



Organisational Learning: Foundational Building Block for Acquiring and Deploying Strategic Capabilities

Andrew Lindsay Cox¹  Mark Xu² 

^{1,2}Portsmouth Business School, University of Portsmouth, Portsmouth, UK

The correspondence author: mark.xu@port.ac.uk

Organisational
Learning:

Received: 03/11/2024

Revised: 12/12/2024

Accepted: 30/12/2024

Abstract

The capability to acquire, disseminate and apply knowledge (organizational learning-OL) is of paramount importance for organizations in order to sustain long-term survivability and competitiveness. This paper examines, through the lens of the dynamic capability framework, the foundational building block for identifying, acquiring and building strategic capabilities in a specific context of high-level environment dynamism. The paper is based on a study of how organizations in Saudi Arabia deal with the transformative demands associated with high levels of complexity and dynamism in their business ecosystems. A mixed method of semi-structured interviews of senior managers of Saudi organizations and an on-line survey with a cross section of Saudis with extensive experience with Saudi organizations, was adopted to develop a rich narrative of context reality. The study uncovers distinctive features of OL suitable for the context, a causal relationship between organizational learning, leadership and culture as foundational building blocks affecting how strategic capability choices are made and adopted. Although limited in context, this study challenges some theoretical assumptions by formulating a number of research propositions, and proposes the practical implications extend beyond the Saudi Arabian context.

Keywords: strategic capabilities, organizational learning, organizational culture, strategic leadership, organizational diversity, Saudi business

1. Introduction:

The constant challenges of business environment uncertainty and ambiguity plus the inability to interpret new information on opportunities, threats and risks can often lead to conflicts in decision making (Joseph & Gaba, 2020). According to dynamic capability theory (Teece, D. J.; Pisano, G. P.; Shuen, A., 1997), the long-term survivability of organizations and sustainability of competitive advantage, particularly during periods of high levels of environmental dynamism, is dependent on the organization's ability to make appropriate strategic capability choices that facilitates a continual alignment of their asset portfolio (tangible and intangible) (Khurana, Dutta, & Ghura, 2022). This capability is dependent on organizations continually assessing the effectiveness of their processes that make sense of opportunities, threats and risks presented by the prevailing level of environmental dynamism, facilitate timely and effective decision making, and manage the realignment of their asset portfolio. However, how organisations respond effectively to context specific environment



THE SCIENCE
PUBLISHING HOUSE

International
Journal of
Strategy and
Organisational
Learning

Vol.1 No.2



challenges in order to develop strategic capability has not been adequately addressed.

The unique characteristics of the Kingdom of Saudi Arabia (KSA) make it an ideal context on which to base this study. KSA (thereafter refers to Saudi) is transforming its economy from almost complete reliance on stable and mature extraction industries (oil and gas, petrochemicals, and minerals) to vibrant juvenile industries that have growth and value-adding potential (KSA, 2030). The transformation is halfway through and there are early indicators of success that can be used as an interesting case to draw insights from (McBurney, 2023). In addition, Saudi organisations are experiencing high level of environmental dynamism affected by changing demographics, the geopolitical instability in the region, the global net zero environment pressure, the digital technology and AI disruption, regional conflicts, humanitarian crisis as well as social and societal changes (immigration, workforces, etc.). As such, KSA represents a unique international context to conduct this study.

The rest of the paper is structured as follows, next section provides a literature review of the key concepts and assumptions related to environment dynamism, the notion of building blocks for deploying strategic capabilities. Section 3 introduces the methodology and the data collection process. The qualitative results are presented in the subsequent section 4 with discussion of fresh insights on the relationships between the building blocks in light of (Teece, 2007) framework. Section 5 is devoted to theorize with a model and five propositions. The last section draws the conclusion with a note of limitations and direction for future research.

2. Literature review

2.1 Environment dynamisms of KSA

It is widely assumed that organisations need to effectively respond to the variety and the level of dynamism of the business environment in order to survive and sustain competitiveness. For example, in a relatively stable environment, the above assumptions may not hold true, because organisations operating in such environments can focus on internal operational efficiency to survive. Whereas with high level of environmental dynamism, the response mechanism could vary according to the specific context of the organisations and the environment they operate in.

There is a plethora of extant literature and theories on organisational responses to environmental challenges (Espejo & Harnder, 1989); (Auster & Choo, 1994); (Xu, Ong, Duan, & Matthews, 2011). This can be categorised broadly as organisational excellence approaches including organisational learning, leadership development, process reengineering, change management, dynamic capability, etc. The other is towards “variety reducer” (Beer, 1981) using management science, digital and AI tools to filter out the complexity of the environmental variables - include environmental information scanning (Daft, Sormunen, & Parks, 1988); (Xu, Kaye, & Duan, 2003), big data analytics, horizon planning, scenario simulation, digital transformation, and AI and machine learning (ML) in support human cognition, sense making and collective

decision making.

Given this ongoing strategic challenge that can be approached from wide perspectives, it is necessary to restrict the scope of this study, thereby we focus the enquiry on how dynamic capabilities shall be developed in a specific context with high level of environment dynamism. As noted earlier, the KSA represents such a unique context with environmental dynamics and challenges, as depicted in Figure 1.

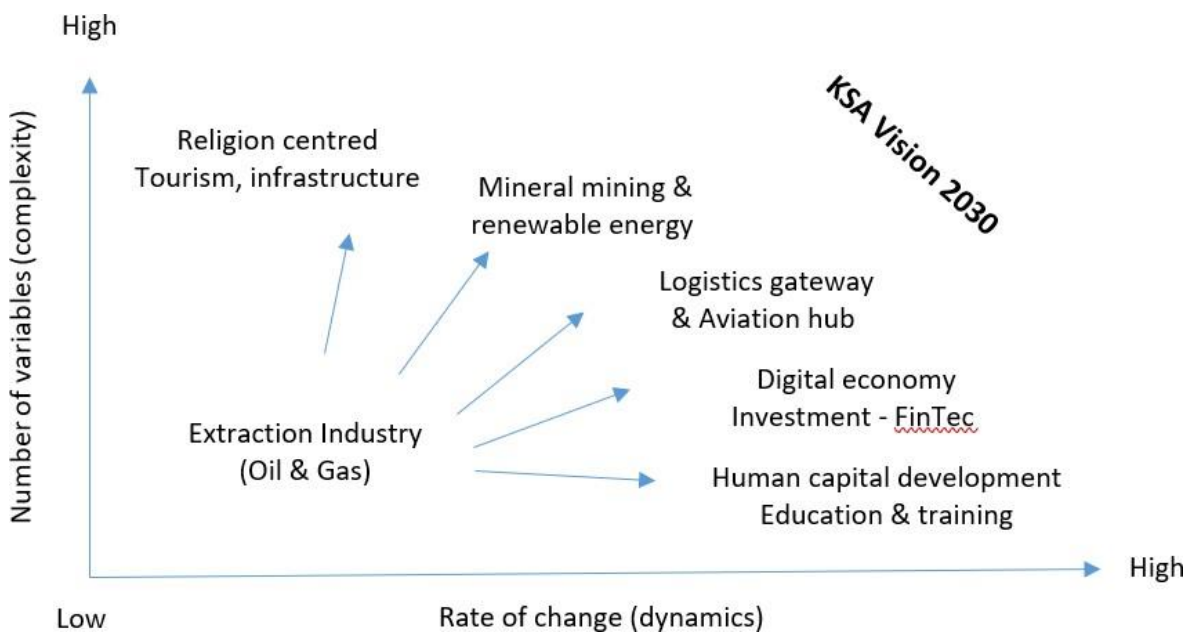


Figure 1 Environment Sectors Dynamism of KSA 2030 vision

KSA has started a transformation journey towards the KSA 2030 Vision from 2017 that was initiated by the KSA government. The petroleum and adjacent downstream petrochemical industries in KSA have for several decades operated in a stable environment characterized by constant and predictable demand, large market share, and increasing profitability. This has provided the Saudi government with a reliable source of revenue to fund their “Five Year” development programs. However, recent global trends away from the use of fossil fuels towards increased use of renewable energy sources, has encouraged the transformation of KSA industries to renewable energy production, expanding into related mineral mining, and strategic diversification into new sectors in digital economy - for example, FinTech investment, global transportation hub, religion and Arab culture centre and the associated infrastructures. A consequence of the rapid transformation towards the new economy and sustaining competitive advantages, is that many Saudi business leaders are now being exposed to increasing complexities and rapid changes that they have not previously experienced. The interim success (McBurney, 2023) of transformation to the new industries provides a valid case to examine the building blocks of DC in a high environment dynamism context.



2.2 The Dynamic Capability Framework and Building Blocks

(Teece, 2007) DC framework provides a useful structure for examining how organizations identify threats, opportunities and risks in their operating environment, make strategic decisions, and realign their asset portfolio. The framework makes it useful in underpinning this study of how Saudi organisations identify, build/acquire and implement strategic capabilities. The components of the original dynamic capability framework included processes (managerial and organizational), position (assets - tangible and intangible), and paths (ways) to successful implementation of strategic choices. Subsequent variations to the framework enhanced the processes into three explicit clusters of capabilities: sensing, seizing, and reconfiguration capabilities (Teece, 2007). In this research we focused on the three capabilities and consider them from a process point of view, in particular, we constrain our enquiry to the sequential logic between the three capabilities, i.e. sensing is the capability to learning (to know); seizing is the capability to make decisions (to decide); reconfiguration is the capability of making changes (to do) - agility to readjust resources and to make changes.

There are many variables that influence the creation, renewal or devolution of strategic capabilities (Ambrosini & Bowman, 2009). We argue that these variables are context specific and therefore should be considered when identifying the building blocks for developing an organization's ability to make strategic choices. A review of extant literature suggests that most variables are intrinsically available within organisations in the form of three essential building blocks, these are leadership capabilities ((Teece, 2007), organisational learning processes (Eriksson, 2014); organisational culture (Fainshmidt & Frazier, 2017).

Leadership capabilities

Leadership serves as a key mechanism for assembling the repertoire required for developing sensing-seizing-reconfiguring capabilities. Leaders as decision makers, play significant role in knowing (sensing capability), deciding (seizing capability), executing decisions and making changes (reconfiguration capability). Therefore, leader's cognitive skills and styles impact DC building. A number of assumptions posit positive relationships between the two. For example, leaders galvanizes employees to a common set of shared values, goals and objectives ((Teece, 2007). Leadership theory suggests that leadership effectiveness is contingent upon organisational context (Fiedler, 1964; House, 1971; Sharma, 2018) and different leadership styles exist. According to (Bass, 1990) framework of leadership styles, top-level leadership can be classified into transformational leadership (TFL) and transactional leadership (TAL). Muhammad (Asif, 2021) further elucidate that transformational leaders, owing to their ability to inspire followers can have a profound effect on employee behavior and can stimulate innovation and new learning. Transactional leaders, on the other hand, who motivate the followers in the direction of established goals and clarify role and task requirements, can lead to improved work performance. A supportive leadership style can foster a

proactive dialogue with employees and establishes a trusting environment that facilitates the honest sharing of opinions and knowledge, ensuring access to all the resources they need in order to succeed. Leaders with strong “*paradoxical cognition*” are better at balancing the conflicting forces (Helfat & Peteraf, 2015). Entrepreneurial leadership is found important in confronting the inertia of existing systems and practices that support maintaining the status quo, adopting potentially costly and potentially risky radical change and willing to break existing obligations where necessary (Peteraf, Di Stefano, & Verona, 2013). In summary, strategic capabilities are inherently the result of proactive leaders who take a direct interest across all processes that build, renew, and reconfigure in order to maintain survivability (Feiler & Teece, 2014). The review suggests that organisational leadership, could affect every stage of the processes, specifically on seizing capability in human-based decision making organisations.

Organisational Learning:

Organisational Learning

(Schwandt & Marquardt, 1999) argued that the speed of change in the global marketplace makes it imperative that organizations match the speed of change with the speed and quality of their learning. Organisational learning is centered on knowledge acquisition, sharing, collective sense making, integration and exploitation processes in the development of managerial capabilities as well as organisational learning capabilities. Strategic capability building processes rely on the generation of knowledge from internal and external sources, the integration of knowledge and sense-making of new knowledge (Prieto, Revilla, & Rodríguez-Prado, 2009); (Nieves & Haller, 2014). Muhammad (Asif, 2021) refers to the seminal work of March (1991) to highlight two distinct types of organisational learning: explorative learning (ERL) and exploitative learning (ETL). The former is about seeking knowledge that is outside the current domain of an organization; it prepares the organization to address future challenges. The latter is about harnessing value from the current resources and capabilities (Gibson & Birkinshaw, 2004); Gupta et al., 2006; (Chandrasekaran, Linderman, & Schroeder, 2012). Organisations need both ERL and ETL for long-term success as well as to address current needs. These learning models are embedded in organisational structures, routines, behaviors, conventions, databases and interaction patterns among individuals.

Organisational learning mechanism can be seen in different learning loops (Tosey, Visser, & Saunders, 2012), that learning to improve performance at an increasing rate refers to single-loop learning. Whereas learning to reflect on and inquiry into the governing variables, values and norms underlying organisational action, relates to double-loop learning. (Labib, 2016) summarises the first loop learning as preserving and improving status quo, whereas, second loop learning implies changing the status quo itself, hence adds a third loop of learning - altering rules for decision making assumptions through continually questioning the validity of such assumptions when the situation changes. We argue that the learning mechanisms and the loops are essential building blocks for DC development, specifically for the sensing capability.



Organisational culture

Organisational culture refers to the “*whole of the organization’s*” inherent willingness to accept and adopt change (Fainshmidt & Frazier, 2017). It is seen as the “*social fabric*” of organisations for developing strategic capability. Changes in culture are subtle but can be vital for long-term strategic capability development, however, it can be a constraint or a barrier to innovation and changes depending on the shared organisational values, norms and practices (Karimi & Walter, 2015). Values and beliefs are significant components of organisational culture that influence human behaviour. The level of trust reflects the organization’s social norms. It is assumed that organisations with the highest levels of trust will normalise the sharing of opinions (positive and negative) and the free exchange of knowledge. High levels of trust will reduce the likelihood of misunderstanding of intentions and result in lower levels of conflict and dysfunctional behaviour, and ultimately lead to greater integration of effort and utilization of resources (Fainshmidt & Frazier, 2017).

Studies on culture and innovation (a capability to learn and change) reveals that an organization’s values, norms, symbols, habits, language and history that trigger the firm to innovate, provides an atmosphere that fosters creative thinking and risk-taking in the interest of innovation (Weber & Heidenreich, 2018). It encompasses such diverse culture aspects as risk-taking, tolerance toward mistakes, openness to new ideas and technologies, autonomy and empowerment of employees, nonformal communication and flexibility. An innovative culture not only reinforces creativity but also effectively encourages employees to share their knowledge across the board, thereby shall be seen as a moderating factor, which is conducive to improved innovation performance (Martín-de Castro, Miriam Delgado-Verde, & Navas-López, 2013).

The efficacy of culture on capability building may differ due to different country culture. (Basahal, Forde, & MacKenzie, 2021) foregrounds the socio-cultural context of Saudi Arabia in which religious laws and dominant norms around the role of women in society continue to impact the operation of the labour market. For example, it is important to maintain physical segregation so as to meet Nitaqat regulation while achieving localisation by using more female workers. The Saudi nomadic and tribal culture could pose great challenges of culture conceptions on DC. We argue that a context specific conducive organisational, team and individual culture is an essential building block of DC development, specifically in facilitating changes and transformation, i.e. realising the reconfiguration capability.

The building blocks leading to strategic capabilities guided the research design, which is introduced next.

3. Research methodology

The literature suggests that the majority of empirical studies on the use of (Teece, 2007) framework, relative to strategic choices, used a mixed-methods approach for data collection (Eriksson, 2014). Previous empirical studies using DC framework provided the basis for the research variables and questions of this study (Garcia et al., 2014; (Chang, Chen, ray, & Huang, 2015); H.-F. Lin et al., 2016; (Zhang & Wu, 2016); (Saul & Gebauer, 2018). With both structured and open questions, the intention was to gain insights into the building blocks that facilitate the development paths for building strategic capability as well as barriers - hereby refers to “roadblocks” that hamper strategic capability development.

The sample population for this study was selected from Saudi organisations. Data was collected using mixed methods - semi-structured interviews and an online survey questionnaire. The interviews and survey questions aimed at discovering two components, how (processes) the respondents’ organisations identified, built/acquired, and implemented strategic capability, and the influence that organizational learning, culture, and leadership (building blocks) had on those processes. As such, this study adopts an inductive approach in order to generate insight on the specific building blocks and paths leading to DC.

Participants for the structured interviews were selected using a critical purposive sampling approach. The inclusive criteria are senior managers with in-depth knowledge and experience in high- ranking positions in Saudi organisations, and included Chairmen, CEOs, VPs, and senior managers, who were knowledgeable and capable to articulate how Saudi organisations deal with opportunities, threats, and risks. On average, the interviews are around eighty minutes each. The interview questions contain a profile question and 11 open questions asking participants to give their views on the current and future priorities and capabilities of Saudi organizations concerning - sensing, seizing, and reconfiguration, and for their opinions on the extent that organizational learning, organizational culture, and leadership capabilities aided or constraints building dynamic capabilities. Table 1 shows the profile of the interviewees.

Using the same sampling approach, the survey sample were selected using the selection criteria - experience in Saudi organisations, in roles such as, but not limited to, executive management; strategic management; performance measurement; process improvement; R&D; marketing; change management; learning and development roles. The survey collected seventy-five (75) valid responses. Participants for both the interview and survey are ensured confidentiality, anonymity and data security. The survey questionnaire contains a profile question and eight questions with multiple measures for each question using a Likert scale 1-5, (Note this paper reports only the qualitative analysis from the two sets of data, other than the quantitative results, hence the quantitative analysis is intentionally omitted).



Table 1. Profile of Interviewees

Interviewee	Age of organization (years)	Size of organization (employees)	Annual revenue (estimate \$)	Industry sector	Job level	Time in role (years)
1	>10<=25	>1000<=10000	>1billion	Mining	Executive	<=5
2	>25	>10000	>1billion	Services	Manager Mid-Level	<=5
3	<=10	<=1000	<=100 million	Services	Executive	>5<=10
4	>25	>10000	>1billion	Oil & Gas	Supervisor/ Team Leader	>10
5	>10<=25	>1000<=10000	>1billion	Mining	Executive	>5<=10
6	>10<=25	<=1000	<=100million	Services	Executive	>5<=10
7	>25	>10000	>1billion	Services	Manager Mid-Level	>5<=10
8	>25	>10000	>1billion	Oil & Gas	Executive	>5<=10
9	>25	>10000	>1billion	Oil & Gas	Manager Mid-Level	<=5
10	>10<=25	>1000<=10000	>100m<=1b	Mining	Executive	>10

The data was analysed using thematic analysis where themes were coded by NVivo. The coding allows new themes to emerge, and specific context in the KSA to be captured for explanation and discussion. Selected quotes are used as key evidence. The results are presented and discussed in the next section.

4. Findings and Discussion

4.1 Organisational learning for Saudi Strategic Capability development

Findings from the interview not only confirm, but extend the survey results with contextual details. Some selected quotes are as evidences. The result shows OL as a positive building block to Saudi strategic capability development, but in specific ways as below.

Individual 1st loop learning

Saudi organisations demonstrate individual first loop learning, i.e. individuals are usually responsible for their own professional development supported by large Saudi organisations. The training and development function in most Saudi organisations have retained their historical focus on teaching employees how to operate and maintain the existing asset portfolio, but have not matured in pace with what is required to cope with the number and rate of changes occurring within the Kingdom. Many large Saudi organisations have created learning and development centres for leadership training. The notion of the ability of an organization to develop DC is dependent on how well the

leaders are developed (Nieves & Haller, 2014) is supported. However, these centres rely on learning and development professionals yet with traditional curricula. This individual based personal development is related to the 'performance culture', which focuses solely on improvement of business targets - the nature of 1st loop learning. Some selected quotes are as below:

'a focus on profitability has resulted in management being more concerned about improving existing processes rather than looking at whether those processes are appropriate for the future.'

'Most Saudi organisations strive to achieve perfection. As a consequence, they typically have a low tolerance for people making mistakes.'

Active absorbing external knowledge via external consultancy

Absorptive and transformative capabilities are critical to assimilate and merge new knowledge for innovation. While Saudi organisations have established repositories of knowledge from internal and external sources, our data indicates that less emphasis is on the internal sharing and socializing of new knowledge among employees and a reluctance to develop organisational wide absorptive capabilities. Interviewees agreed that the corporate 'body-of-knowledge' is typically underutilised and undervalued. Furthermore, the pool of knowledge held internally by employees, remains dormant and not actively sought out by senior management and incorporated into corporate decision-making processes. This is evident as below:

'Knowledge and experience from the shop floor "experts" is rarely shared with senior management, who would prefer to bring in external consultants'

'Saudi organisations contain a high level of latent knowledge that typically goes underutilized.'

'There is no structured method for knowledge transfer between entities with the organization.'

Knowledge acquisition in Saudi organisations tends to rely on external consulting companies, and joint ventures with leading international organisations as the primary sources of acquiring new knowledge. There are less connections and partnerships with the country's universities, research organisations, and centres of excellence for R&D. This may be explained by the unique leadership style and the Saudi nomadic and tribal culture.

'The more we engage with external sources of knowledge, the more knowledge we have about potential opportunities, threats and risks.'

'Joint ventures with leading international companies have proven beneficial to Saudi organisations because the joint venture partner introduces technologies, knowledge, skills and operational capabilities that did not exist in the Kingdom.'



As a result, there is apparently a lack of organisational wide structure and mechanism for knowledge sharing and deep loop learning. This has been commented by some of the interviewees:

‘Saudi organisations lack specific structures and processes for capturing knowledge on new opportunities, threats and risks. The organization’s size has a bearing on how this process is performed and what capabilities are employed.’

‘The silo nature of many larger Saudi organisations results in limited knowledge flows across divisions within the organization, mostly knowledge flows are kept to within silos (divisions or departments). Most knowledge flows between silos and other entities is dependent on personal relationships and networks.’

Vocational vs tertiary training for future learning

A noticeable change for the future Saudi workforce has been the inclusion of females in tertiary education and a trend of sending young Saudis to universities abroad, which gave them the freedom to explore possibilities, and expand the range of experiential learning opportunities. These graduates become the driving forces to engage learning and changes, and challenge the current organisations’ learning approaches when they become the decision makers in the organisations.

Considering roadblocks from OL perspective, the sensing on new opportunities appear rather limited by the current mechanism, despite a strong sense of dynamism from the external environment, perceived by the KSA managers.

“Saudi organisations have historically taken an insular view of the market and ignored regional and global opportunities.”

‘Significant opportunities are perceived possible if the market was truly open, and the geopolitical situation in the region stabilised’.

‘The geopolitical risk in the region is extreme, and foremost in the minds of Saudi organisations.’

The results imply that the current Saudi organisational learning building block is unique, yet inadequate towards building the sensing capabilities needed. This is explicitly demonstrated by individual-based learning development, but not systematic organisational learning.

4.2 Leadership for Saudi Strategic Capability development

The study data confirms the association of leadership style as both a building block and roadblock on the influence that organizational learning has on strategic capability development within the Saudi context. The Saudi leadership style was found to be

dominantly transactional, less delegative and participative according to the types of leadership style by (Lewin, 1997). In addition, Saudi leaders exhibit controlling behaviour, are coercive, 'risk adverse', are afraid of failure, and do not want their "view of the world" questioned by employees.

'Decisions are made by people because of the importance of their position, not because of their experience and knowledge, and not always for the benefit of the organization or its shareholders.'

'Saudi management is perceived as being risk-averse and slow to make decisions'

Managers may feel uncomfortable when confronted with facts that do not match their preconceptions. Decisions are not data driven. On the other hand, it is arguable that a strong top-down, transactional leadership may be a positive contributor to Saudi business reconfiguration capability, because it can be effective in making quick (not necessarily correct decisions) and executing tasks fast. From the theoretical point of view, however, such a leadership risks in not becoming a visionary leader and not making right decisions for the organization. A less participative leadership style may require excessive resources in order to motivate staff, build trust and monitor performance of the workforce. When facing uncertainty in a dynamic business environment, collective sense-making is essential to eliminate noises and individual cognition bias. It is envisaged that the future capability of Saudi business would require a transformational change in leadership style - by nurturing a conducive employer-employee relationship, empowering employees to make decisions and taking responsibilities, becoming entrepreneur leaders to embark innovation, and adjusting management hierarchy to incorporate collective sensing making and decision making.

4.3 Organizational culture for Saudi Strategic Capability development

The study data confirms the association of organizational culture as both a building block and roadblock on the influence that organizational learning has on strategic capability development within the Saudi context. The specific culture elements affecting strategic capability development in the Saudi context include unique values and religion beliefs, lack of trust and respect, increasing female workforce, and tenure of employment. An example is the 'performance culture' which is explicitly prevalent, and failure to meet performance targets is considered a personal failure by individuals to 'keep their promises' and reflects on their calculus of trust. This performance culture can be viewed from two folders, on the one hand, it seems a positive contributor to reconfiguration capability - as it enables effective executing tasks/orders - i.e. do things right in an effective manner. On the other hand, it is harmful on innovation and taking risky decisions - thus likely to weaken sensing and seizing capabilities.

'The lack of trust, exhibited by many Saudi top managements, in the opinions of others within their organisations is reflected by their almost 'addiction' like practice of engaging with external consultants.'

This could be explained by the Paradox of Management Control of (Joseph & Gaba,

2020), who questioned if in some cases, decision-making biases may exacerbate due to management structure where workers may feel threatened by top management or by the centralized provision of feedback, because an organization’s members may screen information in their reluctance to inform managers of bad news; hence lower-level staff may “sugarcoat” negative feedback and thus leave those managers with a distorted view of the organization’s performance (Fang, et. al. 2014).

The study confirmed the rapid evolution of organizational culture that has occurred in Saudi organizations over a relatively short period of time compared to European and Northern American organizations, however it suggests that many of the traditional cultural habits and practices continue to prevail, and are reflected particularly in leadership style. On a cautionary note, recent, albeit anecdotal, evidence suggests that a generational change in leadership is removing many of the traditional cultural constraints.

5. The Model and Propositions

In light of the key findings, a model of building blocks leading to DC has been developed as shown in Figure 2.

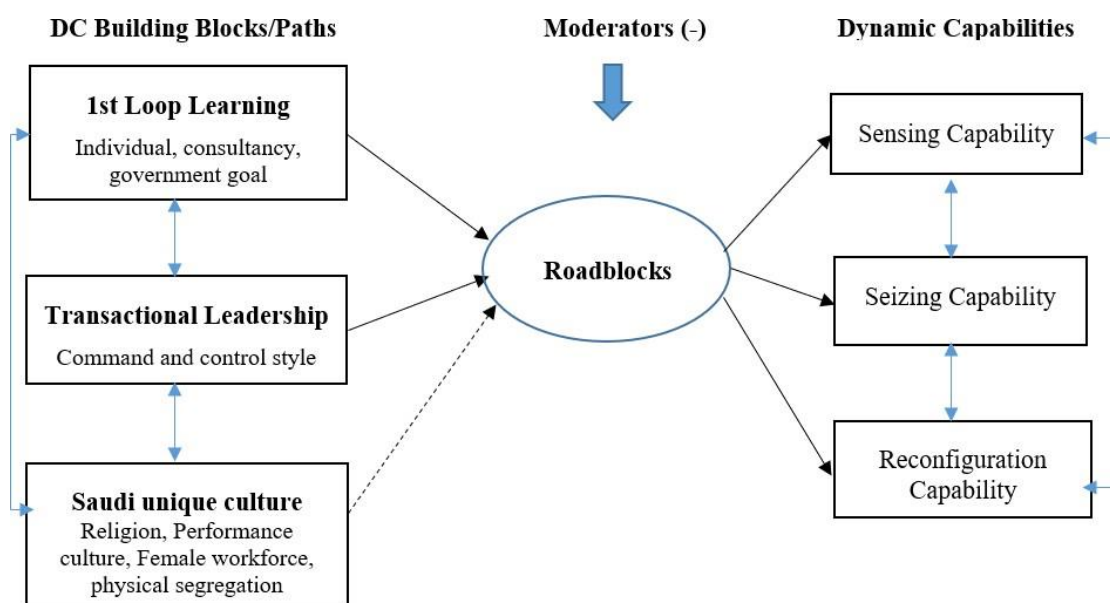


Figure 2 The Building Blocks-Paths to Dynamic Capability (DC)

On the relationships between building blocks and strategic capability development, the assumptions on organizational learning, leadership and culture that work for Western companies become mostly roadblocks in the unique context of Saudi business. For example, organisational wide learning and knowledge sharing, entrepreneurial leadership, collective decision making, and participative culture are rarely in existence despite being perceived important for developing capabilities. The three building blocks on the left of the model are rooted from the unique Saudi context, which pave the

pathways for Saudi strategic capability development. Whereas, some roadblocks could impose negative mediation effect of the DC development path. The model suggests a number of propositions that could potentially extend existing knowledge.

Firstly, learning for sensing capability is through individual development and education, external consultancy for knowledge acquisition and innovation, and embedding government development goals into business strategy setting. This leads to

Proposition 1: Organisational wide learning mechanism and loops may be not important for sensing capability when there is a visionary leadership supported by effective professional development and external consultancy in an environment with strong government (or societal) goal influence.

In the form of decision making for seizing opportunities/taking actions, a top-down command and control leadership style appears effective in this case. Entrepreneurial leadership and participative decision process are rare in Saudi organisations. This leads to

Proposition 2: A top-down command and control leadership is effective for seizing and reconfiguring capability, but with high risk of not doing right things (e.g. missing strategic opportunities, choosing wrong options).

The unique culture manifested by specifically the religion, performance culture (no mistake to make and report), female workforce, physical segregation, is a fabric influencing the three dynamic capabilities. As employees are less involved in sensing and seizing processes, the influence is indirect, whereas employees are part of the transformational change - reconfiguring process, culture exerts more direct impact on reconfiguration capabilities - in the sense of supporting changes. This supports

Proposition 3a: Context specific culture dimensions indirectly affect sensing and seizing capabilities via individual learning and leadership influences, but have direct effect on reconfiguration capability.

Proposition 3b: In the case of strong leadership and weak organisational learning, the leadership capability has wider impact on the three capabilities than the learning and culture building blocks.

Secondly, the three building blocks are interrelated and multivariant effect cannot be ignored when examining the relationships with strategic capability development. As aforementioned, the specific culture dimensions have apparent influence on the learning and leadership style in Saudi organisations. The individual learning and extensively using external consultancy for knowledge acquisition also help strengthen the command control leadership style. It is difficult to assert if the performance culture is a result of the control leadership or vice versa. Due to the multivariant effect from the three building blocks, also the negative effects from the roadblocks, it may not be possible to quantify the impact of each variable on each of the strategic capabilities. This leads to

Proposition 4: Organisational learning, leadership and culture are interrelated



building blocks positively affect dynamic capabilities, however, they can be roadblocks imposing negative effect. Multivariate effect among the building blocks can amplify or weaken the overall relationships.

Thirdly, in the case of Saudi strategic capability development, the sensing, seizing, and reconfiguration process clusters in (Teece, 2007) framework are also interrelated, and in practice, they may not appear as distinctive separate stages. What was witnessed from this Saudi case is that sensing and seizing activities are essentially performed by the leadership team, there are very limited employee participation in these processes. Reconfiguration is a process of continuous re-alignment of resources and changes that involve employees, their awareness and readiness is critical to the success of the transformational changes. This leads to

Proposition 5: In a culture of less employee participation and engagement, sensing and seizing capabilities essentially reply on leadership quality and capability, whereas reconfiguration capability requires not only leadership capability, but also employee awareness and readiness for change.

The propositions have wide implications to theories and practice. (Teece, 2007) profound dynamic capabilities framework model laid down the foundation of strategic capability development processes, but for each organization to find the appropriate paths to develop the sensing, seizing and reconfiguring capabilities, the specific context and the building blocks must be considered. This study suggests that organisational learning, leadership and culture are the essential intertwined building blocks that could enable or constrain strategic capability development. In the Saudi context case, leadership capability affects directly every stage of the strategic capability development processes, sensing, seizing and reconfiguration. Saudi culture as a social fabric, facilitates learning and leadership development, and directly influences reconfiguration. We argue that there is no one size fit all mechanism for strategic capability development, specific paths based on the three building blocks shall be identified. As an example, we suggest the following to Saudi business and the like as below:

On organisational learning, Saudi's current strategic capability development path can be described as strong individual learning via professional development and using external consultancy for sensing opportunities, bounded by government development goals. It is apparently lack of employee engagement and organisational wide knowledge sharing and learning. The learning loop is limited to target improvement, but this does not imply Saudi organisations shall transform to structured organisational learning by implementing knowledge sharing and knowledge exploitation technologies and mechanisms. Given the unique culture and tradition, it is important to develop further the capability of the leadership team, - their sensing ability, critical thinking and response ability. For example, initiating triple loops learning to change managers' mindset, to question decision assumptions, reflect and learn from failures/deficiencies of the current processes, systems and products. Adopting digital technologies and big data analytics to enhance management information provision.

On leadership, the current path is described as top down command and control

managerial decision making. It is suggested that collective sense making at management level and leveraging the benefits of using external consultancy could reduce bias and decision risks. It is a practice in other sectors that routine and structured decisions/tasks, are performed better by advanced digital technologies like AI and ML. These non-human entities in organisations can avoid potential conflicts with humans and culture, particularly in a context with strong religion and culture influence.

The Saudi culture on female work force changes is shaping how future learning and leadership will be, but the religion and performance culture cannot be changed in a short time, although it is evolving in the long term. Hence, any organisational mechanism aimed for strategic capability development must be designed to fit the dominating culture setting. It is worthy to note that transforming to a desirable strategic capability development orientated culture is part of an ecosystem of organisational change (learning, leadership), but it requires cultivation and influence.

6. Conclusion

This paper concludes that context specific paths should be identified for developing organisations' strategic capabilities. The paths are conceived from organisational learning, leadership and culture as building blocks that are intertwined to affect the sensing-seizing and reconfiguration capabilities. In the case of Saudi business operating in a dynamic environment, under the influence of its unique religion and culture, as well as strong government intervention, individual development coupled with external consultancy underpins the sensing capability, strong leadership with command and control style anchors seizing and reconfiguration capabilities development. The unique culture works like a social fabric affecting individual learning and leadership development.

This study makes contribution by theorization of a pragmatic approach that includes real-world considerations of the specific context when addressing strategic capability development. It also makes a practical contribution by setting some guidance for organisations to map out their current strategic capability development practices against a desired set of practices and processes. The Saudi strategic capability development paths appear different, yet effective responses to cope with the strategic challenges from both inside and outside their organisations.

A few limitations are noted for caution. Firstly, the Saudi unique context may not represent other context, hence the findings and the claims from this study may not be repeatable in other countries/organisations. However, this does not weaken the generalizability of the model components and the relationships discovered. Secondly, the sample size for the study is relatively small, and the nature of the qualitative data does not allow a quantified analysis of the strengths of the relationships and the multivariate effects among the building blocks as depicted in the model. Lastly, it is possible that there is a reverse impact of DC on the building blocks, which is outside the scope of this study. Future research could be conducted to validate/enrich the model elements, and the relationships with different contexts.



References:

- Ambrosini, V., & Bowman, C. (2009). What are dynamic capabilities and are they a useful construct in strategic management? *International Journal of Management Reviews*, 11(1), 29–49. <https://doi.org/10.1111/j.1468-2370.2008.00251.x>.
- Asif, M. (2021). Strategic leadership and ambidextrous learning Exploring the role of dynamic capabilities and intellectual capital. *International Journal of Quality and Service Sciences*, 12, 1, 1-14 DOI 10.1108/IJQSS-03-2019-0034.
- Auster, E., & Choo, C. (1994). How senior managers acquire and use information in environmental scanning. *Information Processing & Management*, 30, 5, 607-618.
- Basahal, A., Forde, C., & MacKenzie, R. (2021). The role of HR capabilities during external change. *Saudi Arabia Journal of human resource management*, 23(2): 15-27.
- Bass, B. (1990). “From transactional to transformational leadership: learning to share the vision”. *Organizational Dynamics*, Vol. 18 No. 3, pp. 19-31.
- Beer, S. (1981). *Brain of The Firm*. 2nd edition John Wiley & Sons Ltd.
- Chandrasekaran, A., Linderman, K., & Schroeder, R. (2012). “Antecedents to ambidexterity competency in high technology organizations”. *Journal of Operations Management*, Vol. 30 No 1/2, pp. 134-151.
- Chang, K., Chen, H., ray, Y., & Huang, H. F. (2015). Information technology and partnership dynamic capabilities in international subcontracting relationships. *International Business Review*, 24(2), 276–286. <https://doi.org/10.1016/j.ibusrev.2014.08.003>.
- Daft, R., Sormunen, J., & Parks, D. (1988). Chief executive scanning, environmental characteristics, and company performance: an empirical study. *Strategic Management Journal*, 9 (2), 123– 139.
- Eriksson, T. (2014). Processes, antecedents and outcomes of dynamic capabilities. *Scandinavian Journal of Management*, 30(1), 65–82 <https://doi.org/10.1016/j.scaman.2013.05.001>.
- Espejo, R., & Harnder, R. (1989). *The Viable System Model: Interpretation and Applications of Stafford Beer's*. New York: VSM, Wiley.
- Fainshmidt, S., & Frazier, M. L. (2017). What Facilitates Dynamic Capabilities? The Role of Organisational Climate for Trust. *Long Range Planning*, 50(5), 550–566. <https://doi.org/10.1016/j.lrp.2016.05.005>.
- Feiler, P. F., & Teece, D. J. (2014). Case study, dynamic capabilities and upstream strategy: Supermajor EXP. *Energy Strategy Reviews*, 3, 14–20. <https://doi.org/10.1016/j.esr.2014.05.003>.

- Gibson, C., & Birkinshaw, J. (2004). "The antecedents, consequences, and mediating role of organizational ambidexterity". *Academy of Management Journal*, Vol. 47 No. 2, pp. 209-226.
- Helfat, C. E., & Peteraf, M. A. (2015). Managerial Cognitive Capabilities and the Microfoundations of Dynamic Capabilities. *Strategic Management Journal*, 36, 831–850. <https://doi.org/10.1002/smj>.
- Joseph, J., & Gaba, V. (2020). Organisational structure, information processing, and decision making: a retrospective and roadmap for research. *Academy of Management Annals*, 14, 1, <https://doi.org/10.5465/annals.2017.0103>.
- Karimi, J., & Walter, Z. (2015). The role of dynamic capabilities in responding to digital disruption: A factor-based study of the newspaper industry. *Journal of Management Information Systems*, 32(1), 39–81. <https://doi.org/10.1080/07421222.2015.1029380>.
- Khurana, I., Dutta, D. K., & Ghura, A. S. (2022). SMEs and digital transformation during a crisis: The emergence of resilience as a second-order dynamic capability in an entrepreneurial ecosystem. *Journal of Business Research*, Vol. 150, 623-641, <https://doi.org/10.1016/j.jbusres.2022.06.048>.
- KSA, V. (2030). downloaded from https://www.vision2030.gov.sa/media/rc0b5oy1/saudi_vision203.pdf.
- Labib, A. W. (2016). Towards a Triple Loop Learning from Failures. In 13th International Conference on Probabilistic Safety Assessment and Management., (p. (Vol. 1)).
- Lewin, K. (1997). Resolving social conflicts & field theory in social science. . *American Psychological Association*.
- Martín-de Castro, G., Miriam Delgado-Verde, J. E., & Navas-López, J. C.-G. (2013). The moderating role of innovation culture in the relationship between knowledge assets and product innovation. *Technological Forecasting and Social Change*, 80(2), 351-363, <https://doi.org/10.1016/j.techfore.2012.08.012>.
- McBurney, N. (2023). *Saudi Arabia - The ambition versus the reality of Vision 2030* . Retrieved from Middle East Saudi Arabia Political and Country Risk Newsletter 10 Jan 2023: retrieved from https://www.controlrisks.com/our-thinking/insights/middle-east-ksa?utm_referrer
- Nieves, J., & Haller, S. (2014). Building dynamic capabilities through knowledge resources. *Tourism Management*, 40, 224–232. <https://doi.org/10.1016/j.tourman.2013.06.010>.
- Peteraf, M. A., Di Stefano, G., & Verona, G. (2013). The Elephant in the Room of Dynamic Capabilities: Bring Two Diverging Conversations Together. *Strategy Management Journal*, 34, 1389–1410. <https://doi.org/10.1002/smj>.



- Prieto, I. M., Revilla, E., & Rodríguez-Prado, B. (2009). Building dynamic capabilities in product development: How do contextual antecedents matter? . *Scandinavian Journal of Management*, 25(3), 313–326. <https://doi.org/10.1016/j.scaman.2009.05.005>.
- Saul, C. J., & Gebauer, H. (2018). Born solution providers - Dynamic capabilities for providing solutions. *Industrial Marketing Management*, (January), 0–1, <https://doi.org/10.1016/j.indmarman.2018.01.007>.
- Schwandt, D., & Marquardt, M. J. (1999). *Organizational Learning*. CRC Press.
- Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28, 1319–1350. <https://doi.org/10.1002/smj.640>.
- Teece, D. J.; Pisano, G. P.; Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- Tosey, P., Visser, M., & Saunders, M. N. (2012). The origins and conceptualizations of “triple-loop” learning: A critical review. *Management Learning*, 43(3), 291–307. <https://doi.org/10.1177/1350507611426239>.
- Weber, B., & Heidenreich, S. (2018). When and with whom to cooperate? Investigating effects of cooperation stage and type on innovation capabilities and success. *Long Range Planning*, 51 (2) 334-350, <https://doi.org/10.1016/j.lrp.2017.07.003>.
- Xu, M., Kaye, R., & Duan, Y. (2003). UK Executives' vision on business environment for information scanning - a cross industry study. *Information & Management*, 40 (5), 381- 389, Elsevier.
- Xu, M., Ong, V., Duan, Y., & Matthews, B. (2011). Intelligent agent systems for executive information scanning, filtering and interpretation: perceptions and challenges. *Information Processing and Management*, 47 (2). pp. 186-201. ISSN 0306-4573 [10.1016/j.ipm.2010.07.001](https://doi.org/10.1016/j.ipm.2010.07.001).
- Zhang, J., & Wu, W.-P. (2016). Leveraging internal resources and external business networks for new product success: A dynamic capabilities perspective. *Industrial Marketing Management*, 61, 170–181. <https://doi.org/10.1016/j.indmarman.2016.06.001>.