



A Multi-level Perspective on Trust, Collaboration and Knowledge Sharing Cultures in a Highly Formalized Organization

Journal:	<i>Journal of Knowledge Management</i>
Manuscript ID	JKM-05-2020-0354.R2
Manuscript Type:	Research Paper
Keywords:	Organizational Culture, Trust, Knowledge sharing, Social Capital, Multi-level

SCHOLARONE™
Manuscripts

A Multi-level Perspective on Trust, Collaboration and Knowledge Sharing Cultures in a Highly Formalized Organization

Abstract

Purpose – *Organizational culture is important in innovation and change, and becomes significant if its importance and practice are shared across all levels of an organization. Highly formalized organizations are not an exception to this. Yet, there is shortage of empirical evidence on how the organizational culture's perceived importance and practice unfolds across the senior-management, middle-management, and operational levels of a formalized organization.*

Design/methodology/approach – *Applying a theoretical frame incorporating information asymmetry, knowledge sharing, and cultural participation we examined three important facets of culture – trust, collaboration and knowledge-sharing. Using a Jordanian bank's case study, we collected data using a mixed methods approach; quantitative to identify variations across levels and, subsequently, qualitative to explore the nuanced patterns in the perceived importance and practice of the three facets across different organizational levels in the context of a formalized organization.*

Findings – *Our findings suggest that the importance and practice of the three cultural facets are shared as well as differentiated across organizational levels based on purposiveness, person/situation-dependency and nature of work and nature/relevance of knowledge.*

Originality – *Using a multi-level lens provided insight not yet gained by current work in the field. This allowed us to unearth nuanced differences in the perception of organizational culture across organisational hierarchies. The paper contributes to the*

1
2
3 *scholarship on organizational culture in context of formalized organizations, and to*
4 *managerial practice by offering insights on how a shared practice of trust,*
5 *collaboration and knowledge sharing is distributed across organizational levels, not*
6 *captured before. We also suggest propositions related to each of three cultural facets,*
7 *not spelled out before.*
8
9
10
11
12
13
14

15 **Keywords** – *Organizational culture, trust, knowledge-sharing, multi-level, social*
16 *capital*
17
18
19

20
21 **Paper type** – *Research Paper*
22
23
24
25
26
27
28

29 **Introduction**

30
31
32
33

34 Innovation and change require a congruent organizational culture (Büschgens et al., 2013;
35 Gold et al., 2001). An organizational culture is most meaningful if its importance and practice
36 is shared and distributed at all organizational levels (Büschgens et al., 2013; Miron et al.,
37 2004). Thus, this shared distribution at different organizational levels is important for
38 managers to understand. Moreover, innovation and change are inevitably influenced by
39 organizational formalization, e.g. hierarchical structures and standardized rules/procedures
40 (Andrews and Kacmar, 2001). This formalization could influence the perceived importance
41 and practice of culture across organizational levels (Kim and Lee, 2006). Thus, managers in
42 formalized contexts must understand how culture is perceived and practiced at senior-
43 management, middle-management and operational levels in order to make innovation and
44 change meaningful.
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 Recognizing that organizational culture have many facets, we focus on three
4 important facets; trust, collaboration, and knowledge-sharing. Trust refers to the willingness
5 to be vulnerable and share sensitive information (Von Krogh et al., 2012). Collaboration is
6 the degree to which individuals in groups help/support each other to solve problems and
7 share ideas (Janz and Prasarnphanich, 2003). Knowledge-sharing is the employee's abilities
8 to share expertise, experience, and know-how via interactions within teams and work units,
9 and throughout the organisation (Svetlik, 2007). Yet, despite the importance of these facets
10 (see Ashok et al., 2016; Hsu, 2008; McEvily et al., 2003), to our knowledge, empirical
11 evidence on their perceived importance and practise at different organizational levels is
12 patchy and incomplete (Fulmer and Gelfand, 2012; Janowicz-Panjaitan and Noorderhaven,
13 2009); particularly in the context of a highly formalized organization. Addressing this gap is
14 imperative given the importance of organizational culture in innovation/change (Büschgens
15 et al., 2013; Hartnell et al., 2011) and in formalized organizations in particular.

16
17 To address the aforementioned gap, we asked: *how are trust, collaboration, and*
18 *knowledge-sharing culture perceived and practiced at senior-management, middle-*
19 *management and operational levels in a formalized organisation.* Specifically, we identified
20 variations and subsequently explored further nuanced patterns to enhance our theoretical and
21 managerial understanding of organizational culture across organizational hierarchies. Using a
22 Jordanian bank's case study, we employed the mixed-methods approach, involving 12
23 interviews and a survey with 109 informants at different organizational levels. The aim was
24 to develop a framework, associating different facets of organizational culture with different
25 levels of the organization. Using a multi-level lens provided insight not yet gained by current
26 work in the field.

27
28 The findings of the paper firstly contribute to the literature on organizational culture
29 by unfolding the nuanced and significant differences in how culture's facets vary across the

1
2
3 organizational hierarchy. Secondly, it contributes to the literature on formalized organizations
4 by delineating how variations in organizational culture's facets are reflected in practice.
5
6 Finally, it contributes to managerial practice by offering insights on how shared perception of
7
8 organizational culture can be enhanced and distributed across different organizational levels.
9
10

11
12 Hereafter, the paper presents our theoretical underpinning, i.e. information
13
14 asymmetry, knowledge sharing, and cultural participation. Next, we examine the practice of
15
16 organizational culture and its manifestation in formalized organizations, followed by a
17
18 critical review of the relevant literature to identify theoretical gaps. Next, we present a
19
20 theoretical lens with which we approach culture in our organisational context, i.e. social
21
22 capital theory, followed by the research methodology. The paper then empirically develops
23
24 the framework through the discussion of findings, and concludes by highlighting
25
26 contributions, implications, boundary conditions and avenues for future research.
27
28
29
30
31
32
33
34

35 **Theoretical Underpinnings**

36
37
38 The nexus of three sets of theorizations underpins our study: information asymmetry,
39
40 knowledge sharing, and cultural participation.
41

42
43 *Information asymmetry* is when one party within a transactional relationship has more
44
45 or better information than the other (Bergh et al., 2019). It particularly applies when
46
47 information is private, i.e. belonging to or for the use of a particular person or group
48
49 (Connelly et al., 2011). Information asymmetry could be horizontal or vertical. Horizontal
50
51 asymmetry is when information is distributed among similarly situated parties, e.g.
52
53 operational employees holding different experiences/expertise, but related to similar day-to-
54
55 day issues. Vertical asymmetry exists when one type of party holds information others do
56
57 not, and even if the latter's information is aggregated it is not as complete as that of the
58
59
60

1
2
3 former (Clarkson et al., 2007). For example, senior managers hold information about
4 strategic priorities and profit margins that operational employees do not, even if the latter's
5 information is combined. Information asymmetry is also context dependent (Tong and
6 Crosno, 2016), and influenced by the existing structural conditions, such as bureaucracy (see
7 Brodbeck et al., 2007; Schmidt and Keil, 2013). Nonetheless, information asymmetry is a
8 market failure, which often needs to be addressed *between organizational levels* because it
9 creates a disparity between those who hold information and those who could potentially make
10 better decisions if they had that information (Connelly et al., 2011). It also needs to be
11 addressed *across organizational levels* because it profoundly effects organisational actors'
12 perceptions and actions in support of one another. Employees have varied purposes,
13 objectives (Polese et al., 2018), performance, satisfaction, and not the least, trust and
14 commitment, and these variations could negatively affect organizational objectives and
15 functioning (Tronvoll et al., 2018). Information asymmetry therefore, necessitates that these
16 varied perceptions are aligned. Yet, addressing information asymmetry is difficult unless
17 employees are willing to share information, collaborate and co-create value (Polese et al.,
18 2018).

19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41 *Knowledge sharing* is the reciprocal transmission of information and experiences
42 from one actor to another. Knowledge sharing is important because in the present-day
43 turbulent and knowledge-intensive environment (Massa and Testa, 2009), knowledge is
44 regarded as *the* key resource, rather than *a* resource to generate organizational
45 competitiveness (Drucker, 1995). Nonetheless, knowledge is person-embodied, i.e. difficult
46 to be effectively detached from the individual possessing it, because it resides collectively in
47 human mind (Mahr et al., 2014). It is often rooted in individuals' deeply-held contextual
48 experiences developed over time, and these experiences are difficult to be transferred to
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 others, and can at best be shared via interactions and collaborations (Akbar, 2003).
4
5 Knowledge sharing, however, is connected to the issue of relevance. For example, strategic
6
7 information is more relevant to senior managers compared to operational employees involved
8
9 in day-to-day operations. Nonetheless, the importance of knowledge-sharing is widely
10
11 recognized. It represents a vital process (Holsapple and Jones, 2004; Bock et al., 2005) which
12
13 generates several organizational benefits. It reduces time to improve products and services
14
15 (Alavi and Leidner, 2001; Yang and Chen, 2007), decreases production costs, improves team
16
17 performance (Cummings, 2004; Lin, 2007), and enhances organizational learning (Yang,
18
19 2007), innovation capability (Lin, 2007; Saenz et al., 2009; Chen et al., 2010), effectiveness
20
21 (Yang, 2007; Zheng et al., 2010) and performance (Darroch, 2005; Gowen et al., 2009; Liao
22
23 et al., 2011; Wang and Wang, 2012; Kim et al., 2013). Notwithstanding, in order for
24
25 knowledge sharing to be absorbed and instilled into organizational functioning, it needs to
26
27 reflect as a cultural construct, a culture which not only exists at a given organizational level,
28
29 but also transcends that level, i.e. across all organizational levels. This aim is difficult to
30
31 achieve without the knowledge-sharing culture being diffused across the organization as
32
33 whole, thereby bringing in the importance of participation in an organization's culture.
34
35
36
37
38
39
40

41 *Cultural participation* is the means of expressing one's social position and
42
43 contribution to others. It represents a powerful platform for establishing mutually beneficial
44
45 networks and relations (Becchetti, Deglie Antoni and Failio, 2010) and influences the
46
47 intrinsic motivation of individuals and groups to foster authentic personal engagement and
48
49 social relationships (Ferilli, Sacco and Tavano Blessi, 2012). It represents a particularly a
50
51 strong mechanism for individuals and groups who are creative, and are motivated to learn and
52
53 share experiences with others. Cultural participation is widely discussed in the context of
54
55 sociology and politics; yet, it is also relevant to the way organizations function. Organizations
56
57
58
59
60

1
2
3 are also characterised with stratification, where different strata, such as managers (or high-
4 brow/elitist) as opposed to operational employees (or low-brow/egalitarian), function in silos,
5
6 based often on power relations that have the capacity to both allow and disallow
7 participation. This is particularly applicable to highly formalised organizations, e.g. banks,
8 where bureaucratic systems/processes leave less room for creativity and innovation, and
9 create silos that are high knowledge-sharing within, but less-knowledge-sharing outside.
10 Cultural participation in this context serves as a mechanism to reduce, if not eliminate,
11 stratification, and in turn allows the organization to work as a collective and cohesive unit
12 where organizational members at different levels develop a shared understanding and are able
13 to work together to achieve the common organizational goals.
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29

30 **Organizational Culture and its Facets**

31
32
33
34
35
36 Organizational culture is the shared forms of social knowledge within organizations, such as
37 rules, values, norms, interpretations, assumptions and approaches that shape employees'
38 attitudes, behaviours and actions (Cameron et al., 2014). Organizational culture exerts its
39 influence through shaping the behavior of organizational members (Schein, 2010).
40 Organizations are keen to understand why, in certain circumstances, employees exhibit
41 different levels of engagement with the prevailing culture (Corace, 2007), as organizational
42 culture provides a key conduit for innovation and change (Büschgens et al., 2013; Hartnell et
43 al., 2011). The subsequent discussion details three important facets of organizational culture:
44 trust, collaboration, and knowledge-sharing.
45
46
47
48
49
50
51
52
53
54
55
56
57

58 *Trust culture*

1
2
3 Trust is an individual's willingness to be vulnerable and permitting others to get access to
4 their personal resources (Mayer et al., 1995). It involves mutual respect and understanding
5 which promotes opportunities to efficiently combine and exploit knowledge assets (Kamasak
6 and Bulutlar, 2010). Trust also enhances the willingness of individuals to absorb and
7 exchange knowledge, leading to superior knowledge-sharing (Bouty, 2000). Trust, in
8 addition to being interpersonal, could also be impersonal where employees are able to trust
9 the institutional mechanisms contributing towards innovation and change (Ellonen et al.,
10 2008). Trust among peers is considered crucial (Wieslander, 2019) and more trusting
11 employees display superior collaboration and commitment, participate in more knowledge
12 sharing, and perform fewer counterproductive work activities (Verburg et al., 2018).

13
14
15
16
17
18
19
20
21
22
23
24
25
26 Empirical evidence supports the importance of a trust culture. For example, Von
27 Krogh et al. (2012) highlight that a trust culture stimulates active knowledge-sharing and
28 enhances the speed of communication by empowering employees to willingly share personal
29 concerns. Similarly, Cohen and Prusak (2002) suggest that high levels of trust lower
30 transaction costs and improve sharing of knowledge and expertise. Other scholars highlight
31 that the absence of trust is one of the main barriers to knowledge transfer and sharing (Bock
32 et al., 2005; Kim and Lee, 2006). Indeed, a trust culture can be improved and supported
33 amongst group members through social communication which complements task
34 communication (Pinjani and Palvia, 2013). Despite these exhortations on the importance of a
35 trust culture, it remains to be empirically analyzed how the perceived importance and practice
36 of trust culture are reflected at different organizational levels in highly formalized contexts.

37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 *Collaborative culture*

54
55
56 Collaborations constitute interactions between members of an organization, including open
57 dialogue, coactivity and a variety of other social interactions (Gold et al., 2001).

1
2
3 Collaborative interactions are important because they aid in sharing and creating new
4 organizational knowledge (Nahapiet and Ghoshal, 1998). Organizations that aim to create a
5 collaborative environment must provide incentives and support to foster greater interactions
6 among organizational members, both formally and informally (Hsu, 2008).
7
8
9

10
11
12 Empirical evidence supports the importance of a collaborative culture. A collaborative
13 culture is the primary enabler of knowledge creation and sharing (Von Krogh et al., 2012),
14 and a source of competitive advantage (Gibson, 2001). It increases organizational members'
15 willingness to work together, share knowledge, promote each other's learning and
16 performance (Janz and Prasarnphanich, 2003), and cooperate and help one another (Chen and
17 Huang, 2007). One limitation of collaboration is the potential to act opportunistically;
18 seeking to retain the benefits of prior collaboration without continuing further contributions
19 (Pathak et al., 2020). Thus the absence (or disruption) of a collaborative culture impedes
20 knowledge creation and sharing, as well as innovation and change (Fahey and Prusak, 1998;
21 Pathak et al., 2020). However, to the best of our knowledge, no empirical study to date has
22 empirically analyzed how the perceived importance and practice of collaborative culture are
23 reflected at different organizational levels in highly formalized contexts.
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40

41 *Knowledge-sharing culture*

42
43
44 Knowledge-sharing is the act of rendering tacit knowledge explicit (and transferable) in
45 conjunction with others (Lee et al., 2016). Knowledge-sharing involves both donating and
46 collecting knowledge. Knowledge donation exchanges and communicates personal
47 intellectual capital to others (De Vries et al., 2006), and the knowledge possessor listens,
48 provides information and talks to others to solve problems and improve the knowledge of
49 others (Darroch and McNaughton, 2002). Knowledge collection, on the other hand, involves
50 the recipient gathering knowledge, consulting co-workers, and observing, practicing, or
51
52
53
54
55
56
57
58
59
60

1
2
3 listening to others to share their intellectual capital (Kim et al., 2013; De Vries et al., 2006).
4
5 Empirical evidence suggests that both these processes are important for innovation success
6
7 (Svetlik, 2007), especially in the context of service-based organizations (Ashok, 2016).
8
9

10 Ample empirical evidence highlights the importance of knowledge-sharing (see
11
12 Kamasak and Bulutlar, 2010; Kim et al., 2013). Knowledge-sharing is co-dependent on the
13
14 culture of mutual trust (McEvily et al., 2003) and collaboration (Nahapiet and Ghoshal,
15
16 1998). A knowledge-sharing environment encourages organizational members to exchange
17
18 their knowledge, enhance organizational performance and generate/develop new ideas (Von
19
20 Krogh et al., 2012; Hislop et al., 2018). Shared knowledge generates value by lowering the
21
22 necessity for information search and processing between collaborating workers, making them
23
24 more effective and efficient in accomplishing their job goals (Tsai et al., 2014). Yet, the
25
26 empirical research on how organizational context influences employee knowledge-sharing is
27
28 limited (Ashok, 2016; Kim and Lee, 2006), and to our knowledge, there remains a need to
29
30 empirically analyze how the perceived importance and practice of knowledge-sharing culture
31
32 are reflected at different organizational levels in highly formalized contexts.
33
34
35
36
37
38
39

40 *Highly formalized organizations*

41
42
43

44 Formalization is the extent to which organizational activities are visible in a written form as
45
46 policies, procedures, regulations, and job descriptions (Kim and Lee, 2006). [Information](#)
47
48 [asymmetry is normally a significant feature of formalised organisations \(Adler and Borys,](#)
49
50 [1996\).](#) Formalization influences knowledge flows (Chen et al., 2010), as well as behaviors of
51
52 individuals and groups (Kim and Lee, 2006). This in turn influences the degree of trust,
53
54 collaboration and knowledge-sharing (McEvily et al., 2003; Nahapiet and Ghoshal, 1998).
55
56
57
58
59
60

1
2
3 Organizations are social networks where hierarchy influences social capital,
4 which in turn underpins all knowledge exchanges and communication (Inkpen and
5 Tsang, 2005). Whether or not formalization constrains or enables culture and
6 knowledge sharing is contested. Studies have argued that the effective management of
7 knowledge requires flexibility and less emphasis on work rules (Holsapple and Joshi,
8 2001) and that having fewer formal structures enables employees to interact and
9 communicate to create new knowledge (Jarvenpaa and Staples, 2000). Conversely, it
10 has been argued that it is possible to increase flexibility while maintaining a formal
11 hierarchical structure (Kim and Lee, 2006). In their seminal work, Nonaka and
12 Takeuchi (1995) indicated that a combination of formal/hierarchical and non-
13 hierarchical (or rather 'self-organizing') organizational structures serve to improve
14 knowledge creation and sharing, even in the highly formalized context of Japanese
15 organizations.

16
17 Banks are a typical example of a formalized organization (Stovel and Savage,
18 2006; Al-Abdullat and Dababneh, 2018). The different managerial levels within a bank
19 represent an interesting domain in which to explore the perceived importance and
20 practice of cultural participation at different organizational levels in highly formalized
21 contexts.

22 *Social capital theory and a multi-level lens*

23
24 Social capital theory (SCT) centralizes relationships as means for social action. It is
25 comprised of numerous knowledge enablers, including organizational structure and culture.
26 Putnam (1995: 67) defined SCT as, "*the features of social organizations such as networks,*
27 *norms, and social trust that facilitate coordination and cooperation for mutual benefit*".

1
2
3 Social capital is the invisible glue that keeps social networks together and gives people
4 motivation to work towards shared goals. It not only provides the mechanisms for
5 coordination and collaboration, but also enables knowledge sharing in organizations
6 (Ganguly et al., 2019). Social capital could be structural, relational and cognitive (Nahapiet
7 and Ghoshal, 1998). The structural dimension explains the pattern of links among actors, the
8 assets developed and leveraged via relationships, and organizational norms, obligations, trust
9 and identifications. Relational capital signifies the extent to which relationships can be
10 organized in the relationship pool. The cognitive dimension explains the resources supplying
11 shared interpretations, representations and systems of meaning between parties. Social capital
12 is embedded in social connections and relationships and these could exist at the same
13 managerial level as well as across different levels and hierarchies (Chang and Chuang, 2011).

14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
SCT resonates well with this study's focus. Firstly, it considers trust as a crucial
factor in influencing social ties, social interactions, knowledge-sharing and a shared vision
for knowledge-sharing (Levin and Cross, 2004). Similarly, SCT regards collaborations and
social interactions as central to innovation and change (Lee et al., 2016; Ganguly et al., 2019)
and for enabling a knowledge management behavior between individuals (Hoegl et al., 2003;
Nahapiet and Ghoshal, 1998). Likewise, as tacit knowledge, being difficult articulate, is best
transferred when shared (Nonaka and Takeuchi, 1995), SCT emphasizes the importance of
social relationships and interactions in sharing knowledge. Social-relationships are a crucial
mechanism for sharing and applying knowledge in organizational contexts (Levin and Cross,
2004; Singh, 2005), and knowledge-sharing among organizational members is reliant upon
social interactions (Adler and Kwon, 2002; Kostova and Roth, 2003). Overall, social capital
is a result of trustworthy collaborations and interactions among organizational employees,
sharing knowledge and experiences with one another (Reiche et al., 2009). Thus, SCT

1
2
3 provides a useful theoretical basis to analyze the perceived importance and practice of trust,
4 collaboration and knowledge-sharing at different organizational levels.
5
6

7
8 Social behavior can be understood more richly by employing a multilevel lens. A
9 multilevel lens is essential for understanding real-world phenomena (Kozlowski and Klein,
10 2000). It is also important because social behavior is rooted in individuals' attitudes,
11 cognition and behaviors, which not only affect the functioning of teams and organizations,
12 but also are affected by the latter (Costa et al., 2013). The tendency in the literature is to
13 evaluate a given phenomenon using a single analysis level, e.g. individual, group/team or
14 organization. Yet, within the evolving sphere of management, researchers are increasingly
15 using a multi-level lens to formulate more intricate understandings of various phenomena
16 (Kozlowski and Klein, 2000). This is because one level of analysis, e.g. individual, is nested
17 in another, e.g. group, which is then nested in the organizational unit, e.g. department, and so
18 on (Hitt et al., 2007). These nested arrangements are the central theme of multilevel thinking,
19 and could also be applied to different levels within an organization. For example, the
20 operational level is nested in and guided by the middle-management level, which in turn is
21 nested in and governed by the senior management levels. Following that premise, this study
22 uses intra-organization nesting levels to analyze how the perceived importance and practice
23 of trust, collaboration and knowledge-sharing is reflected at different organizational levels in
24 highly formalized contexts.
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48

49 **Methodology**

50 *Approach*

51
52 Our approach was guided by the study's research question, i.e. to identify variations, if any,
53 and subsequently explore how trust, collaboration and knowledge-sharing are perceived and
54 practiced at different organizational levels within a formalized organization. This research
55
56
57
58
59
60

question required following a combination of post-positivism and social-constructivism. Post-positivism argues for making intersubjective comparisons between different knowledge claims to make rational judgements (Easton 2010) because reality can never be completely known and human biases (due to cultural experiences, world view, etc.) invariably interfere with one's ability to perceive a phenomenon (Cohen et al., 2014). We, therefore, followed post-positivism to initially identify variations, if any, in perceptions of organizational members at different levels. Nonetheless, we also recognized that information does not exist independently of context and the agents within the context (Burr, 2015), and that making sense of the reality is a social, or shared, and, contextual, or situation-dependent, process, based on how the agents within the context interpret, or perceive and understand, the world (Lee et al., 2016). We, therefore, followed social constructivism to explore in depth the nuanced differences in perceptions of organizational members at different organizational levels. The combination of post-positivist and social constructivist approaches marked out our research as an emergent and reflective sense-making process within a natural, changing context (see Easton, 2010).

Case Study Design

We used a case study research design. Case study design allows researchers to concentrate on a focal organization(s), which then facilitates an intensive examination of context, including its culture and hierarchy (Kothari, 2004). Case study design is extensively employed in qualitative analysis to examine complex real-life situations (Saunders et al., 2009). With regard to how many case studies to choose, Ghauri and Grønhaug (2005, p.119) state, '*... there is no upper or lower limit to the number [of cases]. Often one case is enough*'. Following these, we chose one case study as our focal organization. This allowed us to

1
2
3 control for the organizational context and thus focus on understanding in depth the complex
4 topic of organizational culture and its facets. Our research question also required a formalized
5 organizational context, and such contexts involve a bureaucratic system (Swinkels and Van
6 Meijl, 2020; Saporito and Coombs, 2013). Banks represent a typical example of such context
7 given their well-established routines and procedures.
8
9

10
11
12
13
14
15 Our case study was a Jordanian bank – henceforth Bank A. Established in 1973, Bank
16 A is a leading bank (128 branches, 228 ATMs, 2463 employees) in Jordan’s retail banking
17 sector, and has 56 branches in other countries (Syria, Algeria, UK, Palestine and Bahrain)
18 and representative offices in Iraq, UAE and Libya (Annual Report, 2018). In 2018, it
19 received five coveted awards from regional, international and global institutions, including
20 the Best Bank in Jordan 2018 award. Bank A was particularly an interesting case because
21 while like other traditional banks it has a formalized system, it is trying to enact a culture of
22 collaboration and knowledge-sharing. For example, it is trying to engender greater
23 cooperation, interactions and relationships among organizational members, including the use
24 of new ICT systems.
25
26
27
28
29
30
31
32
33
34
35
36

37
38 We also adopted a multi-level perspective. This perspective argues that existing
39 systems are stabilized by shared rules and practices, and that developments at multiple levels
40 link together and reinforce each other as a result of the interplay of many processes and
41 actors (Geels, 2006). Following Cavaliere and Lombardi (2015), the use of multi-level
42 perspective allowed our study to initially identify variations and, subsequently, explore
43 different facets of the organizational culture in terms of perceptions at the senior-
44 management, middle-management, and operational levels.
45
46
47
48
49
50
51
52
53
54
55
56

57 *Mixed Methods Methodology*

58
59
60

1
2
3 In our case study, we used mixed methods. Mixed methods methodology combines
4 quantitative and qualitative designs in the same research (Venkatesh et al., 2013) and reduces
5 uncertainty associated with interpretation of results as well as highlights convergence,
6 inconsistency and contradiction across the data sources (Ashok et al., 2016). We sequenced
7 the quantitative component, before the qualitative component. We did that because our first
8 research objective was to identify variations, if any, in perceptions at different organizational
9 levels related to the organizational culture's facets. This required collecting information from
10 a large number of informants, spread across the organization. We, therefore, addressed this
11 objective by using the quantitative method, involving a questionnaire survey. However, a
12 quantitative method is unable to explore deeper patterns and insights into the complex web of
13 relationships (Ashok et al., 2018; Creswell, 2009). Thus, to address our second research
14 objective, i.e. to explore in depth the nuanced patterns in trust, collaborative and knowledge
15 sharing culture at different organizational levels, we used the qualitative method involving
16 semi-structured interviews. A qualitative method allows a given phenomenon to be explored
17 in greater detail and profundity, and semi-structured interviews allow the flexibility to tailor
18 questions according to the participants' comprehension needs (Saunders et al., 2009). Using
19 mixed method, therefore, allowed us to minimise the limitations of using quantitative or
20 qualitative method (Creswell, 2012), which strengthened the interpretation and validity the
21 findings (Creswell, 2009). It also allowed us to combine the strengths of the two methods to
22 develop a relatively complete appreciation of the organizational reality (Onwuegbuzie and
23 Collins, 2007) and offer richer insights and robust conclusions (Venkatesh et al., 2013).

54 ***Sampling Strategy***

1
2
3 We had to approach our sampling sensitively and with care. Banks are generally considered
4 as sensitive institutions to investigate. This sensitivity was compounded by the context of
5 Jordan, which in itself is culturally sensitive context, where people are less receptive to
6 participating in research. To address these two levels of sensitivities, we sought the help of
7 the bank's human resources department for sample selection. Both for the quantitative and
8 qualitative components, our sampling was stratified-convenience, in that we first created
9 three strata (senior, middle and operational employees) and within each stratum, working
10 collaboratively with the bank's human resources department, identified potential employees
11 most willing to participate in the research. For the quantitative sampling, 200 questionnaires
12 were distributed and followed up with relevant managers/employees at the senior, middle and
13 operational levels, and 109 questionnaires were returned with a high response rate of 54.5%.
14 For the qualitative sampling, we again identified potential employees within each stratum
15 (senior, middle and operational) and then relied on the participants' willingness to participate.
16 To ensure getting participants from each of the three organizational levels, we actively
17 followed up potential participants, informing them about the study's objectives and
18 usefulness. We used face-to-face semi-structured interviews to collect information, and were
19 open and flexible to the number of interviews to be conducted. We continued enlisting
20 participants at each level until saturation, i.e. where additional data no longer discovered
21 anything new or added to the information that we already had (Bell et al., 2018). We
22 interviewed 12 participants in total; 5 senior managers, 4 middle managers and 3 operational
23 employees - see Table 1 for details.
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

51
52
53
54 -----
55
56 INSERT Table 1 ABOUT HERE
57
58 -----
59
60

Informants/participants

Our 109 quantitative survey informants were mostly male (~ 69%), aged 31 or above (> 73%), and had graduate or above education level (95%). Informants included 17 (~ 16%) senior managers, 48 (44%) middle managers and 44 (41%) operational employees, and had > 5-year experience (~ 90%; almost 50% had > 10-year experience). Our qualitative study participants were from three management levels: senior, middle and operational. As shown in Table 1, the senior level managers (P1, P2, P3, P4 and P8) included heads of departments or the Vice President, the middle-level managers (P5, P6, P7 and P9) were divisional managers and section heads, and the operational employees (P10, P11 and P12) were front-line staff. Of the 12 participants, 58% male (participant 1, 2, 3, 5, 6, 7 and 9) and 42% females (participant 4, 8, 10, 11 and 12), had graduate or above education level. All but one informant were aged > 30, and two-thirds had > 10-15 years of experience. A detailed profile of the participant is given in Table 1, where the participant number highlights the order in which they were interviews.

INSERT TABLE 1 ABOUT HERE

Quantitative Data and Analysis

Our survey used externally validated measures and items adapted from prior studies, as shown below in Table 2 below. In addition to questions on the informants' profile, we used multiple-item measures for all of the variables using a seven-point Likert scale ranging from

1
2
3 1 (strongly disagree) to 7 (strongly agree). The trust and collaboration culture were assessed
4 using a scale adapted from research by Hurley and Hult (1998), and Kim and lee (2006). The
5 knowledge-sharing culture was assessed using a scale adapted from research by De Vries et
6 al. (2006), Kim and lee (2006) and Van den Hooff and Huysman (2009). Finally,
7 formalization was assessed using a scale adapted from research by Kim and lee (2006).
8
9

10
11
12
13
14
15 The survey was piloted and of the 52 distributed questionnaires 31 responses were
16 received (64% response rate). The pilot survey not only helped in developing an initial
17 understating of variations, but also in refining list of interview guide questions; how the
18 questions are comprehended, how the questions are understood in the same way by all
19 participants, and the length of time it takes to complete the survey (Sekaran and Bougie,
20 2011). Some less relevant (closed) questions were excluded, whereas others were combined
21 to reduce the questionnaire length. Other (open) questions were added to cater for a broader
22 range of viewpoints and to obtain supplementary or fresh information. The interview
23 structure and questions were based on the key themes (more later).
24
25
26
27
28
29
30
31
32
33
34

35
36 For the full-scale survey data, we first conducted descriptive analysis and calculated
37 means and standard deviations for each of the three cultural facets and at the three
38 organizational levels. We then conducted univariate analysis using an independent sample t-
39 test to compare the means of two independent groups at a time. Independent-samples t-test is
40 the widely applied test which creates a comparison among the means between two groups
41 that are unrelated in relation to the same continuous, dependent variable (Ho, 2006). This test
42 allowed us to establish if statistical evidence existed that the associated population means
43 significantly differ.
44
45
46
47
48
49
50
51
52
53

54
55
56 -----
57
58 INSERT TABLE 2 ABOUT HERE
59
60

Qualitative Data and Analysis

In semi-structured interviews, we used guide questions to collect data. These guide questions were informed by the extant literature, and were aimed at gaining the full story of the perceived importance and practice of organizational culture's facets. The questions included, among others, the importance and level of collaboration, mutual help among employees, the need and level of trust, the hierarchy and degree of formalization, innovation orientation and encouragement, and knowledge-sharing and its benefits. The participants' identity was anonymised and confidentiality was guaranteed (Berg et al., 2004), and the interviews were held in a neutral location to avoid undesired interruption or misdirection. The data were then transcribed, and, subsequently, validated by the participants.

Our approach to qualitative data analysis was systematic and holistic and this allowed us to inductively develop new concepts whilst also satisfying the high standards in relation to rigor as well as organising the data into categories in order to assemble, organize and structure the data (Gioia, et al., 2013). The data analysis firstly involved open coding through line-by-line and sentence-by-sentence analysis and generated free nodes (Corbin and Strauss, 2014). The nodes were then categorized into more than 50 first-order categories, which were then further refined into 30 categories through an iterative process of analysis, reflection, comparison of categories and deleting/collapsing categories. As detailed in Table 3, 17 of the total first-order codes were used in this paper. These categories were further organized under second-order categories/themes, including trust culture, collaborative culture, and knowledge-sharing culture. The categories were then analysed for emerging patterns, based on the constant comparison of categories to identify similarities and differences, along with the relevant literature, not only to see if what was being found was a precedent, but also to

1
2
3 discover new patterns. The analysis continued until saturation, where nothing new was being
4
5 discovered. The entire process was iterative and emergent, where the team questioned and
6
7 challenged assumptions, reflected upon, improved, and refined the emerging themes and
8
9 patterns.
10
11
12
13
14

15 -----
16
17 INSERT Table 3 ABOUT HERE
18
19 -----
20
21
22

23 **Findings**

24 *Organizational Context*

25
26
27 Bank A follows a conservative (financial management) approach in order to maintain a sound
28
29 financial position in the Jordanian banking sector. Nonetheless, it actively promotes a culture
30
31 of responsibility and learning. For example, the bank shows a strong commitment to
32
33 contributing to the society; it empowers local communities, provides user-friendly services to
34
35 the visually-impaired customers, makes donations to several charitable institutions (hospitals,
36
37 media institute, gender-funding institutions, and martyrs' families welfare societies), and its
38
39 employees actively participate in voluntary initiatives, such as breast cancer awareness, tree
40
41 plantation and hunger eradication (Annual Report 2019). The bank also promotes a learning
42
43 culture. This culture is integral to the Total Quality Management policy that is central to the
44
45 bank's vision and mission (official webpage). In 2019, the bank initiated the Congratulations
46
47 on the Move campaign to engender a culture of amity among its employees (Annual Report,
48
49 2019). The bank also promotes transparency and good governance (Sustainability Report,
50
51 2018) and actively supports academic training/education of its employees at leading
52
53 institutions and universities, nationally and internationally (Annual Report, 2018). Recently,
54
55
56
57
58
59
60

1
2
3 the bank has launched the eNABLE e-learning platform for its employees. The platform
4 offers tailored and specialized training courses/certification, enabling employees to refine
5 their banking knowledge and skills on a regular/continuous basis, without disrupting their
6 routine duties (official webpage). In 2019 alone, the bank delivered 1,492 training
7 programmes (including 16 courses in Arab/foreign countries and 43 professional certificates),
8 and has offered 24,654 courses (including 550 behavioural and 120,806 e-learning courses)
9 (Annual Report, 2019).
10
11
12
13
14
15
16
17
18

19 Nevertheless, the bank is a highly formalized organization. For example, one
20 participant said, *'The bank is a bureaucratic organization by nature...'* (Participant 2) and
21 another stated, *'We as a bank have a considerable amount of rules and procedures to guide*
22 *us in our jobs'* (Participant 1). Yet, there also seems to be an informal system running
23 alongside the formal system in the bank. For example, Participant 2 said, *'... despite this fact*
24 *[the bank's bureaucratic nature] there is another informal system in the bank, a cross*
25 *functional trust-based unwritten type of system....'* It also seems that it is within this informal
26 organizational system that different aspects of organizational culture are positioned. For
27 example, Participant 2 went on to say, *'[this] informal system is based on trust, learning,*
28 *support, collaboration, communication'* The findings below outline patterns of the
29 perceived importance and practice of trust culture, collaborative culture and knowledge-
30 sharing culture found in Bank A.
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51

52 ***Trust culture***

53
54
55
56 Our quantitative results indicated variations in the perceived importance and practice of
57 trust culture at all organizational levels. For example, the difference (0.535) between
58
59
60

1
2
3 the mean values of senior managers (5.99) and middle managers (5.46) was statistically
4 significant (t-value -3.165; P-value 0.002). Similarly, the difference (0.364) between
5
6 the mean values of middle managers (5.46) and operational employees (5.09) was also
7
8 significant (t-value 2.487; P-value 0.015). Likewise, the difference (0.899) between the
9
10 mean values of senior managers (5.99) and operational employees (5.09) was
11
12 statistically significant (t-value 4.554; P-value 0.000). The mean values also indicated
13
14 that the perceived importance and practice of trust successively reduce from the senior
15
16 management to middle management level, and from middle management to operational
17
18 level. Given these variations, we now present the patterns we emergently explored
19
20 among the three organizational levels.
21
22
23
24
25
26
27
28

29 **Importance – differentiated purposes:** The importance of trust culture was duly recognized
30
31 at all levels). Nonetheless, there were variations between organizational levels, owing to the
32
33 trust's differentiated purposes. The senior managers' purposive view was broader and
34
35 comprehensive, e.g. to achieve objectives, work together, innovate and share information. For
36
37 example, one senior manager said, '*I certainly believe that without trust you can hardly*
38
39 *achieve anything*' (Participant 1). Similarly, another senior manager stated, '*trust is extremely*
40
41 *important, I can't myself work with others if I don't trust them*' (Participant 3). Likewise,
42
43 another senior manager said, '*trust is extremely important for innovation and information*
44
45 *sharing between employees*' (Participant 4). The middle managers' purposive view was
46
47 general as well as situation-specific. For example, it was general when one middle manager
48
49 said, '*mutual trust between employees is good, and we believe that we are all working for the*
50
51 *same purpose*' (Participant 9). It was also situation-specific when another middle manager
52
53 associated trust with a particular situation, '*trust is extremely important to accept the*
54
55 *change...*' (Participant 5). The previous middle manager also highlighted the trust's
56
57
58
59
60

1
2
3 importance in a shared context, *'... if we don't trust each other we will not help each other*
4 *and share anything together'* (Participant 9). Compared to that, the operational level
5
6 employees' purposive view was specifically related to people, task or performance. For
7
8 example, one employee associated the importance of trust with dealing with others, *'[with*
9 *trust] you will be more comfortable when you are dealing with the person in front of you'*
10 (Participant 12). Another employee associated trust with shared working and increasing self-
11
12 performance, *'you have to trust your colleagues to be able to work with them... as well as to*
13 *boost your performance'* (Participant 10).
14
15
16
17
18
19
20

21
22 Overall, these findings, as shown in Figure 1, suggested that there are nuanced
23
24 differences in the purposive view of trust's perceived importance. The senior managers'
25
26 purposive view recognizes the trust's importance is general and for goal achievement, shared
27
28 working and innovation. In contrast, the operational employees' purposive view is for jointly
29
30 performing tasks and feel comfortable working within a shared context. In between are the
31
32 middle managers, whose purposive view was both general and contextual.
33
34
35
36
37
38

39
40 -----
41 INSERT FIGURE 1 ABOUT HERE
42 -----
43
44
45
46

47 ***Practice – shared, with differentiated extent:*** At the outset, most managers and employees
48
49 highlighted that the trust culture is shared across the organizational levels. For example, a
50
51 senior manager highlighted, *'Generally speaking, I think there is mutual trust between*
52 *employees in the bank'* (Participant 2), and this view was shared by the other two senior
53
54 managers. One senior manager approached trust passively by saying, *'I personally believe*
55
56 *that no employee attempts to sabotage the work of another employee'* (Participant 1).
57
58
59
60

1
2
3 Another senior manager approached trust more actively by associating it with the
4 organization's informal system, '*Our informal system that supports innovation is a 'trust*
5 *based' system*' (Participant 2). The middle managers also shared this view. For example, one
6 middle manager said, '*there is trust*' (Participant 7) and, '*there has to be [this shared practice*
7 *of] trust to be able to share information with others*' (Participant 6). The operational
8 employees also shared this view. For example, one employee said, '*... luckily we are all*
9 *supportive and trust each other in the bank*' (Participant 10), and this view was shared by two
10 other employees as well. These findings suggested that trust is generally practiced at all
11 levels within the organization.
12
13
14
15
16
17
18
19
20
21
22
23

24 Notwithstanding, the extent to which the trust culture is widely shared was also
25 qualified. For example, the senior managers qualified its practice in terms of its extent and
26 person-dependency. For example, one senior manager said, '*I suppose we have trust to a*
27 *certain degree, I think it is personal and depends on the person in front of you...*' (Participant
28 8). The degree was specified by another senior manager, who stated, '*I think there is trust up*
29 *to a certain limit, you can say 70-80% and we need more...*' (Participant 4). Similarly, the
30 middle managers shared this qualified, person-dependent view. For example, one middle
31 manager stated, '*I can't simply share my knowledge with a person I don't trust*' (Participant
32 6). Another middle manager said, '*there is trust but it is relative, each person is different*
33 *from the other, so I hope for more trust*' (Participant 7). In contrast, however, the operational
34 employees did not highlight the relative degree or person-dependent nature of trust. One of
35 the employees even stated that while he personally had not had an issue of trust before, but
36 that trust is not even a requirement for shared working, '*... I am obligated to help my*
37 *colleagues regardless of me trusting them or not when it comes to work matters...*
38 (Participant 12).
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 These findings suggested, as shown in Figure 1, that there were nuanced differences
4 in the extent to which trust is a shared practice. Senior and middle managers regarded its
5 practice as relative in its degree and person-dependency, whereas for the operational
6 employees the degree or the lack of it perhaps does not matter in performing daily work.
7
8
9
10
11
12

13 ***Collaborative culture***

14
15
16
17
18
19 Our quantitative findings indicated variations in the perceived importance and practice of
20 collaborative culture. For example, the difference (-0.585) between the mean values of senior
21 managers (4.82) and middle managers (5.41) was significant (t-value -3.159; P-value 0.002).
22
23 Similarly, the difference (-0.473) between the mean values of middle managers (5.41) and
24 operational employees (5.88) was statistically significant (t-value -3.635; P-value 0.000).
25
26 Likewise, the difference (-1.058) between the mean values of senior managers (4.82) and
27 operational employees (5.88) was statistically significant (t-value -5.98; P-value 0.000). The
28 means also indicated that the perceived importance and practice of collaboration successively
29 increase from the senior management to middle and from middle to operational level. Given
30 these variations, we now present the patterns we emergently explored among the three
31 organizational levels.
32
33
34
35
36
37
38
39
40
41
42
43

44
45 ***Importance – situation-specific as well as general:*** The importance of collaborative culture
46 was duly recognized. Nonetheless, two sets of views emerged. Firstly, where the importance
47 of collaborative culture was associated with a change context. For example, a senior manager
48 said, '*collaboration* definitely help *[sic.]* when change occurred' (Participant 2). Similarly,
49 a middle manager elaborated, '*collaboration* is especially important when implementing a
50 change, where employees must be there for each other, and help one another...' (Participant
51 9). Likewise, an operational level employee stated, '*we must work together especially when*
52
53
54
55
56
57
58
59
60

1
2
3 *change occurs to help and support each other's and solve the issues promptly...* (Participant
4
5 10).

6
7
8
9
10 The other set of views focused on the collaborative culture's general importance, i.e.
11
12 irrespective of the situation. The senior managers did not highlight this view. Instead, it
13
14 emerged at the middle management and operational levels. For example, one middle manager
15
16 broadly said, '*... it is very important to have collaboration between employees in the*
17
18 *organization*' (Participant 5), and another middle manager supported this view. The
19
20 operational level employees were more specific in highlighting how the collaborative culture
21
22 helps them. For example, one respondent said, '*... [collaboration] helps us to deal with*
23
24 *issues together and help each other when one needs help*' (Participant 11). Another
25
26 operational employee referred to how the lack of collaboration could lead to psychological
27
28 and knowledge-related issues, '*...without this collaboration we would have been really*
29
30 *frustrated to work on our own, I can't work by myself I need people to help me out*'
31
32 (Participant 12).
33
34
35
36

37
38 These findings suggested, as shown in Figure 1, that while the situation-specific
39
40 importance of collaborative culture, i.e. in a change context, is widely shared across all
41
42 levels, unlike the senior management level, the importance of collaborative culture in general
43
44 is also recognized at the middle management level, and more specifically at the operational
45
46 level because it helps in daily problem-solving activities.
47
48
49
50

51 ***Practice – shared, with differentiated extent:*** Collaborative culture was also practiced and
52
53 this was perceived at all levels. For example, one senior manager said, '*... employees in the*
54
55 *bank are collaborative with each other...*' (Participant 2), which another senior manager
56
57 supported. Similarly, a middle manager said, '*Yes, there is collaboration in the bank... I see*
58
59
60

1
2
3 *this all the time in the bank*' (Participant 9), and this view was supported by two other middle
4 managers. One of the latter two middle managers highlighted the localized as well as the
5 diffused nature of collaboration, '*... there is collaboration in the same department and*
6 *across departments as well*' (Participant 5), a view that other middle managers supported.
7 Likewise, an operational level employee stated, '*We all collaborate with each other and help*
8 *each other...*' (Participant 12), and two other operational employees supported this view.
9
10
11
12
13
14
15
16

17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Nonetheless, there were nuanced differences in the extent of collaboration across levels. A senior manager indicated that collaboration is not widespread in an absolute sense, but rather depends on the employees' abilities, '*... some people work as teams, and they are good at it*' (Participant 8). Similarly, another middle manager emphasised the need for increasing the current level of collaboration, '*... there is collaboration but it needs to be more than this...*' (Participant 7). A higher level of collaboration also seems to be more localized, e.g. within a particular department, as one middle managers suggested, '*there is high collaboration between us in the audit department*' (Participant 6). Nonetheless, the extent of collaboration at the operational level seems to be more regular and widespread. For example, one employee said, '*We work with the team spirit...*' (Participant 10), and another employee noted, '*There is collaboration in the branch and we all work as a team together...*' (Participant 11), and two other operational employees shared these views. It also seems that the higher level of collaboration at the operational level was a requirement for shared working, as one participant said, '*... we must work together... I personally needed my colleagues to help me several times and I help them when they need me as well, otherwise we will have great unsolved issues*' (Participant 10).

Overall, these findings suggested, as shown in Figure 1, that while collaboration is practiced in the organization, in the view of senior and middle managers it is perhaps less

1
2
3 widespread and needs to be increased, whereas in the view of operational employees, it
4 represents a daily reciprocal necessity.
5
6
7

8 9 ***Knowledge-sharing culture***

10
11
12
13
14 Our qualitative analysis indicated lack of variations in the perceived importance and practice
15 of knowledge-sharing culture. For example, the difference (0.062) between the mean values
16 of senior managers (5.17) and middle managers (5.11) was statistically insignificant (t-value
17 0.342; P-value 0.733). Similarly, the difference (0.017) between the mean values for middle
18 managers (5.11) and operational employees (5.09) was statistically insignificant (t-value
19 0.083; P-value 0.934). Likewise, the difference (0.080) between the means values of senior
20 managers (5.17) and operational employees (5.09) was statistically insignificant (t-value
21 0.256; P-value 0.798). Given these similarities, we now present the patterns we emergently
22 explored among the three organizational levels.
23
24
25
26
27
28
29
30
31
32
33

34
35
36
37 ***Importance – purposive as well as situation-specific:*** The importance of knowledge-
38 sharing culture was duly recognized. Nonetheless, for senior managers this recognition
39 was not only purposive, but also situation-specific. For example, one senior manager
40 said, *'knowledge-sharing is extremely important and a need in the business*
41 *environment'* (Participant 8), associated with different organizational purposes, e.g. *'...*
42 *important to... innovation'* (Participant 4), and *'... for the success of new projects'*
43 (Participant 1). One of the senior managers also highlighted its situation-specific
44 importance in, *'... employees... accepting the change'* and *'... helping employees to*
45 *function well in a turbulent environment'* (Participant 2). Middle managers also
46 recognized the importance of knowledge-sharing culture, but associated it particularly
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 during times of change. For example, *'knowledge-sharing is important when trying to*
4 *implement any change in the bank'* (Participant 5). One of the middle managers thought
5 that it was a necessary requirement for actualizing change; *'No change will occur if*
6 *there is no sharing of information between us in the bank, we have to work and support*
7 *each other to change...'* (Participant 6). This situation-specific view was also shared at
8 the operational level, for example, *'I believe that no change will succeed without*
9 *knowledge-sharing'* (Participant 10). Other than the change context, for operational
10 employees, knowledge-sharing also helped in work-related aspects, e.g. solving
11 problems, diffusing knowledge and building employees' expertise. For example, one
12 employee said, *'we must share knowledge with each other... this [reciprocally] could*
13 *help a lot in solving many issues... knowledge will be spread faster, by that people*
14 *could be more knowledgeable of what happens at work... what needs to be done'*
15 (Participant 11).

16
17 Overall, these findings, as shown in Figure 1, suggested that the importance of
18 knowledge-sharing is recognized at all organizational levels for varied reasons, but
19 especially during situation-specific organizational change.

20
21 **Practice – shared, with differentiated extent:** Knowledge-sharing culture was also practiced
22 within the organization. It was practiced at the senior level as one senior manager said, *'I*
23 *honestly share my information with other colleagues in my department and even outside my*
24 *department...'* (Participant 1), and two other senior managers gave specific examples in this
25 regard, e.g. sharing information about new products or about the bank via 'Do You Know'
26 emails. On similar lines, one of middle manager said, *'We see knowledge-sharing all the time*
27 *here in the bank'* (Participant 9). Likewise, the operational employees said, *'We share*
28 *knowledge with each other all the time'* (Participant 12), and *'... our manager was always*
29

1
2
3 *supportive and encouraged us to share every bit of information with each other* (Participant
4
5
6 12). Another employee highlighted how this knowledge-sharing helped them, especially
7
8 during times of change, *'Without knowledge sharing... huge problems [during change]*
9
10 *would not have been solved... [knowledge-sharing] helped us do our work in a much*
11
12 *smoother manner, and accept the change* (Participant 10).

13
14
15 Nevertheless, the findings also suggest the differentiated extent of knowledge-sharing
16
17 practice. For example, one senior manager said, *'We are trying to encourage knowledge*
18
19 *sharing more...'* (Participant 2). Similarly, another senior manager said, *'I certainly like to*
20
21 *share information I have with others in the bank but I cannot deny it needs to be more to*
22
23 *support innovation* (Participant 4). The differentiated extent of knowledge-sharing is also
24
25 related to the nature of knowledge shared. For example, one middle manager qualified the
26
27 nature of information that can be shared, *'... [knowledge-sharing] has limits... one must be*
28
29 *careful before sharing any information in the bank... there shouldn't be any sharing of*
30
31 *classified information with others* (Participant 7). Similarly, one of the operational
32
33 employees suggested that instead of being widespread, knowledge-sharing should be
34
35 relevant, *'Knowledge-sharing is crucial, but the most important part is giving the right*
36
37 *information not just giving any information* (Participant 12).

38
39
40
41
42 Overall, these findings, as shown in Figure 1, suggest that all organizational levels
43
44 perceived that knowledge-sharing is practiced within the organization. Nonetheless, there
45
46 were also qualifications with respect to its extent and based on the nature/relevance of
47
48 knowledge shared.
49
50
51
52
53
54

55 **Discussion**

56
57
58
59
60

1
2
3 This study explored how the perceived importance and practice of three important facets of
4 organizational culture – trust, collaboration and knowledge-sharing – are reflected at different
5 organizational levels – senior management, middle management and operational – in a highly
6 formalized organization. Using social capital theory and a case study of a Jordanian bank,
7 this paper used a mixed-methods approach and developed a framework (Figure 1), which
8 unfolds nuanced variations in the organizational culture’s three facets at different
9 organizational levels. Our contributions are elaborated upon below.

10
11
12
13
14
15
16
17
18
19
20 The paper firstly contributes to the literature on organizational culture by unearthing
21 new patterns/insights at different organizational levels, not elucidated before. Our three facets
22 (trust, collaboration, and knowledge-sharing) varied across organizational levels in their
23 perceived importance and practice. Past research has recognized the importance
24 organizational culture’s facets in influencing employees’ empowerment, trustworthy
25 relationships, communication, willing collaboration, cooperation, knowledge-sharing and
26 learning, as well as innovation, change and organizational performance (see Hislop et al.,
27 2018; Janz and Prasarnphanich, 2003; Von Krogh et al., 2012). Our findings suggest that the
28 perceived importance and practice of *trust culture* is generally shared at all levels. Thus, trust
29 among peers is considered crucial, and more trusting employees display superior
30 collaboration and commitment, participate in more knowledge sharing, and perform fewer
31 counterproductive work activities (Verburg et al., 2018; Wieslander, 2019). Yet, our findings
32 also show that this importance or practice is differentiated across levels, based on the
33 purposiveness or person/context-dependency, as suggested by the following propositions:

34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56 *Proposition 1: The perceived importance of trust is purposive; senior managers*
57 *associate it with wider organizational purposes, operational employees regard it for*
58

1
2
3 *task/performance, and middle managers take both a wider and situation-specific*
4
5 *purposive view.*
6
7

8
9
10 *Proposition 2: The perceived practice of trust is shared, but also differentiated; for*
11 *senior and middle managers its degree is person-dependent, whereas for operational*
12 *employees this degree is not an issue for performing daily work.*
13
14
15

16
17
18
19
20 Similarly, our findings suggest that the perceived importance and practice of
21 *collaborative culture* is generally shared across all levels. This supports earlier claims that the
22 absence (or disruption) of a collaborative culture impedes knowledge creation and sharing
23 (Pathak et al., 2020; Von Krogh et al., 2012). Nonetheless, our findings also show this
24 importance or practice varies across levels, based on its degree and problem-solving or
25 otherwise situation; Ashok (2018) has earlier highlighted that in some circumstances
26 collaboration and direct engagement occurs in activities related to problem solving. The
27 nuanced patterns that we unearthed are suggested in the following propositions:
28
29
30
31
32
33
34
35
36
37
38
39
40
41

42 *Proposition 3: While the importance of collaboration during situation-specific,*
43 *organizational change is recognized at all levels, unlike senior managers, middle*
44 *managers also appreciate its importance in general and operational employees*
45 *recognise its importance as a daily problem-solving requirement.*
46
47
48
49
50
51

52
53 *Proposition 4: While collaboration is practiced at all levels, in the senior and middle*
54 *managers' view it is less widespread than desired, whereas in the operational*
55 *employees' view it represents a daily reciprocal necessity.*
56
57
58
59
60

1
2
3
4
5
6
7 Likewise, our findings suggest that the perceived importance of *knowledge-sharing*
8 *culture* is duly recognized at all levels, both in general and as situation-specific. This supports
9 Ashok et al.'s (2018) indication that knowledge sharing is increasingly recognized for its
10 importance in service-based organisations seeing innovation. Notwithstanding, our findings
11 also show nuanced variations in the knowledge-sharing practice, based on the nature and
12 relevance of knowledge shared, as suggested by the following propositions:
13
14
15
16
17
18
19
20
21

22
23 *Proposition 5: The perceived importance of knowledge-sharing is recognized at all*
24 *organizational levels, especially during situation-specific organizational change.*
25
26
27

28
29 *Proposition 6: Knowledge-sharing is perceived to be practiced at all*
30 *organizational levels, yet, its extent is qualified based on the nature/relevance*
31 *of knowledge shared.*
32
33
34
35
36
37
38
39

40 The paper secondly contributes to the literature on formalized institutions by
41 unfolding how an informal system is positioned and runs alongside a formal system. Past
42 research has shown that a supportive culture is a driver of innovation and change; yet the
43 empirical evidence is patchy in relation to how its facets are reflected in a highly formalized
44 organization (Kim and Lee, 2006). Our findings deviate from the normative perspective on
45 formalization in innovating organisations (see Holsapple and Joshi, 2001; Jarvenpaa and
46 Staples, 2000) in that informal cultural arrangements co-exist within a formal setting (Inkpen
47 and Tsang, 2005). Our case study shows evidence of trustworthy, collaborative and
48 knowledge-sharing relationships existing in a highly formal context, supporting Kim and Lee
49
50
51
52
53
54
55
56
57
58
59
60

1
2
3 (2006) in that it is possible to increase flexibility while maintaining a formal hierarchical
4 structure. These nuanced patterns have not been captured before, and this context-specific
5 articulation of ours is unique and represents an important contribution
6
7
8

9
10 Finally, we contribute to the literature on social capital theory by adopting a multi-
11 level lens in relation to the study's focus and context, not attempted before within this field.
12 Past research has recognized that social relationships do exist at the same managerial level, as
13 well as across different levels and hierarchies (Chang and Chuang, 2011); these different
14 levels of social capital arrangements have not been analysed in depth. Our findings provide
15 evidence in this regard, and suggest that social relationships inform behaviours/practices
16 during inter-level social interactions, as noted by Ganguly (2019). Moreover, past research
17 has emphasized the need to use a multilevel lens to understand real-world phenomena
18 (Kozlowski and Klein, 2000). Our study applied both social capital theory and a multi-level
19 lens, and this was instrumental in enabling our study to identify nuanced patterns and
20 insights, not entirely captured or delineated in prior research. Thus, the paper further
21 strengthens the case for using these theoretical and conceptual approaches by providing
22 evidence that such an approach can indeed lead to the discovery of more nuanced patterns
23 and insights, as noted by Kozlowski and Klein, (2000), Hitt et al. (2007) and Costa et al.
24 (2013).
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47

48 ***Managerial implications***

49
50
51
52
53 Our paper has a number of managerial implications. Firstly, our findings show how
54 understanding of culture's facets emerge out of myriad everyday interactions between
55 organizational members as part of their work requirements and organizational conditions;
56
57
58
59
60

1
2
3 such as problem-solving, collaborative work, guarding/preserving sensitive information,
4 managerial responsibilities, and so on. Thus, social capital in organizations is instrumental in
5
6 constructing an institutional mechanism of its own, i.e. the informal culture, running parallel
7
8 to the formal culture. The informal culture, in turn, becomes an important mechanism in
9
10 collaboratively performing work and achieving organizational goals. The findings also
11
12 suggest that highly formalized organizations are not immune to this emergent, informal
13
14 culture. Quite the contrary, the formal system could often become too bureaucratic and thus
15
16 perhaps necessitates a parallel channelling mechanism for employees to interact and support
17
18 each other, share knowledge, solve issues/problems, and develop trustworthy relationships,
19
20 which formal organizational mechanisms may or may not be able to engender. Managers,
21
22 therefore, need to encourage and emphasize greater interactions and networking among
23
24 employees to develop and strengthen the web of social capital.
25
26
27
28
29

30
31 The paper also provides managers a deeper understanding of the multilevel nature of
32
33 organizational culture by spelling out the nuanced differences across organizational levels. At
34
35 more senior levels trust culture is more important than collaborative or knowledge-sharing
36
37 culture. These findings also suggest that senior managers may need to focus more on
38
39 developing collaborative and knowledge-sharing relationships in order to balance out the
40
41 importance and practice of these relationships with those of the trust culture. Doing that will
42
43 also be important because senior managers serve as role models and thus need to set an
44
45 example for others to follow in order for the culture to evenly practiced at all organizational
46
47 levels. The paper also suggests that middle management is key in the development of
48
49 organizational culture. This is because they rate high to very high in relation to the
50
51 importance/practice of all three aspects of culture. Middle managers absorb and practice
52
53 collaborative and knowledge-sharing as much as the operational level or the senior level, for
54
55
56
57
58
59
60

1
2
3 that matter, if not more. Thus, middle managers are the custodians of culture; exemplifying
4
5 this through the way they practice it daily, becoming important role models for employees.
6
7
8
9

10 11 ***Limitation and future directions*** 12 13 14 15 16

17 Our study is not without limitations. It focuses on three aspects of organizational culture,
18
19 whereas there are many other facets that were beyond the paper's scope. Future research,
20
21 therefore, can focus on different other facets of organizational culture, such as learning and
22
23 dialogue. Secondly, this study covered only one Jordanian bank. While this allowed for a
24
25 case study with rich and interesting answers from the participants; there would clearly be
26
27 value in exploring if results would have been similar in other banks or highly formalized
28
29 institutions, or indeed in less formalized institutions.
30
31
32

33 In addition, semi-structured interviews were deemed the most appropriate for this
34
35 kind of in-depth case study as it uncovered important unearthen nuanced differences in the
36
37 perception of organizational culture across hierarchies (Saunders et al., 2009). However it
38
39 must be acknowledged that the sample of twelve interviewees was relatively small.
40
41 Moreover, organizational culture in any country is dominated by the national culture, and this
42
43 in turn, will influence how these relations are examined; therefore results may differ from
44
45 country to country (Michailova and Hutchings, 2006). Other researchers could examine and
46
47 test the study model quantitatively in other settings, companies, organizations, countries, or
48
49 cultures, to examine the generalisability of the findings.
50
51
52
53
54
55
56
57
58
59
60

References

- Adler P and Broys B (1996) Two Types of Bureaucracy: Enabling and Coercive. *Administrative Science Quarterly* 41(1):61–89.
- Adler PS and Kwon SW (2002) Social capital: prospects for a new concept. *Academy of Management Review* 27 (1): 17–40.
- Akbar, H. (2003). Knowledge levels and their transformation: Towards the integration of knowledge creation and individual learning. *Journal of Management Studies*, 40(8): 1991–2014.
- Al-Abdullat BM and Dababneh A (2018) The mediating effect of job satisfaction on the relationship between organizational culture and knowledge management in Jordanian banking sector. *Benchmarking: An International Journal* 25 (2):517–544.
- Andrews MC and Kacmar K M (2001) Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior* 22 (4): 347–366.
- Ashok M, Day M and Narula R (2018) Buyer (dis)satisfaction and process innovation: the case of information technology services provision. *Industrial Marketing Management*, 68: 132–144.
- Ashok M, Narula R and Martínez-Noya A (2016) How do collaboration and investments in knowledge management affect process innovation in services? *Journal of Knowledge Management* 20(5): 1004–1024.
- Becchetti L, Degli Antoni, G and Faillo M (2010) Let's meet up! The role of relational goods in promoting cooperation. *Journal of Socio-Economics*, 39 (6): 661-669.

- 1
2
3 Bell E, Bryman A and Harley B (2018) *Business Research Methods*. Oxford University
4
5 Press.
6
7
8 Berg B L and Lune H (2004) *Qualitative Research Methods for the Social Sciences*. 5th ed.
9
10 Bergh, DD, Ketchen Jr. DJ, Orlandi, I., Heugens, PP, & Boyd, BK (2019) Information
11
12 asymmetry in management research: Past accomplishments and future opportunities.
13
14 *Journal of management*, 45(1), 122-158.
15
16
17 Blomqvist K and Puumalainen K (2008) The role of trust in organisational
18
19 innovativeness. *European Journal of Innovation Management* 11 (2): 160–181.
20
21
22 Bock GW, Zmud RW, Kim YG and Lee JN (2005) Behavioral intention formation in
23
24 knowledge sharing: examining the roles of extrinsic motivators, social-psychological
25
26 forces, and organizational climate. *MIS Quarterly* 29 (1): 87–111.
27
28
29 Bouty I (2000) Interpersonal and interaction influences on informal resource exchanges
30
31 between R&D researchers across organizational boundaries. *Academy of Management*
32
33 *Journal* 43 (1): 50–65.
34
35
36 Burr V (2015) *Social Constructionism*. London: Routledge.
37
38 Büschgens T, Bausch A and Balkin DB (2013) Organizational culture and innovation: A
39
40 meta-analytic review. *Journal of Product Innovation Management* 30 (4): 763–781.
41
42
43 Cameron KS, Quinn RE, De Graff J and Thakor AV (2014) *Competing Values Leadership*.
44
45 Cheltenham, UK: Edward Elgar Publishing.
46
47
48 Cavaliere V and Lombardi S (2015) Exploring different cultural configurations: How do they
49
50 affect subsidiaries' knowledge sharing behaviors?. *Journal of Knowledge*
51
52 *Management* 19 (2): 141–163.
53
54
55 Chang HH and Chuang SS (2011) Social capital and individual motivations on knowledge
56
57 sharing: Participant involvement as a moderator. *Information and Management* 48
58
59 (1): 9–18.
60

- 1
2
3 Chen CJ and Huang JW (2007) How organizational climate and structure affect knowledge
4 management—The social interaction perspective. *International Journal of*
5
6 *Information Management* 27 (2): 104–118.
7
8
9
10 Chen CJ, Huang JW and Hsiao YC (2010) Knowledge management and
11
12 innovativeness. *International Journal of Manpower* 31 (8): 848–870.
13
14 Clarkson, G, Jacobsen, TE, & Batcheller, AL (2007) Information asymmetry and information
15
16 sharing. *Government Information Quarterly*, 24(4), 827-839.
17
18
19 Cohen D and Prusak L (2002) *In Good Company: How Social Capital Makes Organizations*
20
21 *Work*. Boston, MA: Harvard Business School Press.
22
23
24 Cohen P, West SG and Aiken LS (2014) *Applied Multiple Regression/Correlation Analysis*
25
26 *for the Behavioral Sciences*. New York: Psychology Press.
27
28
29 Corace, CJ (2007) Engagement - enrolling the quiet majority. *Organization Development*
30
31 *Journal*, 25 (2), 171–175.
32
33
34 Corbin J and Strauss A (2014) *Basics of Qualitative Research: Techniques and Procedures*
35
36 *for Developing Grounded Theory*. London: Sage publications.
37
38
39 Costa PL, Graça AM, Marques-Quinteiro P, Santos CM, Caetano A and Passos AM (2013)
40
41 Multilevel research in the field of organizational behavior: An empirical look at 10
42
43 years of theory and research. *Sage Open* 3 (3): 1–17.
44
45
46 Creswell JW (2009) *Research Design: Qualitative, Quantitative, and Mixed Methods*
47
48 *Approaches*. Sage, Thousand Oakes
49
50
51 Creswell JW (2012) *Educational research: Planning, conducting, and evaluating*
52
53 *quantitative and qualitative research* (4th ed.). Boston, MA: Pearson Education, Inc.
54
55
56 Cummings, JN (2004) Work groups, structural diversity, and knowledge sharing in a global
57
58
59 organization. *Management science*, 50(3), 352-364.
60

- 1
2
3 Darroch J and McNaughton R (2002) Examining the link between knowledge management
4 practices and types of innovation. *Journal of Intellectual Capital* 3 (3): 210–222.
5
6
7
8 De Vries RE, Van den Hooff B and De Ridder JA (2006) Explaining knowledge sharing: The
9 role of team communication styles, job satisfaction, and performance
10 beliefs. *Communication Research* 33 (2): 115–135.
11
12
13
14 Easton G (2010) Critical realism in case study research. *Industrial Marketing*
15 *Management* 39 (1): 118–128.
16
17
18
19 Fahey L and Prusak K (1998) The eleven deadliest sins of knowledge
20 management. *California Management Review* 40 (3): 265–276.
21
22
23
24 Ferilli G, Sacco PL and Tavano Blessi G (2012) Cities as creative hubs: From instrumental to
25 functional values of culture-led development. In Fusco Girard L and Nijkamp P
26 (Eds.), *Sustainable City and Creativity* (245-270). Ashgate, Farnham.
27
28
29
30
31 Fulmer CA and Gelfand MJ (2012) At what level (and in whom) we trust: Trust across
32 multiple organizational levels. *Journal of Management* 38 (4):1167–1230.
33
34
35
36 Ganguly A, Talukdar A and Chatterjee D (2019) Evaluating the role of social capital, tacit
37 knowledge sharing, knowledge quality and reciprocity in determining innovation
38 capability of an organization. *Journal of knowledge management* 23(6):1105–1135
39
40
41
42 Geels FW (2006) Multi-level perspective on system innovation: Relevance for industrial
43 transformation. In: *Understanding Industrial Transformation*: Dordrecht: Springer,
44 pp. 163–186.
45
46
47
48
49 Ghauri PN and Grønhaug K (2005) *Research methods in business studies: A practical*
50 *guide*. Paerson Education.
51
52
53
54 Gibson CB (2001) From knowledge accumulation to accommodation: Cycles of collective
55 cognition in work groups. *Journal of Organizational Behavior: The International*
56
57
58
59
60

1
2
3 *Journal of Industrial, Occupational and Organizational Psychology and Behavior* 22
4
5 (2): 121–134.
6

7
8 Gioia, DA, Corley KG and Hamilton AL (2013) Seeking qualitative rigor in inductive
9
10 research: Notes on the Gioia methodology. *Organizational Research Methods* 16 (1):
11
12 15–31.
13

14
15 Gold AH, Malhotra A and Segars AH (2001) Knowledge management: An organizational
16
17 capabilities perspective. *Journal of Management Information Systems* 18 (1):
18
19 185–214.
20

21
22 Hartnell CA, Ou AY and Kinicki A (2011) Organizational culture and organizational
23
24 effectiveness: A meta-analytic investigation of the competing values framework's
25
26 theoretical suppositions. *Journal of Applied Psychology* 96 (4): 677.
27

28
29 Hislop D, Bosua R and Helms R (2018) *Knowledge Management in Organizations: A*
30
31 *Critical Introduction*. Oxford: Oxford University Press.
32

33
34 Hitt MA, Beamish PW, Jackson SE and Mathieu JE (2007) Building theoretical and
35
36 empirical bridges across levels: Multilevel research in management. *Academy of*
37
38 *Management journal* 50 (6): 1385–1399.
39

40
41 Ho R (2006). *Handbook of Univariate and Multivariate Data Analysis and Interpretation*
42
43 *with SPSS*. London: Chapman and Hall/CRC.
44

45
46 Hoegl M, Parboteeah KP and Munson CL (2003) Team-level antecedents of individuals'
47
48 knowledge networks. *Decision Sciences* 34 (4): 741–770.
49

50
51 Holsapple CW and Joshi KD (2001) Organizational knowledge resources. *Decision Support*
52
53 *Systems* 31 (1): 39–54.
54

55
56 Hsu IC (2008) Knowledge sharing practices as a facilitating factor for improving
57
58 organizational performance through human capital: A preliminary test. *Expert*
59
60 *Systems with Applications* 35 (3): 1316–1326.

- 1
2
3 Hurley RF and Hult GTM (1998) Innovation, market orientation, and organizational learning:
4
5 An integration and empirical examination. *Journal of Marketing* 62 (3): 42–54.
6
7
8 Inkpen, AC and Tsang EW (2005) Social capital, networks, and transfer. *Academy of*
9
10 *Management Review* 30 (1): 146–165.
11
12 Janowicz-Panjaitan M and Noorderhaven NG (2009) Trust, calculation, and
13
14 interorganizational learning of tacit knowledge: An organizational roles
15
16 perspective. *Organization Studies* 30 (10): 1021–1044.
17
18
19 Janz BD and Prasarnphanich P (2003) Understanding the antecedents of effective knowledge
20
21 management: The importance of a knowledge-centered culture. *Decision Sciences* 34
22
23 (2): 351–384.
24
25
26 Jarvenpaa SL and Staples DS (2000) The use of collaborative electronic media for
27
28 information sharing: An exploratory study of determinants. *The Journal of Strategic*
29
30 *Information Systems* 9 (2-3): 129–154.
31
32
33 Kamaşak R and Bulutlar F (2010) The Influence of Knowledge Sharing on
34
35 Innovation. *European Business Review* 22 (3):306–317.
36
37
38 Kim S and Lee H (2006) The impact of organizational context and information technology on
39
40 employee knowledge-sharing capabilities. *Public Administration Review* 66 (3):
41
42 370–385.
43
44
45 Kim TT, Lee G, Paek S and Lee S (2013) Social capital, knowledge sharing and
46
47 organizational performance: What structural relationship do they have in
48
49 hotels? *International Journal of Contemporary Hospitality Management* 25 (5):
50
51 683–704.
52
53
54 Kostova, T and Roth K (2003) Social capital in multinational corporations and a micro-macro
55
56 model of its formation. *Academy of Management Review* 28 (2): 297–317.
57
58
59
60

1
2
3 Kothari CR (2004) *Research Methodology: Methods and Techniques*. New Delhi: New Age
4
5 International.

6
7
8 Kozłowski SW and Klein KJ (2000) A Multilevel approach to theory and research in
9
10 organizations: Contextual, temporal, and emergent processes. In Klein K J and
11
12 Kozłowski SWJ (Eds.), *Multilevel Theory, Research, and Methods in Organizations:*
13
14 *Foundations, Extensions, and New Directions* (3–90). Jossey-Bass.

15
16
17 Lee JC, Shiue YC and Chen CY (2016) Examining the impacts of organizational culture and
18
19 top management support of knowledge sharing on the success of software process
20
21 improvement. *Computers in Human Behavior* 54: 462–474.

22
23
24 Levin DZ and Cross R (2004) The strength of weak ties you can trust: The mediating role of
25
26 trust in effective knowledge transfer. *Management Science* 50 (11): 1477–1490.

27
28
29 Mayer RC, Davis JH and Schoorman FD (1995) An integrative model of organizational
30
31 trust. *Academy of Management Review* 20 (3): 709–734.

32
33
34 McEvily B, Perrone V and Zaheer A (2003) Trust as an organizing principle. *Organization*
35
36 *Science* 14 (1): 91–103.

37
38
39 Michailova S and Hutchings K (2006) National cultural influences on knowledge sharing: A
40
41 comparison of china and russia. *Journal of Management Studies* 43 (3): 383–405.

42
43
44 Miron E, Erez M and Naveh E (2004) Do personal characteristics and cultural values that
45
46 promote innovation, quality, and efficiency compete or complement each
47
48 other?. *Journal of Organizational Behavior* 25 (2): 175–199.

49
50
51 Nahapiet J and Ghoshal S (1998) Social capital, intellectual capital, and the organizational
52
53 advantage. *Academy of Management Review* 23 (2): 242–266.

54
55
56 Nonaka I and Takeuchi H (1995) *The knowledge-creating company: How Japanese*
57
58 *Companies Create the Dynamics of Innovation*. Oxford University Press.

- 1
2
3 Onwuegbuzie AJ and Collins KM (2007) A typology of mixed methods sampling designs in
4
5 social science research. *Qualitative Report* 12 (2): 281–316.
6
7
8 Pathak B, Ashok M, and Tan YL (2020) Value co-destruction: Exploring the role of actors'
9
10 opportunism in the B2B context. *International Journal of Information Management*
11
12 52:102093.
13
14
15 Pinjani P and Palvia P (2013) Trust and knowledge sharing in diverse global virtual
16
17 teams. *Information and Management* 50 (4): 144–153.
18
19
20 Polese, F, Barile, S, Caputo, F, Carrubbo, L, & Waletzky, L (2018) Determinants for value
21
22 cocreation and collaborative paths in complex service systems: A focus on (smart)
23
24 cities. *Service Science*, 10(4), 397-407.
25
26
27 Putnam RD (2000) Bowling Alone: America's Declining Social Capital. In: Crothers L
28
29 and Lockhart C (eds) *Culture and Politics*. New York: Palgrave Macmillan,
30
31 pp.223–234.
32
33
34 Reiche BS, Harzing AW and Kraimer ML (2009) The role of international assignees' social
35
36 capital in creating inter-unit intellectual capital: A cross-level model. *Journal of*
37
38 *International Business Studies* 40 (3): 509–526.
39
40
41 Saparito PA and Coombs JE (2013) Bureaucratic systems' facilitating and hindering
42
43 influence on social capital. *Entrepreneurship Theory and Practice* 37 (3): 625–639.
44
45
46 Saunders M, Lewis P and Thornhill A (2009) *Research Methods for Business Students* 5th
47
48 ed. Essex, England: Prentice-Hall.
49
50
51 Singh J (2005) Collaborative networks as determinants of knowledge diffusion
52
53 patterns. *Management Science* 51 (5): 756–770.
54
55
56 Stovel K and Savage M (2006) Mergers and mobility: Organizational growth and the origins of career migration at Lloyds
57
58 Bank. *American Journal of Sociology* 111(4):1080–1121.
59
60

- 1
2
3 Svetlik I, Stavrou-Costea E and Lin HF (2007) Knowledge sharing and firm innovation
4 capability: An empirical study. *International Journal of Manpower* 28 (3/4):315–332.
5
6
7
8 Swinkels M, and Van Meijl T (2020) Performing as a professional: Shaping migrant
9 integration policy in adverse times. *Culture and Organization* 26 (1): 61–74.
10
11
12 Tong, PY, & Crosno, J. L. (2016) Are information asymmetry and sharing good, bad, or
13 context dependent? A meta-analytic review. *Industrial Marketing Management*, 56,
14 167-180.
15
16
17
18
19 Tronvoll, B, Barile, S, & Caputo, F. (2018) A systems approach to understanding the
20 philosophical foundation of marketing studies. In Barile, S, Pellicano, M, Polese, F
21 (eds.), *Social Dynamics in a Systems Perspective* (pp. 1-18). Springer, Cham.
22
23
24
25
26 Tsai YH, Ma HC, Lin CP, Chiu K and Chen SC (2014) Group social capital in virtual
27 teaming contexts: A moderating role of positive affective tone in knowledge
28 sharing. *Technological Forecasting and Social Change* 86: 13–20.
29
30
31
32
33 Van den Hooff B and Huysman M (2009) Managing knowledge sharing: Emergent and
34 engineering approaches. *Information and Management* 46 (1): 1–8.
35
36
37
38 Venkatesh V, Brown SA and Bala H (2013) Bridging the qualitative-quantitative divide:
39 Guidelines for conducting mixed methods research in information systems. *MIS*
40 *quarterly*, 37(1): 21–54.
41
42
43
44
45 Verburg RM, Nienaber AM, Searle RH, Weibel A, Den Hartog DN and Rupp DE (2018) The
46 role of organizational control systems in employees' organizational trust and
47 performance outcomes. *Group and Organization Management* 43 (2): 179–206.
48
49
50
51 Von Krogh G, Nonaka I and Rechsteiner L (2012) Leadership in organizational knowledge
52 creation: A review and framework. *Journal of Management Studies* 49 (1): 240–277.
53
54
55
56 Wieslander M (2019) Challenging and destabilizing official discourses: Irony as a resistance
57 resource in institutional talk. *Culture and Organization*: 1–17.
58
59
60

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

Table 1. Participants’ Profile – Qualitative Interviews

Participant*	Gender	Age	Academic Qualifications	Position	Experience in Banking
Senior Managers					
P1	Male	31-40 Years	Masters	EPMO Head of Department	10-15 Years
P2	Male	31-40 Years	Masters	Head of Training	10-15 Years
P3	Male	41-50 Years	Masters	Head of the Investment Centre	> 15 Years
P4	Female	41-50 Years	Masters	DPD Vice President	> 15 Years
P8	Female	31-40 Years	Masters	Head of Product Development	10-15 Years
Middle managers					
P5	Male	41-50 Years	Masters	Divisional Manager, Risk Department	10-15 Years
P6	Male	31-40 Years	Bachelor	Section Head, Audit Department	5-10 Years
P7	Male	31-40 Years	Masters	Manager, Risk Department	10-15 Years
P9	Male	31-40 Years	Bachelor	Section Head, Finance Department	5-10 Years
Operational employees					
P10	Female	31-40 Years	Bachelor	Customer service	5-10 Years
P11	Female	31-40 Years	Bachelor	Teller VIP	5-10 years
P12	Female	31-40 Years	Bachelor	Customer service	10-15 Years

* Participant’s number represent the order in which they were interviewed.

Table 2. Measures of Organizational Culture

<p>Trust Culture (Items = 6; Cronbach α = .889)</p> <p>General trustworthiness of bank members</p> <p>Relationships based on reciprocal trust</p> <p>Reciprocal trust in other members' intentions and behaviours</p> <p>Reciprocal trust on other members' abilities</p> <p>Reciprocal trust in other members' attitude to work toward organizational goals</p> <p>Reciprocal trust in other members' decisions about organizational interests (vs. self-interest)</p>
<p>Collaboration Culture (Items = 5; Cronbach α = .859)</p> <p>Willingness to collaborate across departments and within units</p> <p>Willingness to accept responsibility for failure</p> <p>Supporting each other in times of need</p> <p>Being helpful to each other to solve problems</p> <p>Satisfaction with the degree of collaboration</p>
<p>Knowledge-sharing Culture (Items = 20; Cronbach α = .935)</p> <p>Reciprocal willingness to share information/knowledge with colleagues and others</p> <p>Reciprocal sharing of learning with colleagues and others</p> <p>Reciprocal sharing of skills with colleagues and others</p> <p>Reciprocally keeping colleagues informed of the work I am doing</p> <p>Mentorship from more experienced colleagues</p>

Table 3: Coding Structure

2 nd -order Categories	1 st -order Categories	Representative Open Codes
<i>Trust Culture</i>		
Importance	<i>General Recognition</i>	<i>Senior:</i> ‘Trust is extremely important’ (P3) <i>Middle:</i> ‘I think mutual trust between employees is good...’ (P9) <i>Operational:</i> ‘...trust is important I believe’ (P12); ‘... you must trust others’ (P11)
	<i>Purposive recognition</i>	<i>Senior:</i> ‘if there wasn’t [any trust] the bank could not do anything properly’ (P3) <i>Middle:</i> ‘There has to be trust to be able to share your information with others’ (P6) <i>Operational:</i> ‘... I believe that you have to trust your colleagues to be able to work with them’ (P10)
Practice	<i>Shared-practice</i>	<i>Senior:</i> ‘Generally speaking we trust each other in the bank’, ‘I think that our bank unlike many others has a very friendly environment’, ‘there is mutual trust between us’(P1); ‘I think there is trust between employees’ (P3). <i>Middle:</i> ‘There is trust [in the organization]...’ (P7) <i>Operational:</i> ‘There is trust...’ (P10); ‘There is trust between us in the branch’, ‘we all work together and share our information with each other’ (P11); ‘We trust each other...’ (P12)
	<i>Differentiated extent</i>	<i>Senior:</i> ‘I think there is trust up to a certain limit...’ (P4); ‘...it is personal and depends on the person in front of you if you trust or choose not to’ (P8) <i>Middle:</i> ‘There has to be trust to be able to share your information with others’ (P6); ‘I hope for more trust, it is needed in our type of business’ (P7) <i>Operational:</i> ‘...I personally haven’t had an issue of trust before... I am obligated to help my colleagues regardless ...’ (P12)
<i>Collaborative Culture</i>		
Importance	<i>General Recognition</i>	<i>Middle:</i> ‘Yes there is collaboration in the bank and this is especially important’ (P9) <i>Operational:</i> ‘...collaboration is extremely important...’ (P11); ‘...without this collaboration we would have been really frustrated to work on our own’ (P12)
	<i>Situation-specific Recognition</i>	<i>Senior:</i> ‘collaboration [definitely] helps when change occurred’ (P2) <i>Middle:</i> ‘especially important when implementing a change...’ (P9) <i>Operational:</i> ‘we must work together especially when change occurs...’ (P10); ‘it helps us to deal with issues together and help each other when one needs help’ (P11); ‘I can’t work by myself I need people to help me out’ (P12)
Practice	<i>Shared-practice</i>	<i>Senior:</i> ‘Collaboration is there...’ (P8) <i>Middle:</i> ‘There is high collaboration between us in the audit department...’ (P6); ‘Yes there is collaboration in the bank and this is especially important’, ‘... I see this [collaboration] all the time in the bank’ (P9) <i>Operational:</i> ‘We work with the team spirit’, ‘our manager always encourages us to work as a team and collaborate with each other’, ‘I personally needed my colleagues to help me several times and I help them when they need me as well, otherwise we will have great unsolved issues’ (P10); ‘We all collaborate with each other and help each other...’ (P12)
	<i>Differentiated</i>	<i>Senior:</i> ‘I can say that the new young generation of employees are considered collaborative’ (P4)

2 nd -order Categories	1 st -order Categories	Representative Open Codes
	<i>extent</i>	<p><i>Middle:</i> ‘the bank has a classification of information where there shouldn’t be any sharing of classified information with others’, ‘so there is collaboration but it is a relative thing honestly’ (P7)</p> <p><i>Operational:</i> ‘...I am obligated to help my colleagues regardless of me trusting them or not...’ (P12)</p>
Knowledge-sharing Culture		
Importance	<i>Purposive Recognition</i>	<p><i>Senior:</i> ‘... sharing information with each other is an important driver for the success of new project’s I believe’ (P1)</p> <p><i>Middle:</i> ‘sharing information in general is crucial in conducting any type of business’ (P7)</p> <p><i>Operational:</i> ‘we must share knowledge with each other... this [reciprocally] could help a lot in solving many issues...’ (P11)</p>
	<i>Situation-specific Recognition</i>	<p><i>Senior:</i> ‘knowledge-sharing between employees helps in accepting the change’ (P2); ‘Knowledge and information sharing is really important to change and innovation’ (P4); ‘knowledge-sharing is need in the business environment’ (P8)</p> <p><i>Middle:</i> ‘No change will occur if there is no sharing of information between us in the bank’ (P6);</p> <p><i>Operational:</i> ‘I believe that no change will succeed without knowledge-sharing’ (P10)</p>
Practice	<i>Shared-practice</i>	<p><i>Senior:</i> ‘If I learned new information, I try sometimes to transfer it to others if needed’ (P1); ‘there is knowledge-sharing in the bank, for example, there is an email that gets sent to all employees in the bank called ‘Do you know’ which is aimed at keeping employees aware of what is happening in the bank...’ (P3); ‘We already have tools to share knowledge with each other in the bank, we have links, portals, and frequent emails for sharing knowledge...’ (P8)</p> <p><i>Middle:</i> ‘I personally don’t mind to share my knowledge with others’ (P5); ‘We see knowledge-sharing all the time here in the bank...’ (P9)</p> <p><i>Operational:</i> ‘... our manager was always supportive and encouraged us to share every bit of information with each other’, ‘Without knowledge sharing... huge problems [during change] would not have been solved’ (P10); ‘I think we must share knowledge with each other and we do’ (P11); ‘We share knowledge with each other all the time’ (P12)</p>
	<i>Differentiated extent</i>	<p><i>Senior:</i> ‘We are trying to encourage knowledge-sharing more...’ (P2); ‘I certainly like to share information I have with others in the bank but I cannot deny it needs to be more...’ (P4)</p> <p><i>Middle:</i> ‘In my personal opinion information sharing has limits and any type of information must be characterised before sharing, so one must be careful before sharing any information in the bank’, ‘... the bank has a classification of information where there shouldn’t be any sharing of classified information with others’ (P7)</p> <p><i>Operational:</i> ‘knowledge-sharing is crucial, but the most important part is giving the right information not just giving any information’ (P12)</p>

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

Journal of Knowledge Management

	Trust Culture	Collaborative Culture	Knowledge-sharing Culture
Senior Management Level	<p>Importance: High, and for broader/comprehensive purposes (achieve goals, innovate, etc.)</p> <p>Practice: Shared, but with differentiated extent and person-dependent</p>	<p>Importance: High, but mainly situation-specific, i.e. during change</p> <p>Practice: Shared, but not widespread (employee-dependent)</p>	<p>Importance: High, and purposive as well as situation-specific</p> <p>Practice: Shared, with differentiated extent (being encouraged more)</p>
Middle Management Level	<p>Importance: High, and for general and situation specific purposes (e.g. change)</p> <p>Practice: Shared, but person-dependent</p>	<p>Importance: High, and situation-specific as well as general</p> <p>Practice: Shared, but needs to be increased</p>	<p>Importance: High, and situation-specific (e.g. during change)</p> <p>Practice: Shared, but has limits (due to information sensitivity)</p>
Operational Level	<p>Importance: High, and for people-, task- or performance-related purposes</p> <p>Practice: Shared, as part of daily work, and extent or person-dependency less relevant</p>	<p>Importance: High, and situation-specific as well as a daily necessity to solve problems</p> <p>Practice: Shared, and a reciprocal requirement for daily activity</p>	<p>Importance: High, and situation-specific as well as routine reciprocal work requirement</p> <p>Practice: Shared, but extent dependent on information relevance)</p>

Figure 1: Organizational culture – A multi-level analysis

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46

Journal of Knowledge Management