



Conceptualising Organisational Organic Cognition: A Fifth Dimension of organisational kinetics

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Abstract

Organisations constantly find themselves in a dynamic environment, where technology is disrupting and influencing their way of working, artificial intelligence and automation is being adopted, market segments are volatile and rapidly growing, regulators are ever evolving and complex, and stakeholders have rapidly changing expectations. Theories of organisational change such as dynamic capabilities, organisational cognition, absorptive capacity and organisational learning, offer comprehensive explanations as to how organisations react to change. These views, however, offer insufficient understanding of the cognitive process by which a group of people collectively make sense of what changes in the environment mean and how appropriate action should be taken. This study therefore builds on the organisational change phenomenon with a mindset of organisational organic cognition as a fifth dimension of organisational kinetics. The study argued that organisational organic cognition is viewed as an organisation-wide capacity of sensing, interpreting, learning and adapting to constantly evolving environment and convert experiences into knowledge and respond timely to achieve organisational goal. The study concludes that organisational organic cognition relates with organisational kinetics as a mechanism that connects organisational information, organisational choices and organisational adaptation.

Keywords:

Organisational Organic Cognition, Organisational Kinetics, organisational agility, organisational learning; sensemaking.

1. Introduction

Today's workplace is highly volatile, with a range of new technologies and an unpredictable landscape of change. Digital transformation, artificial intelligence, automation, global competition and changing expectations of stakeholders has changed the equation for organisational competitiveness. The volatile, uncertain, complex and ambiguous (VUCA) world in which organisations operate means that, along with resource ownership, an organisation's ability to understand change, create knowledge and respond effectively is increasingly the difference between its success and failure (Bennett & Lemoine, 2014). Organisations need to build greater competencies to interpret environmental cues, to establish

common understandings, and to plan, prepare and execute strategic interventions. This underscores the increasing role that organisational organic cognition will play as a basis for sustainable adaptation. There are some theories about organisational adaptation that have already been developed, which have given explanations of the way in which organisations change in response to changing environments. The dynamic capability theory focuses on how the firms renew itself by noticing the opportunities and threats, capturing new opportunities and changing the organisational resources (Teece, 2007). Likewise, organisational learning theory illustrates a process for organisations to learn from their experiences and reflect on their knowledge, shifting their assumptions and consequently their actions for the better in the future (Argyris & Schön, 1978; Senge, 1990). Absorptive capacity theory also provides explanations about the recognition, assimilation and exploitation of external knowledge sources by organisations to improve innovation and performance (Cohen & Levinthal, 1990; Zahra & George, 2002). Although these are important aspects of organisational change, however, they offer little focus on the underlying cognitive processes by which organisations make sense of environmental change and appropriate responses are "built.

Organisations' effectiveness in adapting lies not only in the information that is available to them, but in their ability to collectively interpret information. Organisations are often in the same circumstances, and they may react in the same way but they interpret things differently. The sensemaking theory highlights the way shared perceptions are developed within organisations, as a result of interaction, communication and collective interpretation (Weick, 1995; Weick, Sutcliffe, & Obstfeld, 2005). Adaptation involves not only shifting, but also meaning and direction or understanding. If there are no cognitive mechanisms that direct the action of the organization, a very fast motion could lead to incorrect action or to the wrong strategy.

In this context Isaiah (2026) came up with Organisational Kinetics (OK) as a multi-dimensional approach to the study of organisational movement, making use of the dimensions of adaptive velocity, communication flow, structural flexibility and energetic alignment. The framework is a conceptualisation of organisations as dynamic systems that are impacted by internal and external factors that will impact their capacity to 'move', 'adjust' and 'sustain' their performance. While organisational kinetics provides insights on how and why organisations move and adapt, there is a cognitive underpinning that helps them move effectively hence need to answer the following questions: where to, why and how to move. If there is no collective understanding of the requirements for organisational movement, then it can generate speed without direction. This article takes the organisational kinetics perspective a step further by putting forth the concept of Organisational Organic Cognition (OOC) as a fifth dimension of organisational kinetics. OOC is the distributed and adaptive intelligence of a collective that enables them to sense changes, interpret information, learn from experience and to produce coordinated response. OOC is a phenomenon that arises from interactions between employees, technologies, routines, structures and organisational culture, as opposed to the managerial cognition of individual managers. It is a measure of the stage of an organisation's cognitive development in the ability to build collective understanding and turn knowledge into adaptive actions.

The introduction of OOC brings organisational theory to a new place of focus, from what organisations have to how organisations think and act together. Different from knowledge development and utilising external knowledge, OOC concentrates on the cognitive mechanism that facilitates these capabilities to operate effectively, which is explained by organisational learning and organisational absorptive capacity. Organisations need cognitive architectures

more suited to the world of Artificial Intelligence, digital ecosystems and constant disruption than the stock of technology. So, Organisational organic cognition serves as a theoretical lens to understand how organisations develop collective intelligence and how they have meaningful, purposeful and sustainable movement within a complex environment (Isaiah, 2026). Therefore, this paper examines organisational organic cognition as a fifth dimension of organisational kinetics.

2. Developing a New Organisational Framework

The subject of organisational adaption has been traditionally studied in terms of the capacity to survive and be competitive in changing environments, in terms of organisational capabilities and resources. One of the more significant views is the dynamic capability approach that asserts that firms can gain competitive advantage over time by sensing new opportunities and threats in the environment, capturing valuable opportunities, and reconfigure or restructure current resources and structures to fit new challenges (Teece, 2007). This view has greatly helped us to understand the process of organisation adaptation, but only when there is a direct link between sensing change in the environment and organisation's strategic adaptation. Sensing in practice, is not simply an act of detecting information, it is also an act of interpreting, evaluating and giving meaning to the information. Organisations do not directly react to the objective environmental conditions, they react to their interpretation of conditions. In some instances, two organizations in the same industry and dealing with the same technologies, competition and/or regulation may choose different strategies because they have different members who create different understandings of the changes. This indicates that being able to access information or have access to resources is not the only thing that affects adaptation, it is also the collective ability of the organisation to process information, create meaning and coordinate action. Organisations make sense of ambiguous situations through sensemaking processes, which involve individuals and groups engaging in interpretation and building shared understandings of the situation for action (Weick, 1995). This clearly showed that organisational change starts with thinking and not doing.

Another aspect of cognition is captured in organisational learning theory. Organisational learning is capable of describing how organisations learn to perform better in the future through the acquisition, interpretation and integration of knowledge gained from experience, experimentation and interaction with the environment (Argyris & Schön, 1996). Organisations that have such experiences, however, do not necessarily learn from them if they are not analysed and reflected on, and if they are not fed into the collective knowledge systems. If there are no cognitive processes that allow for reflection and knowledge integration, organisations can engage in ineffective patterns of behaviour or may not be attuned to the observed patterns. Recent studies on learning organisations also indicate that capacity to adapt is rooted on the ability of firms to constantly process new information and convert new individual learning opportunities into collective learning capabilities (Garvin et al, 2008; Fiol and Lyles, 1985).

Likewise, absorptive capacity makes a point of the part cognition plays in organisational adaptation. Absorptive capacity is the capacity of an organisation to detect the value of external knowledge, absorb it and use it for productive purposes (Cohen & Levinthal, 1990). More recent evolutions of the idea emphasize the need for knowledge interpretation in addition to acquisition, i.e., the interpretation of new knowledge with respect to existing knowledge and organisational goals (Zahra & George, 2002). However, adaptation is not just the flow of information in organisational systems, it also involves an understanding of the implications of

the information, which in turn involves the cognitive activity of the organisational systems. In an era of growing digital transformation, artificial intelligence, and global uncertainty and complex market dynamics, the cognitive aspect of organisational moves is even more important. While organisations can have access to sophisticated technologies and much data, lack of interpretation of signals to give meaning to the data can lead to bad decisions. Collective reasoning, dialogue and reflection is what makes sense out of data; thus, creating organisational intelligence. Recent research into digital transformation shows that it is essential for an organisation to master technological skills, but also to develop strategic thinking, leadership understanding and organisational learning processes (Warner & Wäger, 2019; Vial, 2019). Thus, the efficiency of organisational movement should not be seen merely as the rate of change in the organization, the amount of resources invested in the movement or the skills and capabilities acquired. It should also involve the mental activity which enables organisations to decide on the need for change, in which direction to change and how to coordinate responses. For this reason, this paper suggests that Organisational Organic Cognition is a complementary dimension of Organisational Kinetics. The traditional organisational theory to understand how organisations move is Organisational Organic Cognition that explains the underlying interpretive mechanism of how the organisations move intelligently. Reactive, fragmented and inefficient organisational movement without cognition, purposeful, adaptive and strategically aligned with cognition.

3. Organisational Kinetics Model

Organisational Kinetics offers a multi-dimensional understanding of organisational motion that views the organisation as a dynamic system in a constant state of adaptation, co-ordination of resources and re-structuring of its organisation in response to its environment. For Isaiah (2026) organisations' effectiveness in turbulent environments is not simply a function of possessing resources, but rather of being able to move with purpose and generate movement through interwoven dimensions that underpin how organisations respond to change. The framework, which highlights four key aspects that drive the organisation's movement, is adaptive velocity, communication flow, structural flexibility and energetic alignment. These dimensions give a basis to understand how organisations mobilise themselves in complex and uncertain environment.

The first dimension is adaptive velocity. This refers to how fast and sensitive an organization is to the changes in its environment and how its strategies, processes and operations adapt. Today, with the rapid disruptions of technology, the emergence of artificial intelligence, fierce global competition and evolving customer preferences, agility is crucial to the survival of organisations. According to Isaiah (2026), adaptive velocity is one of the core elements of organisational kinetics as it is essential that organisations have the ability to adapt fast when faced with new opportunities and threats. This is in line with the dynamic capability theory that focuses on the ability of the organization to sense the change in the environment, seize opportunities and transform organizational resources to stay competitive (Teece, 2018). But not all quick responses will be successful as adaptation because if a response is too quick and not appropriate, the response will be unsuccessful and the decisions made or organisational action taken, will be wrong. Communication flow is the second dimension which deals with the flow of information, knowledge and feedbacks between organisational boundaries. Organisational movement relies on effective communication because the information must flow effectively between people, teams and organisational units to enable coordination and collective action.

Communication technology and knowledge sharing mechanisms have gained greater significance in digitally enabled organisations in enhancing their agility and responsiveness (Ciampi et al., 2021). Yet, whilst access to information can lead to effective organisational responses, this is not always the case. Organisations must be cognitively capable of interpreting information, recognising the meaningful signals and converting knowledge into actions.

Structural flexibility refers to the capacity of the organization's structure, processes, roles and decision-making to adapt to change, the third dimension. Isaiah (2026) argues that organizational mobility involves organization structures that can bend or move with the changing conditions and not be locked into rigid bureaucratic structures. Organisational design, decision-making and cross-functional collaboration that are flexible, decentralised and collaborative help organisations to act more effectively in times of uncertainty and complexity (Warner & Wäger, 2019). However, structural flexibility is largely an ability to move and not enough to explain what direction or purpose a movement is to take. The 4th Dimension, energetic alignment, is about the collaboration of organisation commitment, human motivation and resources for common strategic goals. To move an organisation, the commitment of employees, leadership and organisational resources is critical as transformation cannot be effective without an organisation being aligned, (Isaiah 2026). Organisational energy can either drive the acceptance, opposition and sub-optimal implementation of change initiatives. Prior studies on organisational change have confirmed that the strategic objectives of the organisation, the organisational culture and employee engagement must align to ensure success in adapting to change (Hanelt et al., 2021).

The four dimensions of Organisational Kinetics provide an important insight into how an organisation moves but are mainly concerned with how an organisation decides upon its direction of movement. The speed of change is explained by the concept of Adaptive Velocity, the flow of information is explained by the concept of Communication Flow, the capacity to accommodate change is explained by the concept of Structural Flexibility, and the mobilisation of commitment and resources is explained by the concept of Energetic Alignment. These dimensions, however, are not very comprehensive of the cognitive processes that underlie organisational comprehension of environmental signals and the development of shared meaning and the decision to adopt a particular strategic response. This theoretical restriction is the basis of the extended Organisational Kinetics that is Organisational Organic Cognition (OOC). OOC suggests that there is a need for a cognitive aspect to organisational kinetics, involving the collective sensing, interpretation, learning and adaptive response of organisations. Dynamic capability theory focuses on an organisation's capacity to alter its resources (Teece, 2018) and organisational learning theory is about how organisations learn and absorb knowledge (Argote, 2013), sensemaking theory reveals how the organisation's actions are shaped by the way the organisation makes sense of its ambiguous situation (Weick et al., 2005). Cognition is thus the missing mechanism, which, not only affects the movement of organisations, but also its meaningful and strategically appropriate movement. The Organisational Kinetics is the framework that evolves from the Organisational Organic Cognition model from a model of organisational movement to the model of intelligent organisational adaptation. Organisations need to be fast, informed, flexible, energetic as well as understanding as to when, where and how they move. Organisational Organic Cognition, therefore, is the cognitive basis for organisations to turn the complexity of the environment into meaningful strategic action.

4. Organisational Organic Cognition (OOC)

Organisational Organic Cognition (OOC) is an extension of the concept of organisational cognition, where cognition is seen as a distributed, collective and evolving capacity of the organisation, within its larger context. OOC takes a different stance from the traditional line of thought that focuses on the individual manager or strategic leader as the cognitive entity of the organisation, in that it considers the organisation as a whole as a cognitive entity which can sense, interpret, learn and adapt. Organisations must now be able to create shared understanding and to turn complex information into meaningful action in today's uncertain environment, where technology and competitive circumstances are changing at a fast pace. Therefore, OOC offers a theoretical understanding of the basis of cognition that helps organisations to decide both if they need to change, and how and why. OOC builds on the existing literature on organisational cognition, organisational learning and collective intelligence. Based on the approach of organisational cognition, it is believed that organisations create a shared mental model by interacting between individuals, groups and organisational systems. Collective interpretations affect the way organizations think about their environment, how they interpret a problem and their choice of strategic action (Walsh, 1995). Likewise, (Weick et al., 2005) suggested that sensemaking processes in which organisational members make sense out of ambiguous events precede organisational action. So, it isn't the environment that is being responded to, it is the meaning that organisations give to the changes.

The essence of OOC is its collective nature, which is different from individual managerial cognition. OOC can be understood as a consequence of the interaction of several organisational elements (employee, leadership teams, routines, information systems, technologies and institutional practices) whereas individual cognition is related to knowledge, beliefs, and decision-making processes of specific actors. This is in line with the distributed cognition theory (Hutchins, 1995), which suggests that the cognitive processes are not solely constrained to one individual, but are distributed among people, artefacts and social systems. In organisations, knowledge is created and decisions are made by a network of interactions, and human and technological resources both play a role in the creation of the organisational intelligence. Especially in digitally transformed organisations, where decision making tasks are increasingly dependent on the collaboration of humans, data, analytics and AI systems, the distributed nature of OOC is relevant. Few recent studies on digital transformation have pointed to the need for the ability of digital resources to be combined with human knowledge to yield relevant results and give reactions that are adaptable (Warner & Wäger, 2019; Vial, 2019). But technology doesn't make an organization intelligent, however. Information systems are useful because they allow the organisation to understand information, to create a shared understanding and to take strategic action based on it. OOC therefore puts a special focus on the dynamic relationship between the technical possibilities and the human interpretation.

The dynamic quality of OOC is an illustration of the concept of learning as an on-going process of experience, experimentation and feedback, within the organisation. Organisation learns from reflection, looking back on actions, evaluating results and changing the behaviour going forward. It has been suggested that the reason why knowledge is strategically valuable is that the organisation has the ability to acquire, interpret, retain and use knowledge to enhance future performance (Argote, 2013). In the same way, the absorptive capacity theory emphasizes the importance of external knowledge, its assimilation and its use to innovate and adapt (Cohen & Levinthal, 1990). OOC combines these views by focusing on cognition not being a fixed

organizational resource but a dynamic capability, that continues to grow with the ongoing interaction with the environment. The concept of organic is thus key to the conceptualisation of OOC as it is about the dynamics, self-adjusting and evolving nature of organisational cognition. Organic cognitive systems evolve in response to feedback, adaptation and learning, not mechanical systems which run on fixed rules. Organisations continually update their interpretations in the light of new information and any changes in the environment. This is similar to the theory of complexity which proposes that organisations in uncertain environments are adaptive systems, whose behaviours are the result of interaction between interconnected elements (Uhl-Bien & Arena, 2018). OOC acknowledges this emergent intelligence by setting aside the idea that organisational intelligence is built over time through the dynamics of relationship, experience and collective reflection.

Moreover, OOC in existing organisational adaptation theories has an inherent lack of theoretical link. Dynamic capability theory, which is used to explain how organisations sense opportunities, seize them and transform resources (Teece, 2018) and organisational learning, which is used to explain how knowledge is acquired & retained. These views, however, focus only on the more superficial cognitive process where organizations in conjunction decide what to do in response to environmental cues. OOC tackles this by incorporating the notion of cognition as a key element of organisational dynamics. Collective intelligence to better understand complexity and to inform action is essential to adaptation, and should be considered alongside the other factors described as resources, structures, and capabilities. In the Organisational Kinetics framework suggested by Isaiah (2026), OOC is the cognitive component of the framework along with the other four components: Adaptive velocity, Communication flow, Structural flexibility and Energetic alignment. These dimensions involve how organisations move while OOC involves how organisations interpret their movement, thereby affecting the direction and purpose of organisational movement. Organisational Organic Cognition thus offers a theoretical context for the understanding of organisations as living cognitive systems, which have the capacity to learn, adapt and purposefully transform into their future.

5. The Components of Organisational Organic Cognition

By broadening the view of organisational adaptation, organisational Organic Cognition (OOC) focuses on how the organisation adapts to environmental changes by socially co-constructing cognition, which allows it to perceive, interpret, learn and act as an organisation. OOC posits that the internal cognitive process that is responsible for the transformation of environmental signals into meaningful knowledge and adaptive action is the mechanism required for movement in organisations, as an extension of Organisational Kinetics. It is a concept that takes into account the organisation as a living, cognitive system with intelligence spread throughout the individuals, teams, technologies, routines and organisation processes. Thus, the OOC is defined by the overlapping dimensions that help to explain the ongoing process of organisations' comprehension and manipulation of complex environments. These dimensions of cognition are: organisational sensing, collective interpretation, organisational learning and adaptive response.

5.1 Organisational Sensing

Organisational sensing is the first aspect of Organisational Organic Cognition that means the capacity of an organisation to sense, monitor and recognise changes in its immediate and

external environments. It is about systematic discovery of new opportunities, threats in the competition, new technologies, customer requirements, regulatory shifts and market disruptions. Sensing is a precondition for the organisational cognition as no organisation can interpret or react to changes that it is not able to sense. Organisational sensing is viewed as being very important and is closely linked to the dynamic capabilities perspective created by Teece (2007) who found that sensing, seizing and transforming are the key activities that contribute to gaining a competitive advantage in a turbulent environment. Successful organisations, as mentioned by Teece (2007), are constantly questioning the environment and looking for opportunities and threats that would not otherwise be apparent. Organisational Organic Cognition takes this line one step further by focusing on the relationship between sensing not only as a strategic ability, but also as a cognitive process of the organization. It is not enough for organisations to gather information; however, they must also have the ability to identify significant patterns in intricate flows of information.

With the rapid changes in technology, the development of Artificial Intelligence, the digital disruption and changing consumer behaviour, sensing is becoming increasingly important in the current business context. Research on digital transformation suggests that organisations with robust sensing capabilities are more likely to be able to detect technology opportunities and respond to them with changes to their business models (Warner & Wäger, 2019; Gonzalez-Varona et al., 2024). For instance, companies that can effectively track the digital trends, may be able to identify new platforms, customers' preferences, and technological solutions before others. Multisource information sources also are important for organisational sensing. The organisation's perception of environmental signals is enhanced through customer feedback, market research, employee input, competitive intelligence, and data analysis and stakeholder engagement. Mikalef et al. (2020) stated that digital skills are improving the organisational intelligence by allowing companies to gather massive amounts of data and interpret it to make decisions. But with the information available, it is not always possible to ensure the effectiveness of the sensing. Organisations need ways to discern relevant information from irrelevant.

Organisational sensing could thus be considered as the organisation's cognitive awareness mechanism from an OOC perspective. Like biological organisms, which have their sensing systems as their senses, organisations develop their sensing systems in the form of their employees, technologies, networks and strategic routines. Collective sensing capacity is an important factor in quality organisational movement, depending on the accuracy, speed and depth of the collective sensing capacity (Isaiah, 2026).

5.2 Collective Interpretation

Sensing is the ability to detect some sort of warning signal from the environment, but information does not necessarily lead to adaptation. The second aspect of Organisational Organic Cognition is collective interpretation, in which organisations interpret the information and create shared meaning. Organisations are in a state of uncertainty and ambiguity, and the individual members of the organisation need to collectively make sense of events and how they should affect the organizational behaviors. Collective interpretation is a closely related theory to organisational sensemaking theory. Weick (1995) states that meaning is continually created through interaction, communication and social processes in organisations. The sensemaking theory focuses on how organisational members do not uncover the reality of what they are experiencing, but rather how they interpret it based on their experiences, beliefs and

conversations within the organisation. This interpretation process affects the way organisations define the problems, find opportunities and choose responses. Collective interpretation is the cognitive link in Organisational Organic Cognition between environmental awareness and organisational action. The same information can be presented to two different organisations, and they interpret the information in different ways, thus resulting in different responses. A technological disruption can be seen as a threat and a defensive move for one organisation, but an opportunity for innovation and expansion for another. Collective interpretation needs communication systems, collaborative leadership and psychological environments in which staff can communicate freely with each other to exchange ideas. According to Edmondson (2019), psychological safety is essential for workers to voice their viewpoints, challenge ideas and share expertise without risk of negative repercussions. Such environments promote organizational cognition as the ability to comprehend complex situations is enhanced by having a variety of perspectives within the organization.

Moreover, a collective interpretation decreases cognitive fragmentation in organisations. If departments were not aligned in understanding the change in the environment, they could react in different ways to the change which would impact the effectiveness of the Organisation. Organisations can incorporate the various viewpoints into a unified view of reality by using cross-functional collaboration, communities of practice and communities of knowledge-sharing platforms (Nonaka & Takeuchi, 1995). Collective interpretation is a process of giving direction to the movement of the organisation from the Organisational Kinetics view. Movement without understanding can lead to unnecessary change, to inefficiency in allocation of resources and to reactive behaviour. OOC therefore believes that there needs to be collective intelligence in tandem with organisational speed. Sprint can only be useful if the organisation is aware of the destination for its journey and the reasons for it (Isaiah, 2026).

5.3 Organisational Learning

Organisational Learning is the third dimension of Organisational Organic Cognition and is when organisations learn from experiences, knowledge and feedback to improve future actions. Through learning, organisations can adapt and change current practices, build new skills and continually enhance their performance. Organisational learning is a topic that has been much talked about in the management literature. Argyris and Schön (1978) consider there are two types of learning, single-loop learning happens when organisations notice errors in the current assumptions, whereas double-loop learning occurs when they doubt and change the assumptions they make in their decision making. In highly uncertain contexts, double loop learning is relevant as organisations need to not only change their current context, but also discard old ways of doing things. Organisational learning is at the heart of OOC for learning is a function of experience. Organisation that detects change, but does not process information and learn can't adapt. When learning occurs, it becomes organisational memory and what has been learnt in the past affects future choices. For Crossan et al. (1999), organisational learning is about a set of processes of intuition, interpretation, integration and institutionalisation that transform individual knowledge to organisational knowledge.

Digital technologies, knowledge platforms and collaborative systems are becoming more and more vital to assist in continuous learning within modern organisations. The application of AI, data analytics and digital knowledge management systems offer opportunities to organisations to capture, process and disseminate knowledge more effectively. But technology is not enough to bring about organisational learning. Commitment, leadership and reflection or knowledge

sharing mechanisms are necessary to learn. The knowledge-based view of the organisation also highlights the fact that knowledge is one of the most significant strategic assets of an organisation to create competitiveness (Grant, 1996). Knowledge creation, sharing and application are key to effective innovation and adaptation by organisations. Organisational learning then increases the cognitive capability of the organisation by making sure that past experiences of the organisation are utilized in their future response. The OOC is a formal environment where organisational learning serves as the development process of organisational cognition. It enables the intelligence of the organisation to develop in time. As biological learning systems become more adaptive with experience, organisations become more adaptive following a continuous learning process (Isaiah, 2026).

5.4 Adaptive Response Cognition

Adaptive response cognition is the last factor in Organisational Organic Cognition and it describes the relationship between the understanding and the action taken in the organisation. Once the information from the environment is received, meaning is attached to it, lessons are drawn from past situations, and then a response is made, organisations have to make a choice. When environmental changes are sensed, their meaning is interpreted and lessons learned from previous situations, and then a response is made, organisations have to make a choice. This process includes comparing options, choosing suitable plans and assigning resources and coordinating the action plans. Adaptive response cognition is not simply an organisational reaction, but involves some deliberate consideration of the cognition. Reactive organisations react to what happens to them externally without thinking; cognitively adaptive organisations think through a situation, consider options and then choose a response that relates to strategic goals. This separation is a consequence of the claim of dynamic capability theory that firms have to perceive opportunities as well as exploit and transform resources to generate value (Teece, 2007). To perform adaptive response cognition, strategic decision making skills are needed. Managers and employees need to collate information from a variety of sources, consider the possible consequences of the actions they might take, and plan action at different levels in the organisation. Dynamic capability is a term used to describe the ability of the organisation to create adaptable decision-making processes, which helps them to adapt to a changing environment (Eisenhardt and Martin 2000).

Due to the nature of digital and knowledge intensive environments, adaptive response cognition has gained its increasing significance because organisations are exposed to simultaneously occurring technological, competitive and social pressures. Organisations, for example, must not only be aware of the technology's potential, but also decide on the right way to implement it, impact on staffing and ethical and moral implications. The quality of organisational response is related to the capacity of the organisation to cognitively assess complex situations. Another aspect of adaptive response cognition is also the link between cognition and organisational agility. Agility is commonly thought of as being quick, flexible, responsive, but in OOC, it's thought of as being intelligent. In the worst case, quick decisions without proper knowledge can lead to missteps and mistakes, but in the best case, careful thinking can help organisations make decisions that will add sustainable value. Hence, adaptive response cognition is the action facet of organisational intelligence. It changes the collective understanding into organisational activity and matures the cognitive process of sensing, interpretation, learning and responding (Isaiah, 2026).

6. The Fifth Dimension of Organisational Kinetics, namely organisational organic cognition

Organisational Organic Cognition (OOC) is an extension of Organisational Kinetics, adding the cognitive element to the movement of the organisation. Traditional views of organisational movement are mostly related to organisational capability of change, adaptation and coordination of activities. But motion is not necessarily an effective adaptation. Organisations that are incapable of accurately sensing the environment, of forming common perception and developing suitable responses run the risk of moving too fast in the wrong direction. Hence, OOC sees cognition as the intelligence mechanism that affects organisational movement in terms of its quality, direction and sustainability.

The first four of the Organisational Kinetics dimensions are capturing the various kinds of organisational movement within the Organisational Kinetics framework. The adaptive velocity is the rate at which the organisation adapts to changes in the environment. Organisations need to be able to move quickly in making decisions and enacting changes in turbulent markets. But it is possible that fast reaction but without understanding will result in ineffective reactions. Dynamic capabilities are about reacting to change, but also about sensing opportunities, understanding conditions, and changing resources strategically, as Teece (2007) points out. Communication flow is the exchange of information through organisational boundary. The quick sharing of information between departments, employees and external parties is crucial for effective organisations. But not all information is necessarily an organisational intelligence. Data needs to be transformed, contextualised and interpreted to become knowledge. This distinction emphasizes the significance of OOC as it is the process of cognition that is responsible for turning information into organisational understanding (Nonaka & Takeuchi, 1995). Structural Flexibility: The capacity of organisational systems, processes and structures to adapt to changing demands. Flexible structures facilitate experimentation, collaboration and innovation. However, as the organisation becomes more flexible, cognitive alignment is needed, as staff will need to know why the changes are required and how the new structures will help the organisation achieve its goals. Failure to understand each other can lead to a process of structural change that results in confusion, not adaptation.

In the same way, energetic alignment is the ability to align organisations around people, motivation and resources to achieve shared goals. Collective commitment, which affects the implementation of change, has been identified as an important factor of organisational energy (Bruch & Vogel, 2011). But in energy must be directed, through collective understanding. Therefore, OOC provides an understanding of how organisations change personal perception to become an organisational intelligence. OOC is the fifth dimension - It's about the direction and meaning of the organisation. It is the total capacity of organisations to detect environmental changes, understand their meaning, adapt to their learning and respond accordingly. This view is in line with organisational sensemaking theory where groups need to continually make sense of what they see in the ambiguous and complex environment before any action is taken (Weick, Sutcliffe, & Obstfeld, 2005). Thus, OOC takes Organisational Kinetics from a movement capacity framework to a wider movement capacity framework, ones in which intelligence plays a significant role. The “organic” character of OOC stems from the concept that organisational cognition is dynamic and resides in the multiple levels of decision makers. Instead, it is born of the interaction between employees, technologies, working processes, knowledge systems and organisational experiences. In today's organizations, intelligence is not only located in the

management, but distributed across networks in what is termed knowledge ecosystems (Gonzalez-Varona et al., 2024). Therefore, OOC embodies the capability to learn, reimagine situations and reshape the journey over time as organizations develop.

7. Theoretical Propositions

Organisational Organic Cognition (OOC) builds on existing theory on organisational adaptation by proposing that organisational movement is not just a function of resources, speed, or structural capacity, but also of the capacity of the organisations as a collective to perceive, interpret and respond to its environment in relation to complexity. In today's uncertain and dynamic organisations, the ability to generate, process and apply knowledge, is a source of competitive advantage (Teece, 2018; Warner & Wäger, 2019). The theoretical propositions are developed based on this assumption.

Proposition 1: Organisational Organic Cognition positively relate with adaptive velocity: Organisations that are better at identifying and responding to change have a higher level of cognition.

Adaptive Velocity means how well and quickly organisations detect change, adapt their strategies, and take appropriate action. But when there is a fast-moving pace and inaccurate interpretation, then ineffective reactions may occur. OOC is the cognitive underpinning that allows organisations to identify weak environmental indicators, assess their meaning and react to them timely. According to dynamic capability theory, dynamic capability in an organization is defined as a capacity to ‘sense’ opportunities, ‘seize’ new opportunities, and ‘transform’ resources within the organization (Teece, 2007, 2018). But sensing is a cognitive process as the information from the context has to be perceived, understood, and assigned meaning before strategic actions can be taken. Strong cognitive systems are associated with better signal noise ratios; this means that organizations with high levels of the cognitive system will be more likely to identify meaningful signals over noise and thus be able to make decisions faster and adapt quicker. There is recent evidence showing that digital capabilities, knowledge integration and organisational flexibility increase the ability of organisations to adapt quickly to change in their environment (Ciampi et al., 2021; Mikalef et al., 2020). OOC supplements these views with an explanation of the internal cognitive process that enables organisations to turn information into meaningful action. For this reason, organisations that have a greater capability of OOC are likely to have a greater adaptive velocity. The researcher hypothesized that organisational organic cognition had a positive impact on adaptive velocity as collective sensing, interpreting and learning speed up the organisational reactions to environmental change.

Proposition 2: The flow of communication will be improved when there is organisational organic cognition and shared interpretation improves knowledge exchange.

Communication flow is the process of people and organizational members and units sharing or moving information, knowledge and meaning. While traditional viewpoints of communication focus on information delivery, modern day organisations need communication systems that can help to share knowledge and understanding. The value of information lies in the way it is shared by the members of the organisation and how it is used in collective action. The sensemaking theory emphasizes that organisations make sense in the process of interacting, discussing and interpreting (Weick et al., 2005). Under complex situations, different employees might be given

the same information but have different interpretations based on their experiences, assumptions and organisation contexts. To overcome this challenge, OOC fosters collective cognition in which members of an organisation collectively develop an understanding of events and priorities. Other studies on knowledge management also reveal that social interaction and aspects of organizational culture and mechanisms facilitating collaboration have an impact on knowledge sharing (Nonaka et al., 2000; Alavi & Leidner, 2001). The role of communication ecosystems in which knowledge can flow between technology platforms, between departments and between external networks has also grown in importance during digital transformation (Warner & Wäger, 2019). OOC enhances these processes by making communication more than just the exchange of data; it fosters the construction of an organising meaning for communication. The paper claimed that the ability of the organisation to recognize and understand through the organic cognition could contribute to the improvement of the flow of communication because the interpretative consensus could reduce the ambiguity of communication, facilitate knowledge integration and consolidate the understanding of the group.

Proposition 3: Structural Flexibility supports Organisational Organic Cognition through observation and learning.

Structural flexibility is the capacity of an organisation to adapt in order to change process, roles, decision-making structure and the allocation of resources as needed. Information exchange and the ability to experiment may be restricted by rigid organisational structures, which are related to poorer cognitive adaptation. On the other hand, flexible structures provide workspaces that allow employees to test out new ideas, question old beliefs and come up with creative solutions. Organisational learning theory is based on the premise that an organisation must be able to question its own established routines and create new knowledge through experimentation to adapt (Argyris & Schön, 1996). Likewise, ambidexterity research indicates that organizations should strive to take advantage of their capabilities while at the same time trying to explore new avenues. (O'Reilly & Tushman, 2013) Structural flexibility creates the conditions for this balance by allowing knowledge to circulate and for employees to be involved in problem solving activities. Furthermore, flexible organizational structures have been shown to foster innovation through the ability to collaborate quickly and across functions and to learn continuously (Warner & Wäger, 2019; Vial, 2019). As a social phenomenon, OOC arises out of the interaction between individuals, systems and organisational routines, and thus, the structural flexibility plays an important role as an antecedent to bring cognitive processes into and out of existence. Structural flexibility is found to have a positive impact on the organisational organic cognition, which is manifested as conditions for experimentation, knowledge integration and organisational learning, the study found.

Proposition 4: Organisational Organic Cognition enhances energetic alignment by building common understanding of the strategic priorities.

The term "energetic alignment" is used to describe the alignment of the energy of the members of an organisation around shared strategic goals. Organisations may have competent staff and adequate resources, but if the individual efforts aren't aligned then the organisation is less effective. By providing information about organisational objectives, OOC helps to align employees' energies in the same direction, by helping them identify their roles and understand how they can help achieve shared goals. Strategic alignment in the literature focusses on the

linkage of organization's resources, capabilities and employee responses with the strategic goals (Henderson and Venkatraman, 1993). But just formal alignment isn't enough; it takes common knowledge and mutual commitment. If people within an organisation understand the issues and objectives in the same way, they will have greater control in coordinating activities and back the strategic issues. Evidence regarding organisational culture and leadership shows that shared meaning affects the extent to which people are engaged, committed and are able to act together (Schein 2017). OOC further extends this thinking to suggesting that strategic alignment is a process of ongoing cognitive interactions among employees, leaders, technologies and organisational systems. The researcher claimed that the organic cognition of the organisation reinforces the energetic alignment by creating common sense of strategic cognitions, facilitating coordination and guiding the organisation's effort.

8. Theoretical Contributions

Organisational Organic Cognition adds to the field of organisational theory in offering a new understanding of organisational movement that goes beyond the traditional concepts of capacity, structure and resources. Current concepts include dynamic capabilities, organizational learning and organizational agility models, which provide a very limited focus on collective organizations' cognitive processes that interpret the meaning of the environment changes. First, by adding the dimension of cognition to organisational movement as an explicit dimension of OOC. Organisational Kinetics, as Isaiah (2026) suggests, is about dimensions of organisational movement including adaptive velocity, communication flow, structural flexibility and energetic alignment. The addition of OOC adds another layer to this framework, showing how the movement requires both physical and informational processes, and cognitive direction as well. To be able to effectively respond to changes, organisations need to understand the changes first. Secondly, OOC links up organisational cognition studies with organisational agility and dynamic capability studies. For organisations, dynamic capability theory is about how organisations can transform resources, whereas, OOC is about the collective interpretation mechanism that makes it possible for organisations to transform resources. It offers, therefore, a greater insight into how some organisations adapt well, and others with similar resources struggle to adapt. Thirdly, OOC helps to advance the field of digital transformation literature by adding the focus on organizational understanding as the key to successful digital transformation. The value of digital technologies lies in the extent to which organisations have the cognitive capacity to understand the opportunities, rethink processes and strategically integrate technological resources (Vial, 2019; Warner & Wäger, 2019).

9. Managerial Implications

The OOC structure offers a number of useful implications for managers who manage in a context of uncertainty and quick change. One is to improve the organisation's sensing mechanisms, which managers need to do first. They can range from environmental scanning systems, customer feedback platforms, competitive intelligence processes, until to data-driven decision systems. Sensing effectively can aid organisations to detect new opportunities and threats before they turn into serious problems. Second, creating a culture for sharing knowledge that encourages dialogue, collaboration and collective interpretation in management. Formal systems should be established to enable employees from different departments to share ideas, discuss issues that are on the horizon and build common understanding. In the digital organisation, where the availability of information does not automatically lead to organisational

intelligence, this is especially crucial. Thirdly, managers should create learning environments that reflect. Organisations need to review, review and review again to see how well things are working and change their processes accordingly. Learning-oriented cultures enable staff to try, to learn from mistakes and come up with new solutions. Fourth, strategic interpretation should be encouraged in the service of employees. Managers should be supportive of employee participation in strategic interpretation. Employees are not just the recipients of an organisation's decisions, but they are part of the organisation's cognition. Engaging decision making processes and taking into account all parties increases the likelihood of commitment as employees become aware of the rationale behind strategic measures and the processes of implementation.

10. Conclusion

Organisational organic cognition relates to organisational kinetics by adding cognition as a basic element of organisational movement. The modern companies work in an environment of uncertainty, technological disruption and constant changes. In such environments, it is not just speed, information availability or structural flexibility that are required for successful adaptation. Organisations need to be cognitively able to analyse the changes, understand the implications of those changes and know what to do next. OOC attempts to offer a theoretical understanding of the process by which organisations convert signals from their environment to meaningful organisational reactions. The framework connects and synthesizes aspects of organisational cognition, organisational dynamic capabilities and organisational learning and digital transformation literature to illustrate the relationship between physical and intellectual movement of the organisation. The core of OOC is that organisations need to not only speed up their pace of change, but also need to have an awareness of where the change should happen, why it needs to happen and how they should coordinate collective efforts. Thus, the intelligence that guides this organisational kinetics becomes cognition, a type of intelligence that is not a reactive one, but rather a purposeful one that adapts to the organisational environment.

11. Future Research Expectations

Further studies are needed to operationalise organisational organic cognition (OOC) to create measurement scales; empirically test the relationship between OOC and organisational outcomes; study the relationship between Organisational Organic Cognition (OOC) and antecedent, mediating and moderating variable of the adaptation process; and apply longitudinal methods to examine the relationship between Organisational Organic Cognition (OOC) and adaptation process and how it changes over time.

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