

Conceptualising Individual Innovation Capability in Workplace Settings: A Multidimensional Framework for Future Measurement Development

DOI: 10.12776/qip.v30i2.2401

Laman Gasimzade

Received: 20-07-2026 Accepted: 14-08-2026 Published: 31-08-2026

ABSTRACT

Purpose: This paper proposes a conceptual framework of individual innovation capability (IIC) to guide future measurement development and empirical validation.

Methodology/Approach: An integrative review combined eight Scopus searches and relevant foundational literature. The resulting 44-study corpus was coded across 25 attributes and synthesised through construct-boundary clarification, dimension mapping, conceptual positioning, and relationship mapping.

Findings: IIC is placed between personal innovation resources and innovative work behaviour (IWB), and represented through six candidate capability domains: opportunity exploration, idea generation, idea development, idea mobilisation, idea realisation, and idea sustainment. Organisational and technological conditions are proposed to shape capability development and behavioural enactment.

Research Limitation/Implication: The framework requires operationalisation and empirical validation of its dimensionality, discriminant validity, measurement invariance, and predictive relationships with IWB and innovation outputs.

Originality/Value of paper: The framework distinguishes what employees possess, what they can do, and what they enact at work, providing a conceptual basis for future IIC measurement development.

Category: Conceptual paper

Keywords: individual innovation capability; innovative work behaviour; conceptual framework; scale development; workplace innovation

Research Areas: Management of Technology and Innovation; Quality by Innovation

1 INTRODUCTION

Innovation has become an essential characteristic distinguishing a successful organisation from the ones that fail to adapt to the rapidly modernising technology-dominated business environments. Those who are actively seeking to remain competitive and adapt to uncertainty frequently turn to individuals who can recognise opportunities, produce useful ideas, mobilise support, and convert those ideas into practical improvements. Understanding creativity and innovation at the individual level has therefore been a longstanding concern in organisational research since late 1970-80s as the organisations sought to not only explore who produced the novel and useful ideas, but also which employees could take their ideas one step further leading to their promotion, implementation, and continued use (Amabile, 1983; Anderson, Potočník, & Zhou, 2014). At the organisational level, innovation capability refers to the capacity to generate and implement innovation repeatedly rather than occasionally (Lawson & Samson, 2001).

Existing research on individual-level innovation has identified a range of factors affecting the creative performance in terms of employees' knowledge of the field, operating environment as well as their psychological aptitudes (Amabile, 1983; Amabile & Pratt, 2016). Similarly, how the workplace is set up, the individual characteristics of an employee as well as the approaches exhibited by the leadership staff jointly influence how innovation unfolds at work (Hammond, Neff, Farr, Schwall, & Zhao, 2011). Innovative work behaviour (IWB) research focuses primarily on the enacted innovation-related behaviour covering phases through the generation of idea to its implementation and even sustainability (Scott & Bruce, 1994; Janssen, 2000; Lambriex-Schmitz, Van Der Klink, Beusaert, Bijker, & Segers, 2020). While these models have established multiple approaches for measuring innovation-related behaviour, their dimensions are often fragmented and limited empirical separation exists between these stages. IWB indicates what employees actually do at work, but it does not explicitly distinguish their underlying capability from the organisational and technological opportunities available for its enactment.

This conceptual difficulty becomes more significant as work is increasingly shaped by digital platforms and artificial intelligence, the studies on which have developed multidimensional measures of digital innovation capability and AI-powered service innovation capability at the organisational level (Kroh, Globocnik, Schultz, Holdhof, & Salomo, 2024; Zhou, Zhang, & Wang, 2026). Yet, the framework for individual level capability linking personal resources to enacted IWB remains underrepresented. This paper addresses this gap by proposing a conceptual architecture of individual innovation capability (IIC) and a candidate multidimensional structure for future empirical validation. Personal innovation resources, capability domains, contextual development and activation conditions, and IWB are treated as separate concepts and the paper answers the following question: How should IIC be conceptualised so that it can explain how employees convert personal resources into sustained innovative action under contemporary organisational and technological conditions?

2 CONCEPTUAL BACKGROUND

2.1 Innovation, Creativity, and Innovation Capability

A clear conceptual foundation is crucial because creativity, innovation, innovation capability, individual innovativeness, and IWB refer to related but analytically different aspects of individual innovation. These concepts need to be distinguished analytically to establish the conceptual boundaries allowing for IIC to be developed as a meaningful construct.

Creativity is usually understood as the production of ideas that are both novel and useful. As such the main anchoring theme for creativity is about the generation of original thoughts, approaches, procedures, responses, solutions, or physical products with intrinsic value attached to them. The componential view of creativity suggests that creative performance depends on domain-relevant skills, creativity-relevant processes, motivation, and the surrounding social environment, thereby extending explanations of creativity beyond one's personality and cognitive ability alone (Amabile, 1983, 2013). This proposition helped move the trajectory of creativity research away from perceiving creative potential as a fixed phenomenon by introducing influences such as motivation, task, knowledge and support. Innovation is not a concept about ideas alone, it includes the introduction and application of those ideas, meaning that a solution becomes innovation through testing and adoption at workplace. Therefore, creativity can be understood as a central input into innovation, but innovation is a more complete process that includes the movement of ideas from generation to application (Anderson et al., 2014; Amabile & Pratt, 2016).

Innovation capability adds a consistency layer on top of innovation which distinguishes isolated innovation outcomes from the capacity to repeatedly produce innovation-related activity. Innovation capability is well established at organisational level, while its conceptualisation at the individual level is less developed. This study therefore proposes IIC as a work-contextual individual capacity rather than as a personality label and includes both creative (idea generation) and non-creative elements (investigation, idea championing, planning, collaboration).

2.2 From Organisational Innovation Capability to Individual Innovation Capability

The concept of innovation capability has traditionally been analysed from the organisational level (Acosta-Prado, Romero Severiche Tafur-Mendoza, 2021). However, underlying organisational tools and mechanisms like management information systems (MIS), and knowledge management systems (KMS) do not independently produce innovation. Success of these systems depend partly on employees' ability to recognise opportunities, and to develop and implement ideas in daily work. This micro foundational view is important for innovation capability literature as organisational-level and individual-level studies are rarely bridged and

the crucial connection is not always clarified. This bridge can be understood as a process of analytical zooming where a broader entity, organisational innovation capability (OIC) with its technology, leadership structures, learning climate, and culture, may end up affecting whether and how employees are empowered in terms of opportunities, motivation, knowledge, and support needed to innovate. However, such organisational conditions still do not determine innovative behaviour; employees are expected to deploy the resources to respond to innovation-related demand (Hammond et al., 2011; Anderson et al., 2014; Lukes & Stephan, 2017). In this sense, the proposed IIC construct is treated as a micro-level capability connecting organisational context with enacted IWB.

The distinction also prevents IIC from being reduced to personality, because the literature consistently shows that factors like leadership, work design, climate, autonomy, knowledge sharing, support, and resources influence employees' innovative behaviour (Oldham & Cummings, 1996; Janssen, 2000; Hammond et al., 2011). Recent research on digital and AI-enabled innovation makes this bridge even more important as studies on digital innovation capability, AI-powered service innovation capability, and AI-supported knowledge management show that technological resources create innovation only when combined with human skills, managerial support, organisational learning, knowledge-sharing routines, and employees' willingness to use technology for innovation-related work (Kroh et al., 2024; Karkoulian & Boulos, 2025; Zhou et al., 2026).

2.3 Individual Innovation Capability, Individual Innovativeness, and Innovative Work Behaviour

Individual innovativeness describes a person's tendency towards novelty and early adoption, but is different from the proposed capability to innovate at work which may require the organisational knowledge and understanding, confidence or implementation skills to turn ideas into innovations.

The closest neighbouring construct is innovative work behaviour (IWB). IWB refers to intentional employee behaviour directed toward the creation, introduction, promotion, and application of new ideas within a work role, group, or organization (Janssen, 2000). Classic studies also describe such behaviour through lenses of terms like individual innovative behaviour or individual innovation proposing stages like idea generation, promotion, and realization (Scott & Bruce, 1994; Kleysen & Street, 2001). Later measurement models increasingly adopted the term IWB as the prevailing label and added more dimensions such as opportunity exploration, idea championing, implementation, search, communication, cooperation, overcoming barriers, and idea sustainability (Janssen, 2000; de Jong & den Hartog, 2010; Lukes & Stephan, 2017; Lambriex-Schmitz et al., 2020).

IWB describes innovation-related behaviour enacted by employees, whereas IIC is proposed as the underlying capacity to organise and deploy relevant resources in response to innovation-related demands. The distinction therefore consists of

distinguishing capacity from enactment, not from different innovation activities. Although IWB literature conceptualises it as a multidimensional construct, empirical evaluations do not consistently support the statistical separation of its proposed stages. Kleysen and Street (2001), De Jong and Den Hartog (2010), Salessi (2021), and Al-Khaldi and Bachkirov (2025) report rather varying degrees of overlap in terms of the dimensions used. Accordingly, the dimensional structure of the proposed IIC construct still represents an empirical question, not an assumption of the ready-to-applied framework.

3 METHODOLOGY

3.1 Literature Review Approach

The study adopts an integrative literature review approach to synthesise conceptual, empirical, and meta-analytical articles to inform construct boundary clarification and identification of candidate capability domains for the proposed IIC framework. The review included componential and dynamic creativity models, person-context creativity studies, and state-of-the-science reviews of creativity and innovation in organisations as conceptual background for the terms creativity, innovation, and capability (Amabile, 1983, 2013; Woodman, Sawyer, & Griffin, 1993; Oldham & Cummings, 1996; Shalley, Zhou, & Oldham, 2004; Anderson et al., 2014; Amabile & Pratt, 2016). Another group of articles included classic models and measurement studies such as Scott and Bruce (1994), Janssen (2000), Kleysen and Street (2001), De Jong and Den Hartog (2010), and Lukes and Stephan (2017) which defined and measured the behavioural stages of individual innovation. The review also included meta-analytic and review-based contributions, including Hammond et al. (2011) and Parveen & Reddy (2024), which synthesise predictors of individual-level innovation. The third group of studies was made up of recent scale-development, validation, and context-specific studies that aimed at assessing how IWB measurement has been adopted across different sectors like education, IT support, hospitality, and even across different cultures such as at Arabic, Indonesian, Indian, and GCC-dominant workplaces (Lambriex-Schmitz et al., 2020; Salessi, 2021; Dahiya & Raghuvanshi, 2022; Gkontelos, Vaiopoulou, & Stamovlasis, 2022; Ayoub, Almahamid, & Al Salah, 2023; Parnitvitidkun, Ponchaitiwat, Chancharat, & Thoumrungroje, 2024; Al-Khaldi & Bachkirov, 2025; Dahiya, 2025; Etikariena et al., 2025). The last group consisted of studies on myriad of contextual factors like leadership, fairness, psychological empowerment, learning climate, knowledge sharing, innovation-supportive climate, agile HRM, enterprise social media, digital competence, knowledge management, AI, digital innovation capability, and AI-powered service innovation capability (Janssen, 2000; Tierney & Farmer, 2002; Huang & Li, 2021; Jönsson, Unterrainer, & Kähler, 2022; Abhari, Zarei, Parsons, & Estell, 2023; Huu, 2023; Kroh et al., 2024; Herlina, Budiansyah, Janah, & Adryana, 2024; Coetzee & Leach, 2025; Karkoulou & Boulos, 2025; Altaf,

Tariq, Waqas, Alvi, & Lyu, 2026; Elsaied, 2026; Shamaileh, Mohammad, Aityassine, Aladwan, & Vasudevan, 2026; Zhou et al., 2026).

Empirical and scale-development sources were used to identify candidate domains. Foundational conceptual sources, in turn, were used and retained purposively for construct-boundary clarification and tracking the development pathway of the major innovation model even when they fell outside the scope of the Scopus-derived empirical sample.

The database search was conducted in Scopus on 26 June, 2026 using eight predefined TITLE-ABS-KEY search strings covering creativity and innovation, innovation capability measurement, organisational–individual innovation relationships, employee and individual innovation, individual innovation capability and innovativeness, IWB measurement, IWB process stages, and individual-level innovation measurement. All searches were restricted to publications from 2020 to 2026 (PUBYEAR > 2019 AND PUBYEAR < 2027). For each search, results were sorted using the Scopus relevance ranking and the 50 highest-ranked records were exported, producing 400 raw articles. Records were deduplicated using DOI and title matching, leaving 374 unique records. The complete search strings are reported in Supplementary Table S1.

The unique records underwent relevance screening based on their direct contribution to the study’s conceptual scope including individual-level innovation, IWB dimensionality and measurement, innovation capability, scale development and validation, and personal, organisational, or technological conditions relevant to employee innovation. An intermediate shortlist of 75 records was produced, which was later reduced to 29 records based on the raw relevance score. All the articles with scores 10 or below were excluded from the shortlist. One additional recent study identified outside Scopus, Abun and Macaspac (2023), was purposively included because of its direct relevance to the conceptual framework. Other 14 articles included were legacy pre-2020 studies which provided foundational conceptual basis for these more modern models to allow for adequate tracing of the conceptual evolution of IIC. Then all 44 articles were coded by the author into a complete 25-attribute matrix which covered bibliographic characteristics, study design and level of analysis, construct definition and role, theoretical basis, dimensional structure, measurement strategy, sample and data collection, analytical methods, reliability and validity evidence, main findings, limitations, and relevance to framework development. Codebook for the attributes is provided in Supplementary Table S2, whereas the full study-level extraction matrix is provided in Supplementary Table S3. Because coding was done solely by a single author, coded entries were rechecked against the source studies during synthesis as opposed to employing interrater agreement.

3.2 Framework Development Approach

The framework was developed to synthesise fragmented literature varying in design, context, constructs, measures, and outcomes into an integrated conceptual architecture for informing subsequent IIC measurement development and validation. The framework development followed four steps aimed at generating the conceptual synthesis: construct boundary clarification, dimension mapping, conceptual positioning, relationship mapping. At the first step, terms such as creativity, OIC, individual innovativeness, IWB, and IIC were clarified to establish the conceptual boundaries of the proposed construct. Second stage was informed through the literature review and mapped domains across existing IWB and individual innovation models, logging both repeated as well as less consistently represented domains across studies such as opportunity exploration, idea generation, promotion/championing, implementation/application, realisation, investigation/refinement and idea sustainability/embedding (Kleysen & Street, 2001; Lukes & Stephan, 2017; Lambriex-Schmitz et al., 2020; Dahiya & Raghuvanshi, 2022; Parnitvitidkun et al., 2024; Dahiya, 2025). Third stage of the study placed capability into a conceptual continuum in between its antecedents, also called psychological drivers or resources, such as creative self-efficacy, motivation, psychological empowerment, and psychological capital, and its behavioural output, IWB, which serves to compare the behavioural outcomes for employees with similar personal resources. The last stage of framework development incorporated organisational conditions like autonomy, job complexity, fairness, leadership support, learning climate, risk tolerance, and knowledge sharing and technological conditions such as access to digital and AI tools, enterprise social-media functionality, information accessibility, AI-enabled knowledge-management support, technological integration, reliability, and training; and organisational conditions such as digital innovation capability, and AI-powered service innovation capability as enabling or constraining factors. This step positioned contextual organisational and technological conditions as proposed developmental and activation influences whose relationships with personal resources, IIC, and IWB can be tested in future empirical research. Accordingly, recurrence of innovation related domains across the reviewed studies was treated as evidence for their inclusion as candidate capability domains, rather than as evidence of factorial distinctiveness or empirical validity.

4 LITERATURE REVIEW AND MEASUREMENT LIMITATIONS

4.1 Individual Innovation and IWB Models

Literature on individual innovation at workplace has historically evolved from early creativity models which identified condition that enabled individuals create new ideas of value. Amabile's componential model suggested four predictor variables domain relevant skills, creativity-relevant processes, task motivation,

and the social environment to explain creative performance (Amabile, 1983, 2013). Woodman et al. (1993) expanded on this logic by imagining creativity within an organization as an interplay of individual, group, and organisational factors. Oldham and Cummings (1996) later showed that not every job was capable of producing creative performance from its employees and that the best organisational contexts for it would be jobs with high complexity and supportive staff. They used multiple creativity indicators, including supervisor rated creativity, patents, and suggestion-programme outputs. Tierney and Farmer's (2002) research centered around creative self-efficacy as a main predictor of creative performance, while Shalley et al. (2004) synthesised different sources to demonstrate that creativity depends on both personal and contextual characteristics. Although an important part of broader organisational creativity and innovation literature, the concept of creativity does not directly concern real-life application of ideas, and thus, these models lacked explanatory power needed to explain innovation at work (Anderson et al., 2014). Amabile and Pratt's (2016) dynamic componential model attempts to create a multidimensional path from creative idea development toward innovation outcomes using motivation, affect, meaningful work, progress, and the work environment as factor variables thereby connecting the notions of individual creativity with organisational innovation.

IWB research is yet another tradition within the individual innovation literature dates back to Scott and Bruce's (1994) model which treated individual innovative behaviour as a process affected by the factors such as leadership, work-group relations, problem-solving style, and climate for innovation. This model also introduced one of the earliest measurement scales assessing innovation in three dimensions: idea generation, idea promotion, and idea implementation. Janssen (2000) introduced what is now known as IWB with its nine-item IWB scale including three items, each for idea generation, idea promotion, and idea realization. Its relative simplicity led to the wider adoption of this framework, however, many studies treated this three-dimensional score as one due to their intercorrelated nature (Janssen, 2000; Salessi, 2021; Al-Khaldi & Bachkirov, 2025). Kleysen and Street (2001) expanded upon this model to include opportunity exploration, generativity, formative investigation, championing, and application, while De Jong and Den Hartog (2010) refined it to include idea exploration, idea generation, idea championing, and idea implementation. The former five-factor model had weak fit, whereas the latter four-dimensional IWB scale fit better than alternative models with dimensions still highly correlated. Lukes and Stephan (2017) separated employee innovative behaviour from innovation outcomes by developing the Innovative Behaviour Inventory and Innovation Support Inventory, with six stage model which included idea generation, idea search, idea communication, idea implementation starting activities, involving others, and overcoming obstacles. Lambriex-Schmitz et al. (2020) validated a 44-item multidimensional IWB for vocational teachers using Rasch analysis and CFA. It added idea sustainability domain, which was split into external dissemination and internal embedding, while idea realization was broken down to criterion-based implementation and learning-based communication, respectively. Salessi (2021)

ran Janssen's IWB scale on an Argentinian sample and found it was best represented as a unidimensional measure. Gkontelos, Vaiopoulou, and Stamovlasis (2022) further validated the model for Greek teachers and found support for factors such as idea generation, idea promotion, idea realisation, and idea sustainability, but not opportunity exploration. Ayoub, Almahamid, and Al Salah (2023) also validated a five-factor higher-education model but in the GCC context, keeping opportunity exploration, idea generation, idea promotion, idea realisation, and idea sustainability. Al-Khaldi and Bachkirov (2025) also validated an Arabic version of De Jong and Den Hartog's IWB scale concluding the poor fit for idea exploration, ending up in an eight-item unidimensional Arabic IWB scale.

IWB literature has also examined contextual conditions affecting innovation, including organisational climate, organisational trust, and perceived organisational support (Battistelli, Odoardi, Cangialosi, Di Napoli, & Piccione, 2022; Utomo et al., 2023). Individual and attitudinal conditions have also been examined, including job satisfaction and personality in relation to IWB (Mustafa, Coetzer, Ramos, & Fuhrer, 2021). While Janssen's (2000) analysis focused on employees' perceptions on effort–reward fairness, Hammond et al.'s (2011) meta-analysis confirmed the great role of individual differences, motivation, and job characteristics which specifically affected idea implementation. Huang and Li (2021) looked into small software firms and found that innovation climate affects employee's knowledge acquisition, dissemination, and responsiveness to knowledge while Phil-Thingvad and Klausen's (2021) research on public service organisation employees' found how the dimensions like idea generation, promotion, and realisation were influenced by the organisational conditions such as knowledge of innovation strategy, risk-tolerant culture, and autonomy. Jønsson, Unterrainer, and Kähler (2022) added that job autonomy and trust may support innovation through distributed leadership agency, whereas Herlina et al. (2024), Altaf et al. (2026), and Elsaied (2026) demonstrated the great role of other leadership styles such as transformational, servant, and virtuous leadership styles, respectively, on IWB through cognitive drivers like knowledge sharing, psychological empowerment, engagement, and moral identity.

Some studies showed sensitivity of IWB framework to matters like culture, sector, and technology adoption mindset. Nguyen, Ngo, and Gregory (2022) used individual innovation capability as a moderator of online knowledge sharing but measured it as a short unidimensional construct. Dahiya and Raghuvanshi (2022) validated a five-factor IWB model for Indian apparel manufacturing, which included opportunity exploration, idea generation, information investigation, idea championing, and idea implementation/application and later, Dahiya (2025) applied it for green IWB in Indian hospitality, Parnitvitidkun et al. (2024) employed an eight-dimensional IWB model for IT helpdesk support staff, including opportunity exploration, idea sharing, idea generation, idea implementation, idea organisation, idea learning, idea promotion, and idea realisation. Etikariena et al. (2025) developed an Indonesian intention-for-IWB scale favouring intention-based framework versus past behaviour-based one to

improve predictive power. Huu (2023), Abhari et al. (2023), Karkouliau and Boulos (2025) showed the role of digital competence, enterprise social media, knowledge management, AI use, respectively. Kroh et al. (2024) measured organisational digital innovation capability using seven dimensions, and Zhou et al. (2026) developed a higher-order AI-powered service innovation capability scale that included three dimensions.

Table 1 compares the proposed IIC framework with creativity, individual innovativeness, IWB, and organisational innovation capability models.

Table 1 – Comparison of IIC with neighbouring individual-innovation constructs

Construct/model	Typical dimensions	Key distinction from proposed IIC
Creativity	domain knowledge, creative processes, motivation, idea generation	Primarily concerns ideation rather than capacity across the full innovation process
Individual innovativeness	willingness to adopt, novelty orientation	Orientation towards innovation rather than capacity to perform innovation-process functions
Kleysen & Street (2001)	opportunity exploration, generativity, formative investigation, championing, application	Provides several process domains incorporated into the proposed architecture, but treats them behaviourally
de Jong & den Hartog (2010)	idea exploration, generation, championing, implementation	Measures what employees report doing rather than separating underlying capability from enactment
Lukes & Stephan (2017)	idea generation, search, communication, implementation, involving others, overcoming obstacles	Explicitly separates behaviour from support, but not latent capability from actual behaviour
Lambriex-Schmitz et al. (2020)	exploration, generation, promotion, realisation, sustainability	Introduces sustainability but retains a behavioural measurement referent
Organisational innovation capability	routines, resources, technologies, processes	Organisational rather than individual level of analysis

4.2 Research Gaps and Contribution

The reviewed literature provides a strong foundation for understanding, measuring and conceptualising creativity, IWB, and the conditions that support employee innovation. However, the existing studies have not sufficiently specified IIC as a distinct concept or established a conceptual architecture from which a systematic measurement model can be developed. The creativity models explain how individuals produce novel and useful ideas, while the behaviour models fills in the gap of capturing what employees actually do, such as generating, promoting, and implementing ideas (Amabile, 1983, 2013; Oldham & Cummings, 1996; Amabile & Pratt, 2016; Scott & Bruce, 1994; Janssen, 2000; de Jong & den Hartog, 2010). OIC models explain firm-level resources and routines, but they often do not

specify the employee-level capability through which innovation is realised (Kroh et al., 2024; Zhou et al., 2026). That being said, individual innovation capability, a concept focusing on predicting whether employees have the underlying capability to innovate as opportunities present themselves, has essentially remained positioned between creativity, innovativeness, IWB, and OIC without being sufficiently developed as its own construct. A direct consequence of this for organisations might be the risk of omitting the capable employees who either failed to demonstrate their abilities in lieu of psychological and organisational conditions in favour of those who had the right opportunities and performed accordingly. The proposed framework therefore introduces unequal opportunity as a testable explanation for the difference between the observed IWB and underlying capability. Proposed contribution is thus about separating opportunity and contextual conditions explicitly from capability and its behavioural enactment.

The second gap is dimensional. Existing studies disagree on the structure of individual innovation-related behaviour. Some models propose three stages, others four, five, six, seven, or eight dimensions, including the dimensions such as idea generation, idea promotion, idea realization, opportunity exploration, formative investigation, idea championing, idea implementation, idea search, involving others, overcoming obstacles, idea learning, and idea sustainability (Janssen, 2000; Kleysen & Street, 2001; de Jong & den Hartog, 2010; Lukes & Stephan, 2017; Lambriex-Schmitz et al., 2020; Parnitvitidkun et al., 2024). Additionally, the empirical results of some studies support multidimensional models, while others find that dimensions collapse into one broader factor (Dahiya & Raghuvanshi, 2022; Ayoub et al., 2023; Parnitvitidkun et al., 2024; Dahiya, 2025; de Jong & den Hartog, 2010; Salessi, 2021). For instance, De Jong and Den Hartog (2010) found strong correlations among dimensions and Salessi (2021) supported a unidimensional Janssen scale; while Dahiya and Raghuvanshi (2022), Ayoub et al. (2023), Parnitvitidkun et al. (2024), and Dahiya (2025) supported multidimensional structures. This inconsistency suggests that the field lacks agreement on whether individual innovation should be measured as a single construct, a set of stages, or a higher-order capability, and therefore, while creating a new framework it is crucial to enable its theoretical multidimensionality as well as making sure that it is empirically testable as a possible higher-order construct.

The third gap involves the fact that many scale development and measurement models do treat cognitive and psychological drivers as external antecedents, not a contextually ingrained part of individual innovation. However, literature supports that individual innovation is shaped, not simply affected by leadership, autonomy, fairness, psychological empowerment, creative self-efficacy, knowledge sharing, organisational climate, learning climate, and risk tolerance (Tierney & Farmer, 2002; Hammond et al., 2011; Huang & Li, 2021; Jönsson et al., 2022; Herlina et al., 2024; Coetzee & Leach, 2025; Altaf et al., 2026; Elsaied, 2026). Therefore, integrating them into a capability perspective could help bridging the

gap between the measurement of behaviour and the conditions that make such behaviour possible.

The fourth gap concerns how existing individual-level IWB scales designed before AI-enabled and digitally mediated work became central to innovation do not consider whether current measures can sufficiently capture innovation capability in modern workplaces. Digital competence, enterprise social media, knowledge management systems, AI tools, and AI-powered service innovation capability increasingly shape how employees access information, collaborate, generate ideas, and implement solutions (Huu, 2023; Abhari et al., 2023; Karkoulian & Boulos, 2025; Zhou et al., 2026). Even though the rate of change does not automatically render older scales obsolete, as evidenced by many recent studies that still rely on the older frameworks of measurement, it suggests that the existing frameworks are incomplete at the very least and need refinement.

Taken together, the reviewed literature provides extensive measures of enacted innovative behaviour but does not isolate the individual-level capacity underlying such behaviour from its personal-resource antecedents and contextual opportunities. This provides basis for proposing IIC as a distinct conceptual architecture for future measurement development.

5 PROPOSED MULTIDIMENSIONAL FRAMEWORK

Referring to the discussion of conceptual terms and review of research gaps performed previously, the present study proposes a multidimensional conceptual framework of IIC for future measurement development and empirical validation. It has four main components: personal innovation resources, IIC, organisational and technological development and activation conditions, and IWB, followed by innovation outputs and or workplace impact. The first conceptual component concerns personal innovation resources, which are the internal individual-level drivers that provide foundation from which IIC develop. The second component is a construct that represents individual's latent capability, IIC, which builds on six dimensions that consists of classic IWB stages together with some dimensions that appeared in literature revision but were not systematically tested: opportunity exploration, idea generation, idea development, idea mobilisation, idea realisation, and idea sustainment. Third component, IWB, represents observable enactment of the same stages of innovation. Thus, while IIC measures the capacity of a person to engage in those six dimensions, IWB is concerned with the question whether the measured capability across those actions was actually enacted in specific period and if yes, also the level of intensity by which it was performed. Fourth component represents the contextual conditions, manifested in organisational and technological factors that enable, or constrain the capability development as well as the activation of the dimensions attributes allowing for the conversion of capability into behaviour across the given dimensions.

5.1 Core Dimensions of Individual Innovation Capability

The proposed framework conceptualises individual innovation capability as a multidimensional construct consisting of six core dimensions: opportunity exploration, idea generation, idea development, idea mobilisation, idea realisation, and idea sustainment with some of the later stages defined in two facets. These dimensions and their facets taken together synthesise the main stages identified across classic and recent IWB models: opportunity exploration is defined as the capability to recognise problems, search for opportunities, notice emerging needs, and identify areas where improvement is possible; idea generation refers to the capability to produce novel ideas, solutions, procedures, or approaches of value; idea development is the capability to search for information, assess feasibility, evaluate advantages and disadvantages, learn from feedback, and improve ideas before implementation; idea mobilisation referring to the social capability to communicate ideas, gain support, persuade colleagues or managers, build coalitions, and mobilise resources; idea realisation is the capability to transform ideas into practice, develop plans, test solutions, apply changes, and integrate new practices into daily work; idea sustainment implies the capability to maintain, disseminate, institutionalise, and improve innovations over time.

The framework separates idea development, mobilisation, realisation and sustainment into two facets of their own. Idea investigation and validation is the first step in the process of idea development and serves as the first serious attempt at exploring the idea through research and other people's and even literature's perspectives. Following the investigation and validation, idea refinement and elaboration facets render the idea ready for its immediate mobilisation by designing a clear step-by-step plan that specifies how the idea would work in practice and then revise it based on the evidence and feedback while also identifying potential risks and threats. After the idea is sufficiently developed, idea mobilisation domain begins with promotion and communication through which an employee presents the idea in front of the test audience, usually their colleagues, to incite feedback and preapproval. Championing and resource mobilisation facet of mobilisation goes beyond communication by building active support for the idea, securing funds and material resources needed for idea realisation. Realisation is simply made up of initiation of implementation – using acquired resources in preparation for application – and operational application of the idea. The final stage, idea sustainment, involves idea continuation and adaptation, which allows the idea to be continually applied through changing circumstances, sealed by idea embedding and diffusion which helps idea to engender multiple uses across multiple industrial and cultural uses. Idea sustainment is distinguished from an innovation outcome because it concerns the capacity to maintain, adapt, embed and diffuse an innovation after initial implementation. Actual continuation or diffusion constitutes enacted behaviour, whereas resulting improvements in performance, quality, products or services constitute downstream outcomes.

Table 2 provides a summary for the inclusion and exclusion boundaries used for distinguishing the six candidate IIC domains.

Table 2 – Conceptual boundaries of the candidate IIC domains

Candidate domain	Includes	Excludes
Opportunity exploration	detecting problems, unmet needs and improvement opportunities	evaluating or modifying an already identified idea
Idea generation	producing novel and potentially useful alternatives	evaluating feasibility or selecting among developed alternatives
Idea development	investigation, validation, feasibility assessment, refinement and elaboration	generating the initial idea; securing stakeholder support
Idea mobilisation	communicating, championing, building coalitions and securing resources	physically implementing or applying the idea
Idea realisation	implementation initiation, testing and operational application	maintaining an already implemented innovation over time

5.2 Differences between the Components of the IIC Framework

Personal innovation resources describe what employees possess, IIC describes what they can integrate and deploy, IWB describes what they actually do under specific workplace conditions, and contextual conditions point to the factors that may influence employee's ability to develop capability and/or convert it to IWB. This distinction introduces the assumption of inequality of opportunity into the explanation of individual innovation because observation of lower IWB scores could be due to the reasons other than for low innovation capability like the lack of autonomy, time, information, support, or technological access. Innovation opportunity exposure is treated separately from both IIC and contextual support. It refers to the extent to which an employee encounters or is given access to situations in which innovation-related capacity can be enacted, such as identifiable improvement problems, permission to propose changes, access to relevant stakeholders, participation in implementation, and sufficient task responsibility. Future empirical studies should measure such exposure independently during the same time period as IWB so that low behavioural enactment can be distinguished from lack of opportunity to act. The framework therefore proposes that similar personal resources can produce different behavioural outcomes and why low observed IWB cannot automatically be interpreted as low innovation capability.

Under the framework, personal innovational resources include domain knowledge, creativity-relevant thinking skills, motivation, self-efficacy, empowerment, psychological capital, openness, and digital competence. However, the attributes such as autonomy, psychological safety, leadership support, access to time and knowledge, and fair recognition are treated as organisational development and activation conditions even though some of them might seem like internal resources. Technological development and activation conditions include the usability, integration, reliability, explainability, associated training, privacy implications, and potential to encourage overreliance of digital and AI tools.

Together, the interaction of these components leads to the innovation outputs or workplace impacts (Figure 1).

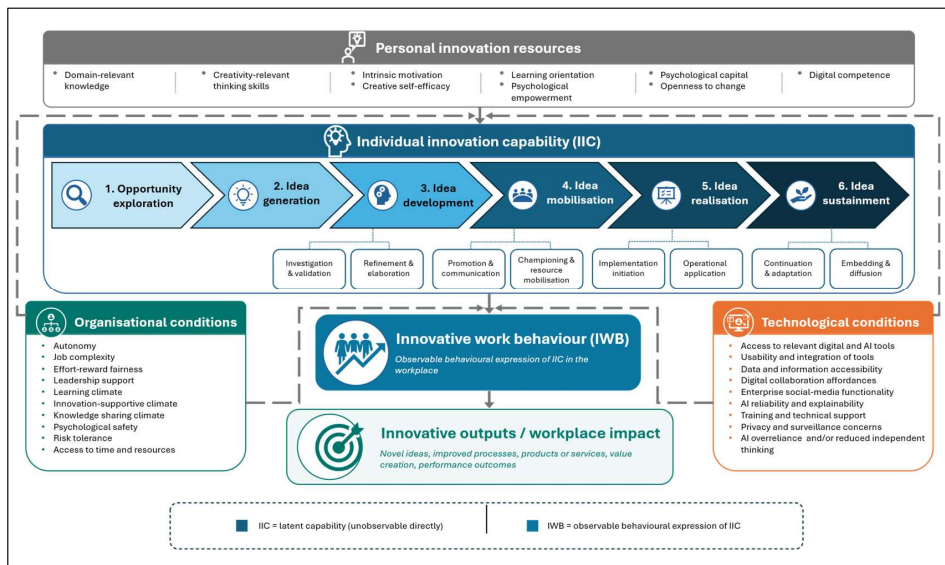


Figure 1 – Detailed framework of individual innovation capability

5.3 Conceptual Propositions

Because the present article develops a conceptual framework rather than testing primary empirical data, it is expressed through propositions that translate the reviewed literature into a coherent model of IIC as opposed to statistical hypotheses.

Proposition 1: Six candidate capability domains represent distinguishable but related components of IIC: opportunity exploration, idea generation, idea development, idea mobilisation, idea realisation, and idea sustainment.

The basis for conceptualising individual innovation capability as a multidimensional process capability expressed through these dimensions is rooted in how classic IWB models identify idea generation, promotion, and realisation as central behavioural stages, combined with later models adding opportunity exploration, championing, implementation, information investigation, idea search, overcoming obstacles, and sustainability.

Proposition 2: Personal innovation resources positively contribute to the development of individual innovation capability.

Personal innovation resources such as creativity-relevant skills, intrinsic motivation, creative self-efficacy, psychological empowerment, and psychological capital form the technical and psychological base of individual innovation capability, supporting employees' ability to engage in innovation-related work. This proposition is supported both by the earlier research and studies such as

componential theory, findings on creative self-efficacy, as well as by more recent studies which established that psychological empowerment mediates the relationship between servant leadership and IWB.

Proposition 3: Supportive organisational and technological development conditions positively contribute to the development of IIC.

Personal innovation resources do not automatically translate into innovation capability; their development depends on how workplace conditions enable or constraint their deployment.

Proposition 4: Innovation opportunity exposure constitutes a boundary condition for the behavioural enactment of IIC.

The importance of this proposition is displayed through the role of the access to opportunities in influencing the innovation outputs. Employees with better access to innovation-related tasks, stakeholders, decision-making and implementation activities will perform higher than the same employees with similar levels of IIC who lack the access to the same opportunities.

Proposition 5: IIC positively predicts subsequent IWB when employees are exposed to relevant opportunities for innovation.

IWB is the observable expression of individual innovation capability, which is consistent with literature-based definitions, but it also extends them by positioning behaviour as the outcome of a broader capability. This proposition suggests that employees who can recognise opportunities, generate ideas, develop them, mobilise them, realise them, and sustain them are more likely to display innovative behaviours in their work roles.

Proposition 6: Supportive organisational and technological activation conditions strengthen the relationship between IIC and IWB, while IWB is expected to contribute positively to subsequent innovation outputs and workplace impact.

The same level of individual innovation capability may produce different levels of observed IWB depending on contextual conditions. Capability may remain unrealised when employees lack autonomy, support, resources, psychological safety, or technological access, whereas supportive leadership, learning climate, innovation-supportive culture, knowledge-sharing routines, and effective digital tools may facilitate its conversion into behaviour.

Together, these propositions define individual innovation capability as a multidimensional, person-context construct clarifying the theoretical sequence of the model through four conceptual components: personal innovation drivers contributing to capability; organisational and technological activation conditions shaping its development and expression; and IWB representing its observable outcome.

6 DISCUSSION

6.1 Theoretical Implications

Comparison with established IWB models reveals both continuity and a substantive conceptual departure. Classic IWB models like Janssen (2000), de Jong and den Hartog (2010) treat idea generation, promotion, and realisation as behaviours whereas the proposed framework strategically relocates them and adds opportunity exploration, idea development, idea mobilisation, and idea sustainment to the capability level. Opportunity exploration dimension appears in Kleysen and Street (2001), De Jong and Den Hartog (2010) idea exploration, and later multidimensional instruments applied for education, manufacturing, IT, and green hospitality (Lambriex-Schmitz et al., 2020; Dahiya & Raghuvanshi, 2022; Parnitvitidkun et al., 2024; Dahiya, 2025). Although some validation studies failed to establish exploration as a separate empirical factor (Gkontelos et al., 2022; Al-Khaldi & Bachkirov, 2025), it remains conceptually important and incorporated into the model. Idea generation is central to creativity theory, as it provides for the strongest bridge between creativity and innovation, appearing consistently in IWB models (Amabile, 1983; Janssen, 2000; de Jong & den Hartog, 2010; Anderson et al., 2014). Idea development activity is strongly visible in Kleysen and Street's (2001) formative investigation and in Dahiya and Raghuvanshi's (2022) and Dahiya's (2025) information investigation dimension, as well as many studies on knowledge management, learning climate, and digital competence, which indirectly support the inclusion of this dimension to the framework, as evidenced by the employees' need for access to knowledge and learning processes to convert ideas into workable innovations (Huang & Li, 2021; Huu, 2023; Karkouloulian & Boulos, 2025). Idea mobilisation stage appears in early literature such as Scott and Bruce (1994), Janssen (2000), and even in De Jong and Den Hartog (2010), and Lukes and Stephan (2017) and is important as it recognises the role of social approval, and collaboration for making workplace innovation happen. Idea realisation dimension appears across nearly all IWB models (Janssen, 2000; Kleysen & Street, 2001; de Jong & den Hartog, 2010; Dahiya & Raghuvanshi, 2022). Conversely, idea sustainment is a rather new step that is increasingly gaining traction with the recent IWB literature. Lambriex-Schmitz et al. (2020) added idea sustainability to educational IWB by distinguishing external dissemination and internal embedding. Gkontelos et al. (2022) and Ayoub et al. (2023) also supported sustainability-oriented IWB dimensions. These elements have appeared separately in multidimensional models but have rarely been assembled into one capability architecture (Kleysen & Street, 2001; Lambriex-Schmitz et al., 2020; Parnitvitidkun et al., 2024).

Apart from separating its IWB and IIC components, the framework also differentiates between personal innovation resources and capability components. This separation is important in terms of resolving an ambiguity that remains within much of the existing literature which mostly treats the capability the same as resources. The literature identifies several recurring personal innovation resources,

including creativity-relevant skills, intrinsic motivation, creative self-efficacy, psychological empowerment, psychological capital, knowledge resources, and openness toward change. Amabile's (1983, 2013) approach suggests that such drivers include domain-relevant skills, creativity-relevant processes, and task motivation; Oldham and Cummings (1996) specify that job complexity, supportive management, supervision that allows for autonomy are important factors for innovation at workplace; Tierney and Farmer (2002) add creative self-efficacy to the list of the creative performance predictors. This is supported by later studies showing that creative self-efficacy is linked to innovation intention and behaviour (Shamaileh et al., 2026), and that psychological empowerment mediates the relationship between servant leadership and IWB (Altaf et al., 2026). Another pillar of personal innovation resources is psychological capital, as employees with higher hope, efficacy, resilience, and optimism are shown to pursue innovation despite barriers (Altaf et al., 2026). These findings suggest that individual innovation capability requires more than technical knowledge but also employees' confidence, motivation and other cognitive resources when it comes to producing useful new ideas, engaging in non-routine work, and acting under uncertainty. However, many of these studies have treated these factors as contextual influences or antecedents to IWB, and in some cases as proxies for the capability to perform innovative work. Accordingly, the proposed framework treats personal innovation resources as antecedent factors of capability itself, not the enacted behaviour because one still needs to translate these resources into capability well before converting the latter to the behaviour.

The framework adopts person-context interpretation of capability, treating its fourth component – organisational and technological enabling/constraining conditions – as independent variables influencing IIC. This preserves the individual nature of the construct while also acknowledging the external factors that affect its development and conversion into behaviour. This is consistent with Scott and Bruce's (1994) finding that leadership, workgroup relations, and climate shape individual innovative behaviour, and with Hammond et al.'s (2011) metaanalysis showing that motivation, job characteristics, leadership, climate, resources, and support predict individual innovation. Organisational conditions include autonomy, job complexity, fairness, leadership support, learning climate, innovation-supportive climate, knowledge sharing, and risk tolerance as per literature (Oldham & Cummings, 1996; Janssen, 2000; Lambriex-Schmitz, Van Der Klink, Beausaert, & Segers, 2025; Coetzee & Leach, 2025). According to the series of leadership studies, transformational, servant, and virtuous leadership styles can be instrumental in supporting IWB through tacit knowledge sharing, psychological empowerment, work engagement, and moral identity (Herlina et al., 2024; Altaf et al., 2026; Elsaied, 2026). Technological conditions include factors such as digital competence, access to enterprise social media, knowledge management tools, which support innovative behaviour, ideation, collaboration, given that employees have the right training, willingness to engage and climate required to convert capability to observable innovative behaviour (Huu, 2023; Abhari et al., 2023; Karkoulian & Boulos, 2025). Therefore, the main contribution

of the study is its separation of resources, deployable capability, enacted behaviour and the contextual development and activation conditions. Future validation should therefore test not only competing dimensional structures, but also whether IIC remains empirically distinct from personal resources and IWB, and whether activation conditions affect particular dimensions differently.

6.2 Practical Implications

If empirically validated, the framework could provide organisations with a new diagnostic structure for identifying why employee innovation does or does not occur. The reasons why an employee scores low on IWB could reflect more than general lack of innovativeness such as insufficient personal resources, weak capability in a particular innovation stage, restrictive organisational conditions, unsuitable technological systems, or simply limited opportunity to act, allowing the organisation to direct development resources towards the right problem. Personal resources can inform recruitment and development; future operationalisations of IIC may combine capability-oriented statements, scenarios, work samples, or multisource ratings; IWB should be measured as time-bounded enactment; and outputs should be evaluated separately through implemented improvements or workplace effects. This would reduce the risks of penalising capable employees whose opportunities were not equally enabling as with many others who eventually end up showing higher IWB outcomes.

In practice, assessment should therefore consider a more robust capability profile rather than a minimalist innovation score consisting of visible innovation outcomes alone. That could also help the organisation manage its human resources more efficiently as well as more effectively by separating the employees who are stronger in recognising opportunities and generating ideas from those more successful in investigating feasibility, mobilising support, or embedding improvements. Idea development weaknesses may require training in searching information, experimenting with different edge cases, evaluating the evidence, or integrating feedback more effectively. Weaknesses in mobilisation may require stakeholder analysis, persuasive communication, coalition building, and resource negotiation, whereas realisation and sustainment weaknesses may call for project management, implementation planning, monitoring, adaptation, and knowledge-transfer support. Applying this stage-specific diagnostics approach is consistent with the evidence from the literature that different forms of support may be more important at different points in the innovation process (Lambriex-Schmitz et al., 2020).

A staged validation is therefore required before practical diagnostic use. First, candidate items should be derived from the six domain definitions and interviews while explicitly referring to the capacity, addressing only one capability domain at a time and excluding the contextual conditions and innovation outcomes. Second, expert review should determine content relevance. Third, exploratory factor analysis (EFA) should be conducted on pilot data, followed by confirmatory factor

analysis (CFA) using an independent sample to compare one-factor, correlated six-factor, higher-order, and composite specifications. Fourth, reliability and convergent and discriminant validity should be tested against constructs like creative self-efficacy, individual innovativeness and IWB. Fifth, measurement invariance, longitudinal predictive validity and incremental validity should be examined across occupations, cultures and other demographic groups.

7 CONCLUSION

This article addresses conceptual fragmentation surrounding innovation at individual level by proposing a multidimensional conceptual architecture of IIC. While the existing research has provided strong foundations through creativity models, IWB scales, OIC perspectives, and studies of personal, organisational, and technological antecedents, these traditions have generally remained separated and did not distinguish between what employees can do and actually do which has been the main outcome of the IWB research. The capability residing at the individual level and connecting these streams has remained insufficiently specified.

The proposed framework distinguishes three sequential components of individual innovation – personal innovation resources, IIC, and IWB – and fourth cross-cutting component – contextual (organisational and technological) development and activation conditions. It defines personal innovation resources as employee's knowledge, skills, and psychological attributes which lay the foundation for innovation capability. IIC is conceptualised as individual's integrated capacity to organise and deploy those resources across six candidate capability domains: opportunity exploration, idea generation, idea development, idea mobilisation, idea realisation, and idea sustainment. IWB is defined as the actual enactment of this capacity during a specified period. Organisational and technological development and activation conditions operate as factors enabling or constraining the development of IIC, and its conversion to observable IWB, while innovation outputs and workplace impact are viewed as downstream outcomes of this process.

The framework therefore offers three principal contributions: it clarifies the conceptual boundaries among creativity, personal innovation resources, IIC, and IWB; it synthesises fragmented models into an integrated conceptual structure and proposes six candidate capability domains for future empirical validation; and it incorporates inequality of opportunity assumption across all sequential components of individual innovation. The proposed six-domain structure should therefore be interpreted as a conceptual architecture for future operationalisation, not as an empirically validated measurement model. The framework remains conceptual and provides a theoretical basis for future measurement development and empirical validation to determine whether IIC can become a theoretically distinct and practically useful construct for understanding how employees contribute to workplace innovation.

ACKNOWLEDGEMENTS

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. However, the author expresses gratitude to the for its comprehensive support of her research activities.

REFERENCES

- Abhari, K., Zarei, M., Parsons, M., & Estell, P. (2023). Open innovation starts from home: The potentials of enterprise social media (ESM) in nurturing employee innovation. *Internet Research*, 33(3), 945–973. <https://doi.org/10.1108/INTR-08-2021-0556>
- Abun, D., & Macaspac, L. G. R. (2023). Promoting innovative work behavior through innovative work environment. *Divine Word International Journal of Management and Humanities (DWIJMH)*, 2(3), 374–412. <https://doi.org/10.62025/dwijmh.v2i3.33>
- Acosta-Prado, J. C., Romero Severiche, A. K., & Tafur-Mendoza, A. A. (2021). Conditions of knowledge management, innovation capability and firm performance in Colombian NTBFs: A measurement scale. *VINE Journal of Information and Knowledge Management Systems*, 51(2), 218–235. <https://doi.org/10.1108/VJIKMS-09-2019-0142>
- Al-Khaldi, S. O., & Bachkirov, A. A. (2025). Enhancing HRM research on innovation: Psychometric properties and validation of the Arabic version of innovative work behavior scale. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-01-2025-0005>
- Altaf, S., Tariq, A., Waqas, M., Alvi, K. M., & Lyu, B. (2026). Servant leadership and innovative work behavior. *Discover Psychology*, 6(1), 157. <https://doi.org/10.1007/s44202-026-00688-6>
- Amabile, T. M. (1983). The social psychology of creativity: A componential conceptualization. *Journal of Personality and Social Psychology*, 45(2), 357–376. <https://doi.org/10.1037/0022-3514.45.2.357>
- Amabile, T. M. (2013). Componential theory of creativity. In E. H. Kessler (Ed.), *Encyclopedia of management theory* (pp. 134–138). Thousand Oaks, CA: SAGE Publications.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157–183. <https://doi.org/10.1016/j.riob.2016.10.001>
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, 40(5), 1297–1333. <https://doi.org/10.1177/0149206314527128>

Ayoub, A. E. A. H., Almahamid, S. M., & Al Salah, L. F. (2023). Innovative work behavior scale: Development and validation of psychometric properties in higher education in the GCC countries. *European Journal of Innovation Management*, 26(1), 119–133. <https://doi.org/10.1108/EJIM-04-2021-0176>

Battistelli, A., Odoardi, C., Cangialosi, N., Di Napoli, G., & Piccione, L. (2022). The role of image expectations in linking organizational climate and innovative work behaviour. *European Journal of Innovation Management*, 25(6), 204–222. <https://doi.org/10.1108/EJIM-01-2021-0044>

Coetzee, M., & Leach, G. (2025). Navigating the conduciveness of the internal work environment for creativity and innovation. *Acta Commercii*, 25(1). <https://doi.org/10.4102/ac.v25i1.1428>

Dahiya, R. (2025). Going green at work: A psychometric assessment of the green innovative work behaviour scale. *International Journal of Organizational Analysis*, 33(8), 2649–2672. <https://doi.org/10.1108/IJOA-01-2024-4164>

Dahiya, R., & Raghuvanshi, J. (2022). Validation of innovative work behaviour scale: Indian apparel manufacturing sector. *Asia Pacific Management Review*, 27(2), 120–136. <https://doi.org/10.1016/j.apmr.2021.06.002>

de Jong, J., & den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity & Innovation Management*, 19(1), 23–36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>

Elsaied, M. (2026). How and when virtuous leadership promotes innovative work behavior? *EuroMed Journal of Business*. <https://doi.org/10.1108/EMJB-05-2025-0209>

Etikariena, A., Kusuma, A. H., Dewi, A. A. I. R. K., Shabrina, D. N., Hafizhah, R., & Seno, Z. R. (2025). Measuring the intention for innovative work behavior: Scale development for Indonesian employees. *JP3I (Jurnal Pengukuran Psikologi Dan Pendidikan Indonesia)*, 14(1), 116–131. <https://doi.org/10.15408/jp3i.v14i1.38023>

Gkontelos, A., Vaiopoulou, J., & Stamovlasis, D. (2022). Teachers' innovative work behavior scale: Psychometric properties of the Greek version and measurement invariance across genders. *Social Sciences*, 11(7), Article 306. <https://doi.org/10.3390/socsci11070306>

Hammond, M. M., Neff, N. L., Farr, J. L., Schwall, A. R., & Zhao, X. (2011). Predictors of individual-level innovation at work: A meta-analysis. *Psychology of Aesthetics, Creativity, and the Arts*, 5(1), 90–105. <https://doi.org/10.1037/a0018556>

- Herlina, M. G., Budiansyah, M. A., Janah, F. R., & Adryana, D. Q. P. (2024). Unlocking employee innovative behaviour: Exploring the power of transformational leadership and tacit knowledge sharing among Indonesian white-collar workers. *Economics and Culture*, 21(1), 29–45. <https://doi.org/10.2478/jec-2024-0003>
- Huang, H., & Li, F. (2021). Innovation climate, knowledge management, and innovative work behavior in small software companies. *Social Behavior and Personality: An International Journal*, 49(4), 1–17. <https://doi.org/10.2224/sbp.9780>
- Huu, P. T. (2023). Impact of employee digital competence on the relationship between digital autonomy and innovative work behavior: A systematic review. *Artificial Intelligence Review*, 56(12), 14193–14222. <https://doi.org/10.1007/s10462-023-10492-6>
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287–302. <https://doi.org/10.1348/096317900167038>
- Jønsson, T. F., Unterrainer, C. M., & Kähler, H. G. (2022). Do autonomous and trusting hospital employees generate, promote and implement more ideas? The role of distributed leadership agency. *European Journal of Innovation Management*, 25(1), 55–72. <https://doi.org/10.1108/EJIM-08-2019-0234>
- Karkouliau, S. K., & Boulos, R. (2025). The moderating role of artificial intelligence on the relationship between knowledge management and employees' innovative work behavior. *Journal of Knowledge Management*, 30(6), 2215–2237. <https://doi.org/10.1108/JKM-04-2025-0606>
- Kleysen, R. F., & Street, C. T. (2001). Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, 2(3), 284–296. <https://doi.org/10.1108/EUM0000000005660>
- Kroh, J., Globocnik, D., Schultz, C., Holdhof, F., & Salomo, S. (2024). Micro-foundations of digital innovation capability: A mixed method approach to develop and validate a multi-dimensional measurement instrument. *Technological Forecasting and Social Change*, 198, Article 122942. <https://doi.org/10.1016/j.techfore.2023.122942>
- Lambriex-Schmitz, P., Van Der Klink, M. R., Beausaert, S., Bijker, M., & Segers, M. (2020). Towards successful innovations in education: Development and validation of a multi-dimensional innovative work behaviour instrument. *Vocations and Learning*, 13(2), 313–340. <https://doi.org/10.1007/s12186-020-09242-4>
- Lambriex-Schmitz, P., Van Der Klink, M. R., Beausaert, S., & Segers, M. (2025). Towards sustainable innovations: Exploring the role of learning climate for innovative work behaviour. *Human Resource Development International*, 1–21. <https://doi.org/10.1080/13678868.2025.2517012>

- Lawson, B., & Samson, D. (2001). Developing Innovation Capability in Organisations: A Dynamic Capabilities Approach. *International Journal of Innovation Management*, 5(3), 377–400. <https://doi.org/10.1142/S1363919601000427>
- Lukes, M., & Stephan, U. (2017). Measuring employee innovation: A review of existing scales and the development of the innovative behavior and innovation support inventories across cultures. *International Journal of Entrepreneurial Behavior & Research*, 23(1), 136–158. <https://doi.org/10.1108/IJEBr-11-2015-0262>
- Mustafa, M., Coetzer, A., Ramos, H. M., & Fuhrer, J. (2021). Exploring the effects of small- and medium-sized enterprise employees' job satisfaction on their innovative work behaviours: The moderating effects of personality. *Journal of Organizational Effectiveness: People and Performance*, 8(2), 228–250. <https://doi.org/10.1108/JOEPP-07-2020-0133>
- Nguyen, T.-M., Ngo, L. V., & Gregory, G. (2022). Motivation in organisational online knowledge sharing. *Journal of Knowledge Management*, 26(1), 102–125. <https://doi.org/10.1108/JKM-09-2020-0664>
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607–634. <https://doi.org/10.2307/256657>
- Parnitvitidkun, P., Ponchaitiwat, K., Chancharat, N., & Thoumrungroje, A. (2024). Understanding IT professional innovative work behavior in the workplace: A sequential mixed-methods design. *Journal of Open Innovation: Technology, Market, and Complexity*, 10(1), 100231. <https://doi.org/10.1016/j.joitmc.2024.100231>
- Parveen, S. S., Reddy, A. V. (2024). Unravelling the concept of innovative work behavior: A critical review. *Organizational Psychology*, 14(1), 109–119. <https://doi.org/10.17323/2312-5942-2024-14-1-109-119>
- Phil-Thingvad, S., & Klausen, K. K. (2021). Managing the implementation of innovation strategies in public service organisations: How managers may support employees' innovative work behaviour. In *Managing knowledge, absorptive capacity and innovation: Volume 37 (pp. 155–183)*. London, England: World Scientific. https://doi.org/10.1142/9781800610316_0006
- Salessi, S. (2021). Comportamiento innovador en el trabajo: Análisis factorial confirmatorio de la Escala de Janssen. *Interdisciplinaria: Revista de Psicología y Ciencias Afines*, 38(1), 7–21. <https://doi.org/10.16888/interd.2021.38.1.1>
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607. <https://doi.org/10.2307/256701>

- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of Management*, 30(6), 933–958. <https://doi.org/10.1016/j.jm.2004.06.007>
- Shamaileh, N. A., Mohammad, S. I., Aityassine, F. L. Y., Aladwan, S. I., & Vasudevan, A. (2026). Fostering employees' innovative work behavior intentions: The roles of agile human resource management systems, innovation-supportive climate, and creative self-efficacy. *International Review of Management and Marketing*, 16(4), 484–493. <https://doi.org/10.32479/irmm.23836>
- Tierney, P., & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal*, 45(6), 1137–1148. <https://doi.org/10.2307/3069429>
- Utomo, H. J. N., Irwantoro, I., Wasesa, S., Purwati, T., Sembiring, R., & Purwanto, A. (2023). Investigating The Role of Innovative Work Behavior, Organizational Trust, Perceived Organizational Support: An Empirical Study on SMEs Performance. *Journal of Law and Sustainable Development*, 11(2), e417. <https://doi.org/10.55908/sdgs.v11i2.417>
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18(2), 293–321. <https://doi.org/10.2307/258761>
- Zhou, J., Zhang, Y., & Wang, H. Y. (2026). Development of the artificial intelligence powered service innovation capability scale. *The Service Industries Journal*, 1–31. <https://doi.org/10.1080/02642069.2026.2681048>

ABOUT THE AUTHOR

Laman Gasimzade ORCID: 0009-0005-5149-3620 – MSc., doctoral researcher in Business and Management at the Hantos Elemér Doctoral School of Business, Management and Regional Sciences, Faculty of Economics, University of Miskolc, Miskolc, Hungary, e-mail: laman.gasimzada97@gmail.com.

CONFLICTS OF INTEREST

The author declares that she has no conflict of interest. The funders had no role in the design of the study, in the collection, analysis, or interpretation of data, in the writing of the manuscript, or in the decision to publish the results.

DISCLOSURE OF ARTIFICIAL INTELLIGENCE ASSISTANCE

The author acknowledges the use of artificial intelligence tools in the preparation of this manuscript. Specifically, ChatGPT by OpenAI was utilised to support linguistic refinement. All AI-assisted content was carefully reviewed, edited, and validated by the author to ensure scholarly integrity, originality, and compliance with ethical standards. The author affirms full responsibility for the content of the manuscript, including any material generated or supported by artificial intelligence.



© 2026 by the authors. Submitted for possible open-access publication under the Terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).