechanisms that shape the innovation payoffs from customer (operation) centricity goals of a service organization.

Our work offers several implications for theory and practice. Organizations can respond to market dynamics by observing changes in customer connectivity at the frontlines. For example, as connectedness levels on the customer boundary shift, the organization may adapt frontline role activities from focusing on being providers to being solvers (and vice versa) (a shift from Quadrant 1 or 3 to 2 and 4, respectively, in Table 4.3). Moreover, if the frontline–customer boundary increases in density, FLEs could be encouraged to develop in-depth customer relationships to access market knowledge. Organizations can affect outcomes by changing the links and frequency of interaction: if boundary connections are loose and contact with customers infrequent, frontlines may be redeployed to act as efficient problem solvers so as to improve organizational efficiency and reduce costs.

Changes can be made at both the customer and IFE boundaries. To illustrate, if the degree of connectedness at both customer and IFE boundaries varies over time due to industry dynamics (i.e., a transition from Quadrant 2 to Quadrant 3 on the diagonal axis of Table 4.3),
the organization might consider restructuring, such as a shift from operations- to customer-centricity. It could also focus on changing service development efforts away from operational improvements to service processes and toward developing new ideas from customers.

Our approach can also assist organizations to consider different network structures as their focus oscillates between radical and incremental innovation (a shift between Quadrant 1 and Quadrant 4 diagonally on Table 4.3). As FLE role activities are replaced by technological interfaces (e.g., augmented reality applications, virtual reality goggles, artificial intelligence-driven bots, and virtual assistants), the organization may tighten internal networks to create standardized and systematic solutions for customers. Yet, the frontlines can still remain important as knowledge brokers who work to creatively solve problems and develop relational partnerships, particularly when the FLE-IFE boundary requires loose coordination (a shift from Quadrant 4 to Quadrant 3 on Table 4.3).

To conclude, by monitoring their network structures and centricity designs, organizations can govern formal and informal structural designs by evaluating and adapting appropriate FLE roles. Service innovation can be nurtured by paying deliberate attention to customer and internal employee structures, guided by a deeper understanding of frontline roles and behaviors. Doing so can help organizations realize new opportunities for innovation emerging from their frontline employees, rather than just viewing FLEs as a nexus of conflict and stress.

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Service innovation from the frontlines


