

# Exploring Typology of Operant Resources at Actor-to-Actor Level in Microfinance Institutions: The Service-Dominant Logic View

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Vol. 31 (1), 2023

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## Abstract

The multidisciplinary theories define resources with a narrow view of inclusivity at different strategic levels. Mainly, it lacks contextuality, an emerging property of resources in strategic management and marketing in the Industry 4.0 era. This study addresses the gap in multidisciplinary theories by exploring contextual resources at the actor-to-actor level in microfinance institutions (MFIs) to cope with the challenges of Industry 4.0-powered service experiences. The Service-Dominant Logic metatheoretical framework explores the contextuality of operant resources, including erudite personnel, customer-actor proficiency, information gateways, humane and social conduct, digital conduct, adherence, and righteous and divine ideology. The qualitative Gioia methodology was adopted to explore the typology of contextual operant resources at actor-to-actor level while interviewing 25 industry experts. These resources can be treated as potential resources for MFIs' actors, offering a new frame of reference for devising engaging service strategies. The analytical exercise of zooming in on the contextual operant resources of MFIs enables scholars and practitioners to adopt a multi-perspective view of contextual operant resources.

**Keywords:** Service-Dominant Logic, Context, Operant resources, Microfinance Institutions, Actor-to-Actor level, Gioia methodology

## Introduction

Industry 4.0 has disrupted the service sector by utilizing advanced technologies like automation, AI, and IoT. It has empowered customers with new interaction methods, thereby compelling firms to provide a more engaging and satisfying experience (Ehrental et al., 2021; Hartwig et al., 2021; Nittala et al., 2022). Through mobile apps, e-commerce platforms, and digital devices, customers are now endowed with more information, knowledge, and skills that influence firms' strategic decisions. For instance, microfinance institutions (MFIs) are adopting digital channels such as mobile apps, internet banking, and omnichannel to serve customers. They have also embraced digital media to maintain customer loyalty, market penetration, and brand identity. Now, the service sector, including MFIs, needs skills and knowledge from their constituents to adopt a multi-actor service design, particularly from their employees and customers (Brodie et al., 2019; Neuhofer et al., 2017). It requires adopting a broader perspective of service (Greer et al., 2016), and this transformation begins with redefining the actors' resources.

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Furthermore, resources give firms a strategic advantage to capture a larger market and efficiently neutralize competition. Barney (1991) resource-based view (RBV) and Hunt and Derozier (2004) resource-advantage (R-A) theory aided practitioners in strategic decision-making for designing engaging experiences. Both theories proposed the categorization of resources for sustainable competitive advantage. However, the difficulty lies in their applicability to Industry 4.0. *Can the RBV and R-A classifications and definitions of resources aid MFIs executives in redesigning their multi-actor service experience?* Both theories have three limitations to a degree. First, both theories excessively emphasize internal resources and disregard external resources and stakeholders. Second, neither theory has paid sufficient attention to the internal and external actors and their respective resources. Thirdly, they comprehensively categorize resources as capital, human, organizational, informational, and relational without elaborating on their application at the actor-to-actor and actor-to-many levels of strategy. This question has motivated scholars to revisit theories in redefining resources that could facilitate the transformation of multi-actor service exchange (Ford & Bowen, 2008; Hadad, 2017; Williams et al., 2020).

As discussed, practitioners need to adopt the modern perspective on resources, and service-dominant logic (SDL) offers a lens that embraces this new shift. The SDL logic provides a framework for capturing the changing dynamics in which all actors are increasingly networked and integrating their resources for value cocreation. SDL logic is regarded as a future theoretical lens that can reconceptualize resources by applying evidence-based research. Scholars from the disciplines of marketing (Brodie et al., 2019; Vargo & Lusch, 2004, 2008a, 2016), strategic management (Gummesson et al., 2010), education (Díaz-Méndez et al., 2019), health (Joiner & Lusch, 2016; McColl-Kennedy, 2012), supply chain management (Koh et al., 2019; Vural, 2017), and public administration (Alford, 2016; Osborne et al., 2013; Vargo & Lusch, 2017) are now reemploying their concepts with the metatheoretical lens of SDL.

SDL reconceives actors and resources from a modern perspective (Madhavaram & Hunt, 2008; Vargo & Lusch, 2004, 2008a, 2008b) and argues that all actors are resource integrators (Vargo & Lusch, 2016, 2017). SDL redefined resources as operands and operants. Operand resources are physical resources, whereas operant resources are intangible and are skillfully combined with other operant resources to generate value (Akaka & Vargo, 2014; Caridà et al., 2019; Madhavaram & Hunt, 2008). Likewise, SDL defines resource integration as a process by which actors integrate their skills and knowledge in complex service ecosystems (Akaka et al., 2019; Peters, 2019; Vargo & Lusch, 2019). Though SDL has a more modern approach than RBV and R-A theory, the resource categorization inherits the same conceptual limitations of inclusivity and overarching resource classification. Furthermore, context and exclusivity are lacking at various strategic levels. In SDL literature, research on redefining resources with a contextual perspective is still in the conceptualization stage, leaving a void for underlying research. (Caridà et al., 2019; Peters, 2016, 2019).

This study intends to fill a research gap by extending the operant resources at the actor-to-actor level (A2A). It unpacks the inclusive classification of operant resources and brings the context of the A2A level for MFIs. The SDL also provides theoretical support as it offers a new property of operant resources as *resourceness*, which means “*realization of potential resources through actors' evaluation and action to transform the potential resources into realized resources*” (Peters, 2019). It is assumed that the resources have no inherent value; instead, they have latent value based on how actors integrate resources in their specific context. (Edvardsson et al., 2014; Kleinaltenkamp, 2019). This new property offers conceptual support to unpack the operant resources of actors within the context of MFIs at an A2A level. Exploring contextual operant resources at the A2A level in MFIs will provide

scholars and practitioners with a list of prospective operant resources they have yet to realize and use to redesign engaging service experiences.

Two ways this study contributes to SDL literature. First, it unpacks the contextuality of operant resources (Peters, 2019) at the A2A level and provides a unique typology of resources. Second, in SDL, there is less consensus on context. For example, Akaka and Parry (2019) define value-in-context on the micro, meso, and macro scales. Several empirical studies define context as industries, geographical boundaries, events, society, and culture. In addition to resources, actors also configure their context to obtain value. (Baker & Welter, 2018; Wadhvani et al., 2020; Welter et al., 2016). This research is significant because it utilizes two contexts, A2A and MFIs, to explore the contextuality of operant resources with the following question:

**RQ:** *Using the service-dominant logic theoretical lens, what are the contextual operant resources at an actor-to-actor level in the context of microfinance institutions from the providers' perspective?*

## Literature review

Multiple disciplines, such as marketing, strategic management, human resource management, sociology, and psychology, define resources and their classification. Likewise, the SDL logic has elevated the discussion on resources to the forefront. The multidisciplinary approach has conceptualized and categorized resources in various ways, such as competency-based, contextual, and interchangeable (Peters, 2019). The term resource is drawn from the study of Economics and is defined as natural resources that are static and limited. However, in recent decades, resources have been labeled as dynamic, immaterial, and contextual (Vargo & Lusch, 2004, 2014a). The contemporary view of resources holds that resources cannot be examined as objects in isolation. The social context, expected value, integration process, and actor's evaluation are also critical in facilitating value cocreation. (Kleinaltenkamp et al., 2012; Peters, 2016, 2019).

Barney (1991) initiated the concept of resources as intangible and intrinsic in Resources-Based-View (RBV) theory. RBV theory defines resources as non-imitable, non-substitutable, valuable, and rare in gaining long-term competitive advantage. It divides resources into three categories: physical capital, human capital, and organizational capital resources. Barney et al. (2001) identified dynamic organizational capabilities, capability, knowledge, process, and protocols as intrinsic intangible resources contributing to sustainable competitive advantage. RBV theory provided a valid theoretical basis for SDL's contemporary definition of resources. This concept of intrinsic and tangible resources is also supported by DeGregori (1987), which explains the nature of resources as *becoming*. He explained that the availability of resources does not guarantee their value. Instead, human intervention transforms the resources into valuable ones. Marketing practices prioritize customer well-being, but research on customer-owned and managed resources is limited, providing a research gap.

The Resource-Advantage (R-A) theory reveals an alternative definition of resources. Hunt and Derozier (2004) proposed human, organizational, informational, and relational resources. Hunt (2011) explained the foundational premises of R-A theory as heterogeneous, imperfect, self-seeking, legal, human, physical, organizational, informational, relational, and innovative for sustainable competitive advantage. The information, relation, and human resources of categorization also yield theoretical support for moving away from resources' static, object-oriented, and endogenous meaning (He et al., 2017). SDL initiates the discussion regarding the reconceptualization of resources as *operand* and *operant* resources (Vargo & Lusch, 2006, 2008a, 2019). Operand resources are physical resources that require

an action to acquire value, whereas operant resources are adept at integrating with other operant resources to cocreate value (Akaka & Vargo, 2014). Operant resources are knowledge, core competencies, dynamic capabilities, and skills, thus playing a significant role in the process of cocreation (Arnould et al., 2006; Vargo & Lusch, 2014c). Vargo and Lusch (2008a) defined resource integration as a process in which the actors transform their more specialized skills in their social context (Vargo & Lusch, 2016). While linking the scholarly work of DeGregori (1987), Dorsch et al. (2017), and Peters (2019), the resources can be redefined to cope with the challenges of Industry 4.0. The contextual properties of resources are the new deliberation in SDL logic; thus, provide a research gap (Akaka, 2013a, 2013b, 2013c; Akaka & Parry, 2019; Akaka & Vargo, 2015; Frost & Lyons, 2017; Peters, 2019).

The Conservation of Resources (COR) and Service Science theories also support exploring the contextual properties to redefine resources. Hobfoll (1989) COR theory provides a framework for how individuals obtain, secure, and retain their social resources, categorizing them as material, conditional, personal, and energetic. The COR covers the actor's active participation in gaining resources, avoiding loss, and investing resources to achieve more (Hobfoll et al., 1990). COR theory states that depending on appraisal, individuals expect compensation for providing and investing their resources, including time, knowledge, social, and cultural bases. If the individual's value evaluation of well-being is not met, the service experiences are influenced by faulty appraisal.

Thus, resources can be rejuvenated and replenished. To date, the exposition of resources and value lacks the conceptualization of context and embeddedness (Kleinaltenkamp et al., 2012; Peters, 2019), and this paper addressed the gap. Vargo and Lusch (2014b) and (Peters, 2019) defined *resourceness* as the quality of potential resources requiring human appraisal and intervention to transform into realized resources. They argued that when the actors realize the resourceness of resources, they transform them into “*actual*” resources, but it is not yet empirically tested. Service science literature also offers the theoretical underpinning for reframing resources in context. Service science literature classifies the resources into four types, i.e., People, technology, organization, and information, where people and organizations are classified as operant resources, and technology and information are classified as operand resources (Spohrer et al., 2015). The research that initiates the redefining of resources from a customer perspective is conducted by Plé (2016), which explores resource integration in the context of a dyadic and identifies a list of 12 customer resources. Table I provides a summary of the relevant literature for critical resource-based theories.

**Table I** Summary of resource theories

<b>Theory/framework</b>	<b>Classification</b>	<b>Contribution</b>	<b>Author(s)</b>
Resource-Based View (RBV)	Physical capital resources, Human capital resources, Organizational capital resources	It provides both classifications of physical and nonphysical resources.	Barney (1991)
Resource-Advantage theory	Human resources Organizational resources Informational resources Relational resources	It broadened the classification of resources, including legal, technological, and relational.	Hunt and Derozier (2004)

Service-Dominant Logic	Operand Resources Operant Resources	It provides both classifications of physical and nonphysical resources.	Vargo and Lusch (2014a)
Conservation of Resource (COR)	Material Condition Personal Energy	It bring the debate of personal and social resources along with stress and motivation. Resources can be rejuvenated and replenished.	Hobfoll (1989)
Service Science	People Technology Organizational Information	It reinforces the preexisting theories of resources with the lens of SDL.	Spohrer et al. (2015)
Resource Integration and Service-Dominant Logic	Informational, Emotional, Physical, Financial Temporal, Behaviour Relational, Cultural Role-related, customer ability Customer willingness, social	It brings twelve potential customer resources that may be used in a cocreation.	Plé (2016)

*Source: Literature review*

## Research Methodology

This research investigates the contextual operant resources at the A2A level in MFIs. The providers' perspective generally differs from the customers, as they interact with more complex and formal institutional arrangements. We followed a qualitative path with Gioia methodology and abduction reasoning. (Dong et al., 2015; Jarvi et al., 2018). Gioia's methodology validates the reality as context-bound (Creswell, 2017), whereas abduction reconceptualizes concepts, thus going with the aim of the study. The Gioia methodology guides the 1st-order concepts, 2nd-order themes, and aggregate dimensions coding technique to develop data structures (Gioia et al., 2013; Nag & Gioia, 2012). The 1st-order concepts are the actors' understanding of a phenomenon, the 2nd-order themes as the researcher's data interpretation, and the aggregate dimensions are the essence of literary language (Gioia et al., 2013; Nag & Gioia, 2012).

The context of MFIs that provide financial and non-financial services to small and medium-sized businesses was adopted. We interviewed 25 industry experts to explore the providers' perspectives. Purposive sampling was applied following the inclusion and exclusion criteria depicted in Table II. The list of MFIs was extracted from Pakistan Microfinance Network.

**Table II**

Inclusion and exclusion criteria of provider-actor as participants

Inclusion criteria	Exclusion criteria
1. The participants worked at MFI at the senior, intermediate, and operational levels.	1. The participants have less than a year of experience.
2. The participants interact directly with clients and superior management	2. Participants who do not directly interact with consumers or participate in strategy formulation.
3. The participants have over three years of professional experience.	3. The participants assigned to state-sponsored programs

*Note: Microfinance Institutions (MFIs)*

Semi-structured interview manual (see the appendix) was adopted for data collection. To acquire data, we conducted 20 face-to-face interviews with an average duration between 35 and 55 minutes. Later, five additional interviews were conducted to ensure data saturation to establish the trustworthiness and dependability of the primary data, we provided the participants with duplicates of their interview transcriptions for review and correction.

### Data Analysis

As stated previously, 25 industry professionals were interviewed to collect primary data. To extract 1st-order concepts, we apply line-by-line coding and list essential codes in the participants' language. The initial two questions pertained to enlisting actors' valuable operant resources, including providers and customers. According to participants, the most valuable operant resources at the A2A level are qualified, knowledgeable, and trained employees. In addition, professionalism emerged as a recurring theme. According to P-A<sub>1</sub>, "Employees with relevant degrees in accounting and finance are good at serving customers." P-A<sub>5</sub> added, "Education plays a significant role, but industry experience and knowledge are also crucial for customer service." Both P-A<sub>11</sub> and P-A<sub>6</sub> supported the same codes. P-A<sub>8</sub> and P-A<sub>19</sub> referred to legislative expertise as a crucial contextual operant resource. According to P-A<sub>9</sub>, understanding the legal ramifications of leasing, pledging, and defaulting is essential to avoid unpleasant litigation. The emerging 1st-order concepts converge in 2nd-order themes as qualified and trained actors.

Participants like P-A<sub>5</sub>, P-A<sub>11</sub>, and P-A<sub>20</sub> gave more weightage to skills and experience. "A good employee should have relevant skills and industry experience, including financial and conflict management and numeracy skills," said P-A<sub>20</sub>. Customer dealing as an essential skill was also a reoccurring code mentioned by P-A<sub>8</sub>, P-A<sub>12</sub>, and P-A<sub>14</sub>. Industry knowledge and experience as 1st-order concepts include good administration, customer dealing, financial management, and conflict management. Likewise, the professional approach was the most reoccurring code. P-A<sub>3</sub> shared his experience, "I have gained a great deal of knowledge from my branch manager regarding critical thinking and analytical evaluation." P-A<sub>9</sub> added, "Demanding reimbursement from annoyed customer requires formidable marketing skills." P-A<sub>23</sub> mentioned effective communication as an essential resource for MFIs. The leadership, commitment, communication, and critical thinking for 2nd-order themes converged as professionalism. Thus, in search of our first question, qualified, trained, knowledgeable, and experienced providers aggregate as *erudite personnel* at A2A.

Industry knowledge emerged as reoccurring code for customer's resources. P-A<sub>17</sub> mentioned, "It is essential to know the industry dynamics in which the customers are operating." P-A<sub>2</sub> shared, "I focus on industry and customers' financial needs." The P-A<sub>23</sub> answer supported a similar code: "Customers with industry knowledge bring a long-term

*relationship with MFIs.*” Thus, customer-actor qualification and experience emerged as a 2nd-order theme. The customer's market credibility and integrity were the most reoccurring codes mentioned by P-A<sub>4</sub>, P-A<sub>16</sub>, P-A<sub>17</sub>, and P-A<sub>20</sub>. All credit officers emphasized market integrity, business sustainability, and customer reputation as essential criteria for a worthwhile actor. P-A<sub>4</sub> said, “*I place more weight on the customer's credibility and market dealings.*” P-A<sub>22</sub> and P-A<sub>24</sub> mentioned work ethics as one of the most effective instincts regarding the payback intentions of customers. P-A<sub>10</sub> shared, “*If the customer shared accurate information during the initial meetings, he is valuable.*” Another recurring code from questions two is the customer-actor's professional attitude. P-A<sub>4</sub>, P-A<sub>6</sub>, and P-A<sub>15</sub> describe the professional attitude as maintaining books of accounts, on-time payments, cooperation, and avoiding misuse of funds. P-A<sub>15</sub> said, “*Small enterprises that keep records and have prompt access to books of accounts for credit assessment are valued.*” Customer-actor qualification, experience, market credibility, business integrity, and professionalism converged as an aggregate dimension of **customer-actor proficiency**. While examining Industry 4.0 dynamics, such as digital banking, P-A<sub>8</sub>, P-A<sub>12</sub>, and P-A<sub>13</sub>, added information as a valuable resource. Through traditional or digital sources, MFIs establish trust for financial services based on credit assessment through the book of accounts, property papers, documentation, and actor-customer credit history. P-A<sub>12</sub> answered, “*MFIs offer financial services to small and medium-sized businesses, valuing those maintaining records. They prefer active text-fillers for digital presence verification.*” Tacit knowledge, market information, market dynamics, and record-keeping themes converged into the **information gateways** dimension.

The fourth query pertained to context-dependent resources equally crucial for both actors. In contrast, the fifth question was focused on potential resources of MFI that are yet to be realized by scholars and practitioners. Humane and social conduct appeared as the context-dependent aggregate dimension for both actors. P-A<sub>2</sub>, P-A<sub>3</sub>, and P-A<sub>7</sub> addressed the impact of peer and senior management behavior toward their peers and subordinates on digital and non-digital platforms. P-A<sub>2</sub> answered, “*I have been working here for seven years because of the respectful environment.*” P-A<sub>3</sub> also mentioned, “*My supervisor has confidence in my credit evaluation. He never used offensive language.*” These 1st-order concepts emerged as workplace attitudes and ethics. Likewise, the customers and their personalities, moods, and emotions emerged as essential themes. P-A<sub>17</sub> reacted, “*A relationship with a consumer necessitates anger management from both parties, particularly regarding a pledged property.*” P-A<sub>21</sub> contributed a distinct level of family legacy and credibility and reacted, “*Customers who are more family oriented and concerned about their market, societal, and familial integrity.*” Providers' and customer actors' personalities, attitudes, and integrity emerged as the aggregate dimension of **humane and social conduct**.

The unique aggregate dimension extracted from transcriptions is the righteous and divine ideology. Participants talked a lot about this distinctive dimension. P-A<sub>2</sub> replied, “*I've discovered that religious conviction and the fear of being held accountable after death have a good association with the customer's payment intention.*” P-A<sub>3</sub>, P-A<sub>4</sub>, P-A<sub>7</sub>, and P-A<sub>10</sub> discussed faith, religious orientation, citizenship, and fear of accountability as crucial operant resources that MFI practitioners should be aware of. P-A<sub>10</sub> emphasized the religious orientation of customers. He empathized, “*We disburse loans at religious institutions with astounding results. Customer religiosity translates into profitable financial results.*” P-A<sub>7</sub> reacted, “*Consumers with a religious orientation avoid willful default.*” The 2nd-order themes of morality, ethics, and spirituality converged into an aggregate dimension of **righteous and divine ideology**.

**Digital conduct** involves responsible behavior on social media. Although it is an actor-to-many level phenomenon, it emerged as a critical operant resource. The 1st-order

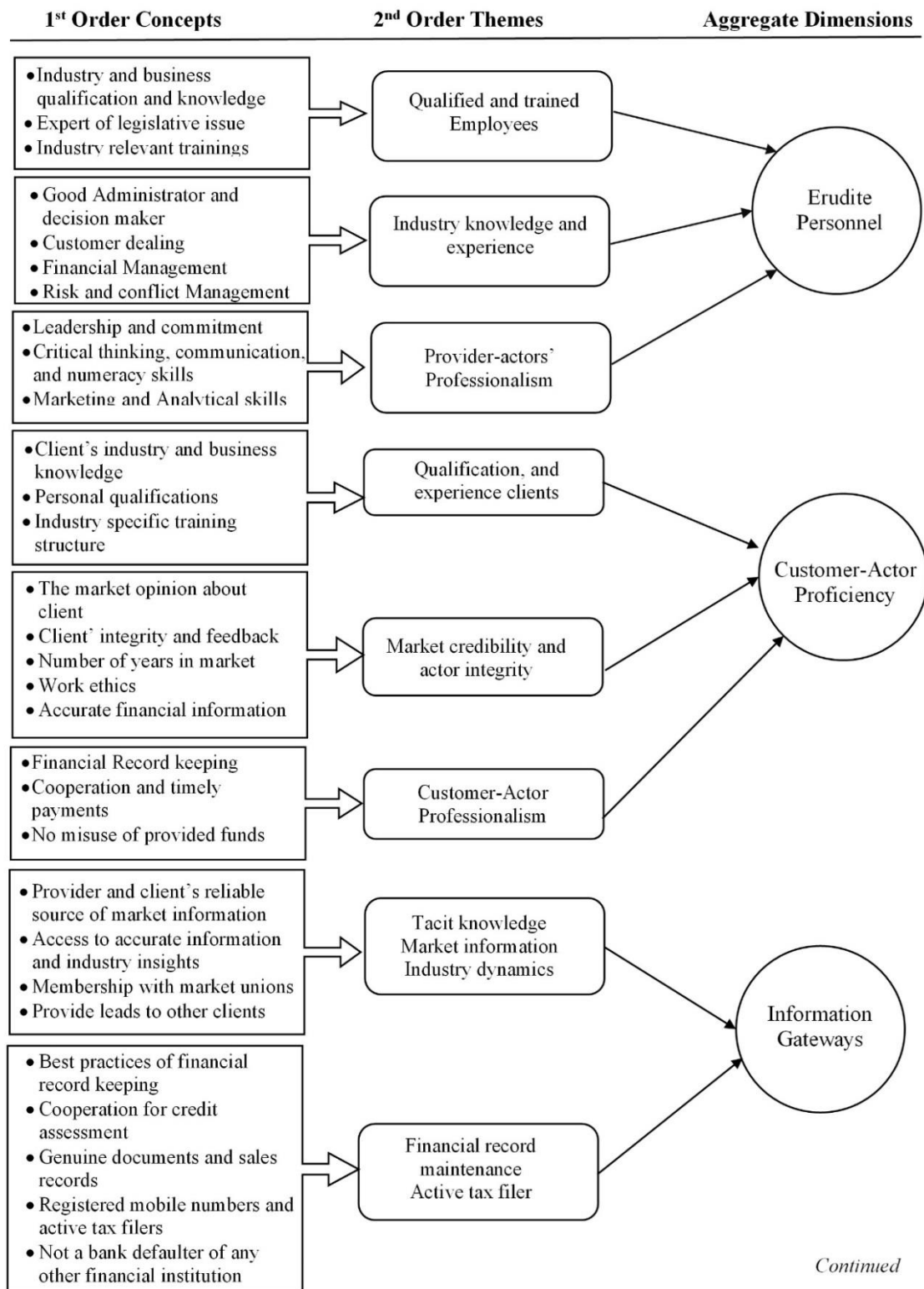
concepts that emerged from transcriptions were related to attitude with a helpline, comments on social media, and virtual communities' malpractices. P-A<sub>16</sub>, P-A<sub>18</sub>, and P-A<sub>22</sub> discussed digital conduct as critical operant resource in a digitized era. P-A<sub>22</sub> shared, "*On the helpline and social media, we encourage consumers to use respectful and constructive language, but occasionally they use abusive language*". P-A<sub>6</sub> cited, "*Cybersecurity is a skill that digital banking customers must acquire.*"

**Adherence** is another contextual operant resource that needs realization. As legal compliance evolved into institutional loyalty, both actors must comply with rules, regulations, consumer rights, and banking laws. P-A<sub>12</sub> replied, "*Compliance with the rules and regulations is an exhibition of institutional loyalty.*" P-A<sub>5</sub> and P-A<sub>9</sub> also emphasized legal compliance as an essential contextual operant resource in Industry 4.0. P-A<sub>25</sub> accentuates the availability of legal assistance in the current digital era in a significant way. He added, "*Unlike two decades ago, the information about legislation, regulations, product information, consumer protection, and data protection are well communicated to customers.*" P-A<sub>5</sub> also shared his concerns about legal adherence as the most critical behavioral resource due to the unprecedented availability of legal guidance on social media, especially YouTube. Figure I present the 1st-order concepts, 2nd-order themes, and aggregate dimensions containing the distinctive typology of contextual operant resources at the A2A level in MFIs.



Figure I (Continued)

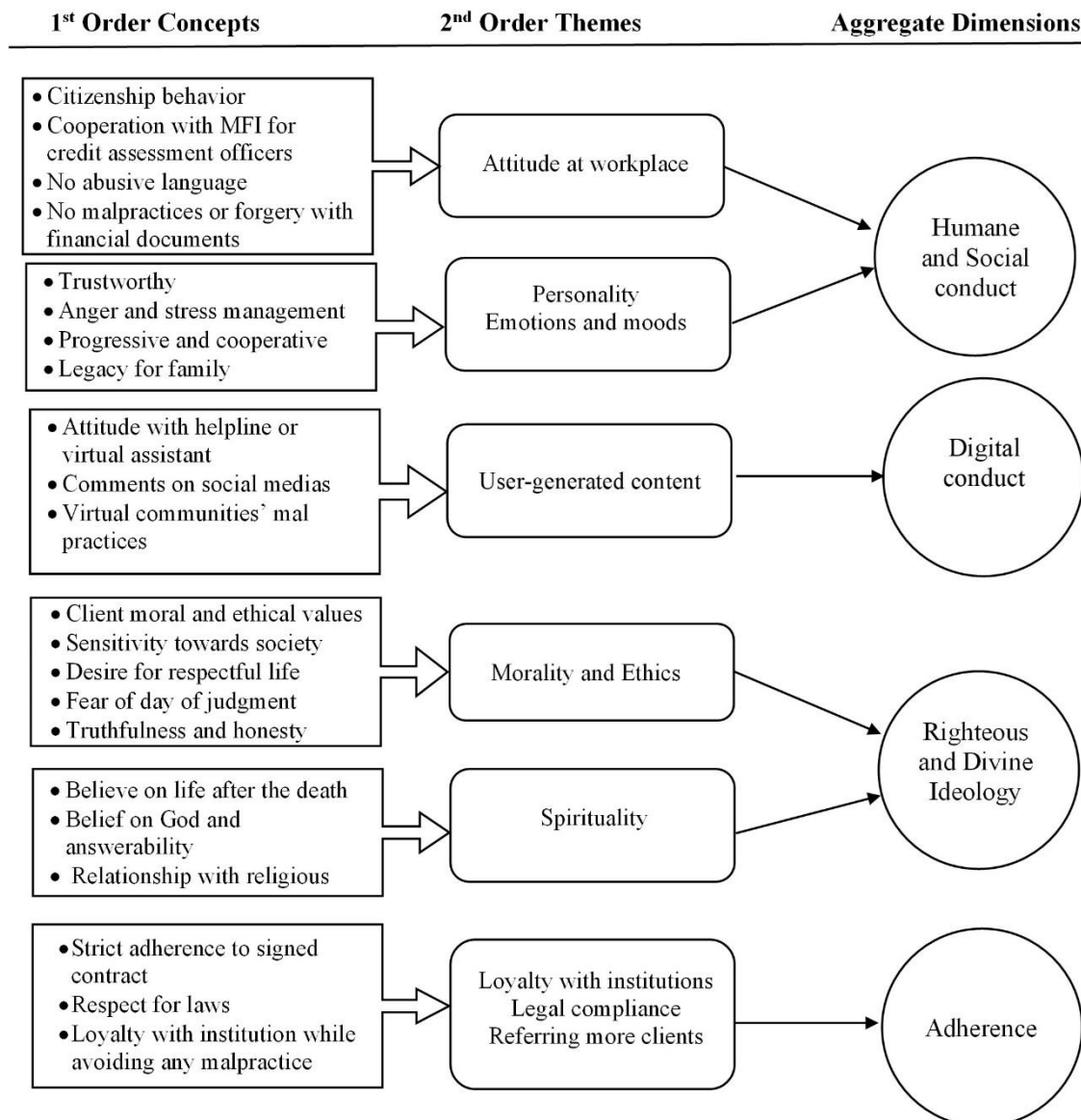
Data Structure Demonstrating Contextual Operant Resources at Dyadic level in Microfinance Institutions



Continued

Figure I (Continued)

Data Structure Demonstrating Contextual Operant Resources at Dyadic level in Microfinance Institutions



## Discussion

As discussed, the resource theories lack in defining the contextuality of operant resources in terms of A2A and Actor-to-many perspectives and this study fills this gap. Data analysis showed that knowledge, experience, skills (Spohrer et al., 2015; Vargo & Lusch, 2017), customer ability, intellectual capital (Barney, 1991; Hunt & Derozier, 2004), market credibility, and integrity are valuable resources at A2A level for both actors. The data structure also includes the properties of knowledge such as relevant qualifications, financial management, numeracy, and risk management. Similarly, the experience comprises industry knowledge, customer interaction, and conflict resolution. The professionalism properties include communication, marketing, record-keeping, analytical skills, and leadership qualities. Additionally, the RBV (Barney et al., 2001) and R-A (Hunt, 2011) theories are applied to large firms and both theories used an inclusive approach while defining resources without

identifying the context. The MFIs provide financial and non-financial services to small and medium enterprises where the customer's credibility and integrity are the firm's market credibility proxies. While zooming in at the A2A level, the typology of contextual operant resources inferred is customers' market credibility and integrity with the properties of the market's opinion and work ethics. This typology of contextual operant resources is supported by Plé (2016) identification of twelve customer resource integration at dyadic. Market credibility and integrity are a proxy of relational and social resources. Both actors' qualifications, experience, and professionalism as operant resources preexist in the literature, whereas market credibility, customers' integrity, and financial record maintenance are distinctive categories. Hence the first proposition inferred from preliminary data is:

*P<sub>1a</sub>: At the actor-to-actor level, erudite personnel and customer-actor proficiency are valuable contextual operant resources in microfinance institutions.*

*P<sub>1b</sub>: At the actor-to-actor level, market credibility and integrity of customer-actor as relational and social resources are valuable in microfinance institutions.*

SDL, and Service Science abductively support the information gateways aggregate dimension. Spohrer et al. (2015) marked information as one of the essential operant resources in Industry 4.0. Likewise, Hunt and Derozier (2004) and Plé (2016) proclaim information as a predominant operant resource. In the context of MFIs at the dyadic level, provider and customer-actor tacit knowledge and accessible information unleash the market dynamics for evidence-based credit assessment and financial need. Financial record-keeping, NTN (national tax number), and access to central databases are crucial at the A2A level. The accuracy and reliability of information and access rights (Spohrer et al., 2015) are equally critical for both actors. Hence, the second proposition inferred from the data is:

*P<sub>2</sub>: At the actor-to-actor level, information gateways, including tacit knowledge, market intelligence, and record-keeping, are valuable contextual operant resources for providers and customers in microfinance institutions.*

The argument COR theory by Hobfoll et al. (1990) and Peters (2019) affirm the resourceness construct, characterized as realizing potential resources for transforming resources through human appraisal and action. The same has been validated in the data structure. The aggregate dimensions in Figure I are the potential resources at the A2A level, requiring actors' appraisal and action to transform into realized resources. As mentioned, the construct of resourceness is also supported by the conservation of resource theory (COR). Hobfoll et al. (1990) define the human nature of evaluating the value of resources. COR theory hypothesizes the human motivation to build, protect, foster, and maintain valuable resources. Hobfoll (1989) suggested that resources can be rejuvenated and replenished, analogous to the resourceness characterization. Humane and social conduct typology includes attitude, behavior, culture, and citizenship behaviors of provider-actors.

Furthermore, trustworthiness, anger, stress, and progressive actors' nature actors emerged as essential themes of potential resources. Stress (Hobfoll, 1989) for acquiring and maintaining value resources to avoid loss, the workplace culture, anger, and progression in an actor's personality as emotional and behavioral resources (Plé, 2016) are inferred as potential resources at a dyadic level. COR theory suggests that resource loss is more impactful than resource gain and thus could damage institutional loyalty and engagement. Plé (2016) also proclaimed the significance of emotional and behavioral resources during resource integration at the dyadic level, and the aggregate dimension of humane and social conduct enforces the same conviction. Thus, the third proposition is:

*P<sub>3</sub>: At the dyadic level, the humane and social conduct, including attitude, behaviors, emotions, and personality of actors, can be transformed into realized contextual operant resources in MFIs.*

Similarly, the customers communicate their opinions and experiences via digital platforms (Mehdiabadi et al., 2020; Sima et al., 2020). As more customers adopt digital banking channels in MFIs, exhibiting socially acceptable ethical behavior and safeguarding transaction-related data becomes essential. Digital banking customers must engage in responsible online conduct to protect their personal information, comply with financial regulations, and regularly update their security settings. In addition, clicking on shady links or downloading unknown attachments may result in cyberattacks or malware. The same has been validated by the 1st-order concepts and 2nd-order themes that converged into the distinctive typology of digital conduct as an operant resource (Gupta, 2023; Machkour & Abriane, 2020; Sima et al., 2020). The fourth proposition related to digital conduct is:

*P<sub>4</sub>: At the dyadic level, digital conduct, including the attitude towards virtual assistance, social media, personal information handling, and user-generated content, can be transformed into realized contextual operant resources in MFIs.*

The notion of actors' righteous and divine ideology, including morality, religiosity, and spirituality, is yet missing in SDL literature. This typology is inductive and emerged as a unique concept at the dyadic level in MFIs. The textual data revealed that the actors' righteous and divine ideology influenced their financial performance with MFIs. The COR theory (Hobfoll et al., 1990) provides theoretical support for these unique themes as it elaborates on the principles of individual development. It is inferred during the interviews that the financial gains from malpractices and forgery are assumed to be a loss of morality. Such subjective beliefs and ideologies of actors bring faithful, trustworthy, and good relationships among actors, including financial performance. The MFIs, especially those providing lending services for the cottage industry, distribute loans at religious places. Thus, the fifth proposition is:

*P<sub>5</sub>: At the dyadic level, righteousness, and divine ideology, including morality, ethics, and spirituality of actors, are potential contextual resources that can be realized into actual operant resources for MFIs.*

Plé (2016) suggested that customer willingness is an essential actor resource in the current era. Likewise, the stressors, motivation, and energies are critical antecedents in acquiring and maintaining rescues. The same applies in the case of adherence. At MFIs, provider and customer actors exchange financial information to sign the legal contract; thus, stressors are natural, including fear of resource loss or actual loss. The only way to ensure the gain of resources is legal adherence. Spohrer et al. (2015) added entities' rights and responsibilities during resource integration. It is inferred from the data that at the dyadic level, as both actors exchange information for signing legal contracts, legal compliance is one of the most critical operant resources in MFIs. Thus, the sixth proposition is:

*P<sub>6</sub>: At the dyadic level, adherence, including legal compliance and loyalty and commitment to the institution and institutional arrangement, are valuable contextual operant resources of actors in MFIs*

The emergent contextual operant resources in MFIs at the A2A level are summarized in Table II. The literature adequately supports the abductive operant resources, whereas the inductive operant resources arose from the transcription data and contributed significantly to this paper.

**Table III**

Typology of contextual operant resources

<b>Typology</b>	<b>Properties of construct</b>	<b>Reasoning</b>
Erudite Personnel	The qualification, expertise, experience, skills, and competencies of provider-actors at the dyadic level	Abductive
Customer-Actor proficiency	The qualification, expertise, experience, skills, market credibility, and integrity of customer actors at the dyadic level	Abductive
Information gateways	The tacit knowledge, accurate and reliable information, market intelligence, and registered identity of actors at the dyadic level	Abductive
Humane and social conduct	The behavior, attitude, emotions, personality, and cultural orientation of actors at the dyadic level	Abductive
Digital Conduct	The attitude with helpline or virtual assistants, comments on social media, and virtual communities' malpractices of actors at the dyadic level	Inductive
Righteous and divine ideology	The subjective belief concerning morality, meaningful life, God, and accountability of actors at the dyadic level	Inductive
Adherence	The legal compliance, loyalty, and commitment with institutions and institutional arrangement of actors at the dyadic level	Inductive

*Source: Interview transcriptions*

### **Conclusion and managerial implications**

The SDL logic posits that value is a function of how customers subjectively perceive and interpret the benefits they can derive from experiences. If the service industry and, more precisely, MFIs need to adopt the service experience powered by Industry 4.0, they must embrace the contemporary approach of viewing all stakeholders as actors and realize their potential operant resources at different strategic levels. Resource integration at the A2A level is a crucial dimension of value co-creation, yet relatively unexplored. This article studies operant resources in the context of an A2A level while adopting the providers' perspective. This article identifies seven contextual operant resources at the A2A level that extends the

conceptual development resources. The study also provides six related propositions for future scholars.

The first future direction is contextualizing resources at actor-to-many levels with an empirical approach that may deepen and broaden the construct of resources and resourceness. The second future direction is related to theory testing and scale development. The data structures and descriptions of contextual operant resources provide dimensions and elements for scale development. For testing the constructs and propositions, this study will facilitate the quantitative scholars to develop a scale for measuring the perception of contextual operant resources of actors. This study is based on the perspectives of provider-actors. The viewpoint of the customer-actor and then the comparison of both views may bring the leading contextual operant resources. Thus, the fourth future direction is bringing the perspective of the customer-actor for comparative study. The comparative research will enrich the construct resourceness and context in the literature of SDL.

The managerial implication of this study is twofold. First, provided list of operant resources can be adopted to redesign the service experience. The second managerial implication is related to qualitative or subjective credit assessment. MFIs rely too much on the quantitative evaluation of customers and ignore the qualitative assessment to ensure financial self-sufficiency. The underlying study proposed that the customer's market credibility, integrity, good practices of maintaining the financial record, morality, ethics, and righteous and divine ideology can be transformed into institutional loyalty and adherence.

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### Appendix

Interview Manual	
Sr	Questions
1	In the current era, what intangible assets should the personnel of MFIs possess?
2	In the current era, what intangible assets should the customers of MFIs possess?
3	What are the most valuable intangible resources equally important to MFI employees and customers?
4	What intangible resources have yet to be realized by the personnel and practitioners of microfinance institutions?
5	Does the above question exclude any crucial information?
<i>MFIs: microfinance institutions</i>	