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**INNOVATIVE WORK BEHAVIOR AND
ORGANIZATIONAL LEADERSHIP IN THE
CONTEXT OF INTELLECTUAL CAPITAL**

Innovaatiline töökäitumine ja organisatsiooniline eestvedamine intellektuaalse kapitali
kontekstis

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Abstract

Purpose – The study explores the flows of intellectual capital dimensions and their influence on organizational performance by testing the interrelationship between innovative work behavior and organizational leadership, as well as examining the mediating role of organizational leadership.

Design/methodology/approach – The subjects in the research paper are eleven Estonian mechanical engineering companies. The data for the study were collected using the Organizational Leadership Capability, Organizational Performance, and Innovative Work Behavior questionnaires with a final sample of 175 engineers as respondents. The research analysis is based on a quantitative statistical evaluation of the research data.

Findings – Human capital with its innovative work behavior generates structural capital in the light of organizational leadership, while in turn, organizational leadership fosters the innovative work behavior of individuals. Ultimately, organizational leadership fully mediates the effect of employees' innovative work behavior on organizational performance.

Originality/value – This is the first empirical study that discusses the interrelationship between organizational leadership and individual innovative work behavior. In contrast to previous studies, which mainly discuss innovative work behavior as an outcome of intellectual capital, this paper regards innovative work behavior as an input for the generation of structural capital in terms of organizational leadership.

Keywords intellectual capital, human capital, structural capital, innovative work behavior, organizational leadership, Estonia

Paper type Research paper

Introduction

One of the key challenges of the modern knowledge-intensive manufacturing sector is how to shape and sustain an organization's competitive advantage in a rapidly changing business landscape that requires constant innovation, flexibility, and the ability to adapt quickly to changing market demands and technological developments. In this dynamic business environment, the role of knowledge and information in achieving business success has become increasingly important, which requires organizations to recognize the importance of intellectual capital as a source of sustainable competitive advantage (Bontis et al., 2018).

Intellectual capital (IC) is the sum of knowledge, experience and their practical implementation (Roos *et al.*, 1998; Chiucchi and Dumay, 2015) that makes an organization competitive in the market (e.g., Jardon and Martos, 2012) and leads to increasing organizational value (e.g., Bozbura, 2004; Tseng and Goo, 2005), business (e.g., Cabrita and Bontis, 2008; Kim *et al.*, 2012), and innovative performance (e.g., Subramaniam and Youndt, 2005; Wu *et al.*, 2007). Firms with high levels of total IC can achieve significantly better performance than firms with low levels of IC (Youndt *et al.*, 2004). Over time, scholars (e.g. Bontis, 1998; Roos *et al.*, 1998; Nahapiet and Ghosal, 1998; Edvinsson, 2002) developed a theoretical framework of IC and its various dimensions, which can be divided into human capital and structural capital. Human capital (HC) represents the knowledge, generated and owned by individuals (Bontis, 1998) and is often seen as the key dimension of IC since the main input of new ideas and knowledge in an organization comes from its employees (Subramaniam and Youndt, 2005). Therefore, employees' innovative and creative behavior, in other terms, innovative work behavior (IWB) – complex behavior of generating and implementing novel ideas (e.g., Janssen, 2000), is a valuable asset of HC. People contribute their skills, capabilities, and expertise to the organization, and when they work together, they form structural capital (SC) – knowledge and experience embedded in organizational systems and processes (Cabrita and Bontis, 2008). Strong social bonds between individuals lead to an increasing reciprocal influence (Granovetter, 1983). Individuals influence each other to pursue aligned goals, creating a phenomenon of collective leadership, where the leadership process emerges and is distributed throughout the organization (e.g. Yammarino *et al.*, 2012). Organizational leadership (OLC), in turn, is a collective

leadership theory that encompasses leadership capabilities embedded in the structure of organizations at both the individual and collective levels (Kivipõld and Vadi, 2010). Thus, if leadership has traditionally been seen as a competence of HC (e.g. Bozbura 2004; Kamukama *et al.*, 2010), organizational leadership is a capability of the whole organization and a strategic asset of SC.

HC and SC are closely linked: while people generate the assets of SC, organizations with strong SC create a supportive environment that allows individuals to try new things, learn, and fail (Bontis, 2000), thereby nurturing their innovative work behavior. The previous studies predominantly consider innovation and innovative behavior as a desirable outcome of IC (e.g. Wu *et al.*, 2007; Aramburu and Saenz, 2011; Mura *et al.*, 2012; Castro *et al.*, 2013; Leitner, 2011; Delgado-Verde *et al.*, 2011; Beltramino *et al.*, 2020; Rehman *et al.*, 2022; Khan *et al.*, 2024). In contrast, the present research paper redefines IWB as a critical input for generating SC in light of OLC, thereby filling a research gap.

The purpose of this study is to determine the flows of IC dimensions and their influence on organizational performance by testing the interrelationship between IWB and OLC and examining the mediating effect of OLC on the relationship between IWB and organizational performance. Although the influence of IC intangibles on organizational performance has been widely studied in the literature (e.g. Jardon and Martos, 2009; Kim *et al.*, 2012; Carbita and Bontis, 2018; Bontis *et al.*, 2018; McDowell *et al.*, 2018; Beltramino *et al.*, 2020), to the author's best knowledge, this is the first empirical study that discusses the interrelationships between OLC and individual IWB and the mediating role of OLC to predict organizational performance.

The conceptual section of this article examines the academic literature to better understand the concept of IC and situate both IWB and OLC within its framework. It further explores how preceding studies have delineated the interplay between OLC and IWB. In the empirical part, the focus shifts to examining the interconnections between SC and HC, specifically through the lenses of IWB and OLC and their effect on organizational performance in the context of the mechanical engineering sector.

Literature review

Intellectual Capital

An organization's value creation is largely based on its intangible resources and capabilities – IC. Prior research conceptualized IC as a gap between a firm's market value and the book value (Edvinsson, 1998), the sum of the tacit and implicit knowledge of an organization's members and its practical translation (Roos *et al.*, 1997; Bontis, 2000), the knowledge and knowing capability of social collectivity (Nahapiet and Ghosal, 1998), the sum of all knowledge and skills that organizations utilize for competitive advantage (Subramaniam and Youdt, 2005; Mura *et al.*, 2012) and innovative management technology (Chiucchi and Dumay, 2015).

Strategy, continuous innovation of products and services, competent employees, loyal customers, reputation and brand strength, beneficial partnerships – all of this falls under the IC umbrella. The essence of IC lies in its general applicability, it plays a significant role not only within the boundaries of an organization but also more broadly within society. IC research developed in three major streams. The strategic stream studied the creation and use of knowledge, as well as the relationship between knowledge and value creation (eg. Edvinsson, 1997; Roos *et al.*, 1997; Bontis 1998; Nahapiet and Ghoshal, 1998). The measurement stream focused on the need to develop the measurement models of IC (Petty and Guthrie, 2000). The third, performative stream of IC research, focused on „analyzing how IC works in organizations, how it manifests itself, and how people, processes, and relationships are mobilized about it” (Chiucchi and Dumay, 2015, p. 306). IC is a multidimensional phenomenon and scholars (e.g. Bontis, 1996; Roos *et al.*, 1998; Bontis *et al.*, 2000; Subramaniam and Youndt, 2005) outline its three main dimensions: human capital, structural capital, and relationship capital. Although the majority of studies use the three-dimensional IC model (Inkinen, 2015), this paper utilizes a two-dimensional IC structure, where SC is seen as the sum of organizational and relational capitals. This distinguishes between "thinking" and "non-thinking" capital (Roos *et al.*, 1998) – HC and SC.

A review of relevant articles was conducted to identify the principal components of the IC dimensions, as a result, the sub-components are summarized in Table I.

Table I. The components of HC and SC.

Human Capital	Competencies	Knowledge, education, training Know-how, skills, experience, expertise, qualifications, Leadership and entrepreneurship capability: task realization capability, problem-solving capability, risk-taking capability	Roos <i>et al.</i> , 1998; Bontis, 1998; Leitner, 2011; Kamukama <i>et al.</i> , 2010; Bozbura, 2004	
	Attitude	Values, attitude towards life and business, aptitude Motivation, commitment, loyalty Learning capacity, resolve Willpower Teamwork capability	Jardon and Martos, 2009; Kim <i>et al.</i> 2012; Hormiga <i>et al.</i> 2011; Leitner, 2011; Bontis <i>et al.</i> , 2018	
	Intellectual agility	Cheer intelligence, creativity, innovativeness Flexibility, adaptability	Roos <i>et al.</i> , 1998; Bontis 1998; Tovstiga and Tulugurova, 2007; Leitner, 2011; Kim <i>et al.</i> 2012	
Structural capital	Relationship capital	Internal Relationships	Collective exchange of knowledge, Communication, cooperation and collective action Value of social relations, friendship, trust, respect	Bontis, 1998; Kamukama <i>et al.</i> , 2010; Delgado-Verde, 2011; McDowell, 2018
		External relationships	Relationships with shareholders, customers, suppliers, R&D partners, rivals, strategic alliance partners, official institutions, society, environment; Knowledge embedded in customers, suppliers, the government, industry associations Knowledge of marketing, and distribution channels, market share, customer orientation, image, brand, reputation, customer satisfaction, and loyalty	Aramburu and Saenz 2011; Kim <i>et al.</i> , 2012; Bozbura, 2004; Jardon and Martos, 2009; Delgado-Verde, 2011; Hormiga <i>et al.</i> 2011
	Organizational Capital	Organizational competencies	Organizational know-how, competitive intelligence, specific methods, organization's creative ability, innovative behavior, renewal and development, sustainability, competitive advantage	Bontis <i>et al.</i> , 2018; Bontis, 1998; Kamukama <i>et al.</i> , 2010; Bozbura, 2004; Kim <i>et al.</i> , 2012; McDowell <i>et al.</i> , 2018
		Systems and Infrastructure	Non-human storehouses of codified knowledge and experience: systems, administrative systems, IT systems, tools, programs, databases, documents, manuals, process manuals, guidelines, charts, workflows Internal organizational structure, environment, design Efficiency, transaction time Routines, procedures, operational processes Product planning processes, innovation processes, managerial mechanisms	Tovstiga and Tulugurova, 2007; Kamukama <i>et al.</i> , 2010; Subramaniam and Youndt, 2005; Mura <i>et al.</i> , 2012; Rehman <i>et al.</i> , 2021 Bontis <i>et al.</i> , 2018; Leitner, 2011
		Leadership	Management philosophy, strategy, innovation strategy, business development plans Alignment of HC with strategic goals, Leadership capability	Bontis <i>et al.</i> , 2018; Tovstiga and Tulugurova, 2007; Kim <i>et al.</i> , 2012; McDowell <i>et al.</i> , 2018
		Culture	Cooperative culture, values	Hormiga <i>et al.</i> , 2011; Aramburu and Saenz 2011; Kim <i>et al.</i> , 2012; McDowell <i>et al.</i> , 2018
		Intellectual property	Patents, copyrights, trademarks, competitive intelligence, formulas, policies, investments	Bontis <i>et al.</i> , 2018; Kamukama <i>et al.</i> , 2010; Rehmman, 2021

By synthesizing insights from multiple sources, the review facilitates a more nuanced understanding of the nature of IC and helps to allocate IWB on the individual level and OLC on the organizational level within the framework of IC.

Innovative Work Behavior as an Asset of Human Capital

HC is the competencies, attitudes, and intellectual agility of the people working for the organization, both inside and outside its physical boundaries (Roos *et al.*, 1998). It contains individual competencies such as employees' knowledge and skills (e.g., Subramaniam and Youndt, 2005), motivation (Hormiga *et al.*, 2007) and loyalty (Wu *et al.*, 2007), creativity and innovativeness (Kim *et al.* 2012; Leitner, 2011).

HC levels positively impact firm value (Bozbura, 2004; Tseng and Go, 2004) economic performance (Bontis, 2018), and innovation (Rehman *et al.*, 2020), since employees bring new ideas and knowledge to the organization, giving it an advantage with their skill in spotting opportunities (Subramaniam and Youndt, 2005; Beltaramino *et al.*, 2020). Given that individual and team creativity nurtures organic innovation within organizations (Amabile and Pratt, 2016), creativity at the individual level is often regarded as a valuable asset for human capital (e.g. Leitner, 2011; Kim *et al.*, 2012). Where there are no ideas, there is nothing to implement.

IWB is a set of individual behaviors to create and apply new and useful ideas to their work environment to benefit role performance, the group, or the organization (Mura *et al.*, 2012; Carmeli *et al.*, 2006; de Jong and Den Hartog 2007). This can be achieved through the automation and robotization of processes, the implementation of new technologies, the launch of new products and services, and the development of new business models. While early studies (e.g., Mumford, 2000) focused mainly on the generation of creative ideas, later researchers (e.g., de Jong and den Hartog, 2007) have called for a broadening of the scope and for more scientific attention to be paid to the implementation of ideas. This distinguishes IWB from mere employee creativity, which focuses on generating novel ideas. Eventually, creativity plays a crucial role in IWB, particularly in the initial phases of innovation, where it aids in identifying performance gaps and generating ideas to meet innovation needs (De Jong, 2010).

The literature outlines three stages relevant to IWB, namely idea generation, idea promotion, and idea realization (e.g., Janssen, 2004). However, idea generation is rather broad, as it proposes to include behavior to explore and try out new ideas. The current paper focuses on Kleysen and Street's (2001) innovative work behavior constructs:

opportunity exploration, generativity, formative investigation, championing, and application. Opportunity exploration refers to the initial phase of an innovation process where one looks for ways to improve current products, services, or processes by thinking about them in alternative ways (Kleysen and Street, 2001). This phase involves identifying unexpected disruptions or mismatches in familiar patterns, whether driven by the need for improvement in existing processes, or by external factors such as crises, changing trends, and customer needs (de Jong and den Hartog, 2010). The process driver can be either an individual's deep intrinsic motivation to solve a particular problem or pursue an exciting opportunity, or an external factor such as a task assigned by the individual's team or manager (Amabile and Pratt, 2016). Generativity refers to behaviors aimed at generating beneficial change leading to growth and development (Kleysen and Street, 2001), and involves identifying applications, implications, and consequences, and refining them into a new idea or set of ideas (Mumford, 2000). The diversity and quality of ideas generated depend upon individual intrinsic motivation, technical skills, factual knowledge, and creativity-relevant processes such as looking at problems from new perspectives, switching between different ideas, thinking broadly, and making unusual associations (Amabile and Pratt, 2016). Formative investigation involves shaping and expanding ideas and solutions (Kleysen and Street, 2001; de Jong and Den Hartog 2007). Given that creativity is an improvisational process (Amabile and Pratt, 2016), and new ideas are often unclear and their implementation uncertain (Kleysen and Street, 2001), the implementation plans should be flexible enough to allow ongoing adjustments through testing and evaluation, ensuring gradual improvements over time (Mumford, 2000). Championing becomes relevant after idea generation, as novel ideas typically differ from current organizational practices. It involves engaging in socio-political behaviors such as garnering support, building coalitions, and securing approval within the organization to promote new ideas (Janssen, 2000; de Jong and Den Hartog, 2007; Hoch, 2013). In the application phase employees demonstrate an application-oriented behavior (de Jong and Den Hartog, 2007). Ultimately, idea application involves making innovation a regular part of organizational processes and includes: implementing, modifying, and routinizing (Kleysen and Street, 2001), ensuring that the innovation process is ongoing.

Organizational Leadership as an Asset of Structural Capital

SC is the organization's "non-thinking" intangible assets (Roos *et al.*, 1998) and combines all non-human IC dimensions, capturing organizational and relational dimensions. SC includes relationships (Bontis, 1998), organizational mechanisms and structures (Bollen *et al.*, 2005), and everything related to internal operations (Bontis, 1998; Hsu and Fang, 2009). Here lie all the organization's stored knowledge (e.g. Carmona-Lavado *et al.*, 2010) and institutional memory in strategies, systems, databases, methodologies, and manuals (Subramaniam and Youndt, 2005; Kamukama *et al.*, 2010). SC encompasses processes related to acquiring and retaining talent, alignment of human resources with strategic goals, and organizational design (McDowell *et al.*, 2018). Leadership, work climate, and culture belong to SC as well (Hormiga *et al.*, 2011; Bontis *et al.*, 2018; McDowell *et al.*, 2018).

De Jong and Den Hartog (2007, p. 44) see leadership as "the process of influencing others to achieve a desired outcome". When team members influence and lead each other toward group or organizational goals (Pearce *et al.*, 2008), collective leadership emerges. „Collective“ (e.g. Contractor *et al.*, 2012) or „collectivistic“ (e.g. Yammarino *et al.*, 2012) leadership, both notions are used in the literature to encompass very similar concepts of leadership at different collective levels, including "distributed" (e.g. Gronn, 2002), "shared" (e.g. Pearce *et al.*, 2008), "democratic" (e.g. Gastil, 1994), "team" (e.g. Morgesen *et al.*, 2009), "network" (e.g. Brass *et al.*, 2004), and "complexity" (e.g. Uhl-Bien, 2008). Each leadership model has its unique characteristics. Ospina *et al.* (2020) identified two main perspectives of the collective leadership approach, the first perceives leadership as a shared responsibility among multiple members of an organization rather than centralized in specific individuals. The second perspective posits that leadership arises from interactions that define a collective direction and is thus decentered from individuals. Common characteristics of collective leadership approaches include the emergence of leadership as a collective property, open boundaries, decentralized expertise, diversity of formal and informal networks, dynamic and non-linear nature, and adaptability to fast-changing environments (Bennett *et al.*, 2003; Yammarino *et al.*, 2012).

OLC is a collective leadership phenomenon that encompasses organizational leadership capabilities, embedded in the structure of organizations, at both the individual and collective levels (Kivipõld and Vadi, 2013). Today's organizations must be able to detect change with limited information, react effectively to minimize uncertainty and foster continuous agility to ensure timely and appropriate responses to emerging situations. Thus, OLC is defined by Kivipõld and Vadi (2010, p. 121) as “the collective ability of leadership to detect and cope with changes in the external environment by maintaining the primary goals of the organization”. OLC is an "emergent state" of the organization and plays a critical role in achieving organizational performance and efficiency (Kivipõld, 2015). The OLC framework describes the two behavioral dimensions of organizational leadership capability – organizational orientation and organizational adaptation, which, in turn, are divided into cognitive, social, and sensory dimensions (Kivipõld and Vadi, 2010). These three domains represent the main factors of organizational leadership: cognitive domain – alignment and cohesion; sensor domain – control-feedback system; and social domain – the architecture of the internal network” (ibid). OLC is the result of the interaction of all these factors. Kivipõld and Vadi (2013), describe it as a process whereby members of an organization carry out their daily tasks while focusing on long-term goals. Thus, organizational leadership, as a collective leadership embedded in the structural pattern of an organization is a strategic asset of SC.

Inter-relationship between IWB and OLC

The IC sub-dimensions interact with each other, creating a virtuous circle that contributes to the value creation (Bontis, 2018). The relationships between different IC dimensions as constant flows can clarify their connections, for instance, the relationship between leadership styles and individual motivations can be viewed as a flow from HC to SC and back to HC (Roos *et al.*, 1998).

IC is created by sharing and combining the intellectual resources of different parties involved through social interaction and collaboration (Nahapiet and Ghosal, 1998). Individuals working together over time align themselves in a recognizable pattern (Bontis, 1998) and form systems and structures of SC (Edvinsson, 2002). Unlike people who accumulate their capital through the course of their lives, SC does not renew itself in most cases and must be updated by the employees themselves, only providing

knowledge can increase IC (e.g. Roos *et al.*, 1998; Edvinsson, 2002; Subramaniam and Youndt, 2005). In this way, SC represents the relationships, that individuals have developed over time through continuous interactions. The strong social bonds between individuals lead to increasing mutual influence (Granovetter, 1983). This interactive process of influence within groups, in which individuals collectively lead each other toward organizational goals (Pearce and Conger, 2003), generates the phenomenon of collective leadership. Contractor *et al.* (2012) describe collective leadership as a particular configuration of social networks, consisting of a set of individuals and the influence relationships that bind them together and thereby regulate their activities. Thus, collective leadership is a socially constructed mutual influence process (Uhl-Bien, 2006), where the communication of team members forms its epicenter (Hiller *et al.*, 2006) and team members are active participants rather than passive recipients in the leadership process (Jakobsen *et al.*, 2021). Members interact with each other, and their behavior is coordinated and integrated into a whole through feedback processes that are managed through relationships (Kivipõld and Vadi, 2013).

Leadership as a "we" or collective phenomenon involves multiple individuals taking on leadership roles over time in both formal and informal relationships (Yammarino *et al.*, 2012, p. 384). Team members exhibit different internal leadership behaviors (Morgeson *et al.*, 2010), which include planning and organizing, problem-solving, supporting and consulting, developing and mentoring, and promoting team self-management (Carmeli *et al.*, 2006; Hiller *et al.*, 2006; Hoch, 2013). The competencies and capabilities of individuals can have an impact on the networks formed within an organization. Those who can overcome barriers and strengthen teams tend to excel in collective leadership roles because they can create the necessary conditions for the efficient distribution of leadership responsibilities (Yammarino *et al.*, 2012). Task coordination behaviors, along with member support and development behaviors, contribute to the emergence of leadership in teams (Contractor *et al.*, 2012). In addition, a collective mindset or tendency to collaborate can be beneficial in contexts that require collective leadership (Yammarino *et al.*, 2012).

Based on the implications of IC theory and the socially constructed nature of collective leadership, we can assume that the IWB of employees generates collaboration between them in terms of organizational leadership. Therefore, it is possible to formulate the following hypothesis (Figure 1):

Hypothesis 1. Innovative work behavior positively influencing organizational leadership capability.

If HC generates SC, then SC, as the mechanism and structure of the organization, supports employees in their pursuit of intellectual performance (Bollen *et al.*, 2005; Wu *et al.*, 2007; Bontis *et al.*, 2018). HC can only unleash its innovative potential when the necessary SC is in place (Bontis, 2000). One way for firms to become innovative is to leverage the innovative capacity of their employees (de Jong and Hartog, 2007). Therefore, it is important to understand how SC can enhance the value of HC.

Existing empirical evidence suggests that various concepts of collective leadership positively correlate with innovative work behavior. Most studies consider collective leadership as a team-based phenomenon and explore its effect on innovative behavior at the collective level (eg. Morgenson, 2010; Hoch 2013) and a limited number of studies have explored the impact of collective leadership on innovative work behavior at the individual level. The findings of Jing *et al.* (2022) show that empowering team leadership in the high-tech enterprise has a significant positive impact on employees' innovation passion. Similarly, Liu *et al.* (2021) have identified the positive impact of shared leadership in universities' scientific research teams on team members' innovative behavior. The result from cross-national research, conducted by Jonsson *et al.* (2020) showed that distributed leadership is positively related to nurses' innovative behavior in Denmark, Italy, and Israel. Similar results showed Jakobsen *et al.* (2021) empirical analysis in the Danish hospital sector on relationships between distributed leadership and performance-related employee outcomes such as job satisfaction and innovative work behavior.

This paper considers organizational leadership as a form of collective leadership that is embedded in the structure of organizations across all organizational levels (Kivipõld and Vadi, 2013) and finds it worthwhile to investigate whether OLC influences IWB at the individual level.

Three domains represent the constructs of organizational leadership. The first cognitive domain explains the emotional attachment of organizational members to the external goals of the organization, where vision/strategy with alignment represents the external focus and vision/strategy with cohesion represents the internal context. At the same time, goal-setting/planning compounds both the external focus and internal context into one main dynamic process (Kivipõld and Vadi, 2010, p.123). Clear goal setting that provides direction toward the organization's overall strategic goals, while allowing individuals and teams the freedom to explore new ideas, greatly enhances individual creativity and organizational innovation (Amabile and Pratt, 2016). Furthermore, when individual ideas are aligned with the organization's vision, they are more easily accepted and implemented, resulting in a continuous innovation process; otherwise, individuals may rely on their own vision, leading to efforts going in different directions (Leonard and Sensiper, 1998; de Jong and Den Hartog, 2007).

The second social domain refers to the internal network of the members within an organization, where informal communication and the extent of centralization determine the flow of information throughout the organization across functional and hierarchical levels (Kivipõld and Vadi, 2010). Several studies have emphasized the importance of access to information for employees' ability to innovate. Employees' awareness of their professional and business environment's needs, trends, and issues catalyzes new ideas, hence the exploration and generation of ideas rely on access to relevant information and strategic resources (de Jong and Den Hartog, 2007; Mumford, 2000). Jakobsen *et al.* (2021) claimed that the distributed flow of information and knowledge reduces information asymmetries, and ensures effective utilization of employee innovative competencies. Similarly, Vandavasi *et al.* (2019) findings show that team knowledge sharing is positively related to individual innovative work behavior.

OLC's third sensor domain encompasses a strategic organizational performance monitoring system that facilitates goal achievement and emphasizes self-regulation, with

positive feedback fostering innovation and organizational change, and negative feedback helping to maintain goals in dynamic environments (Kivipõld and Vadi, 2010). Employees' motivation to generate new ideas is directly related to the feedback they receive (Hellström and Hellström, 2002), so providing frequent, constructive, and supportive feedback in situations where employees have high autonomy leads to increased creativity (Mumford, 2000; Amabile and Pratt, 2016). On the contrary, excessive oversight and control, in addition to a focus on error prevention, can be detrimental to idea application behavior, resulting in lower levels of risk-taking, exploration, and innovation (Amabile *et al.*, 2009).

Taken together, we can conclude that collective behavior in terms of organizational leadership will lead individuals to their innovative work behavior. Therefore, the following hypothesis is proposed (Figure 1):

Hypothesis 2. *Organizational leadership positively influencing innovative work behavior of individuals.*

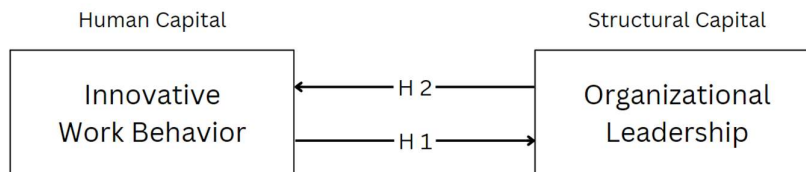


Figure 1. A research framework for Intellectual Capital flows, H1, and H2

Since IC dimensions positively influence each other, improving one component will improve the other (Bollen *et al.*, 2005), it is expected that the relationship between IWB and OLC will be reciprocal.

Organizational Leadership mediating Organizational Performance

The literature suggests that IC has a positive impact on organizational performance (e.g. Kim *et al.*, 2012; Jardon and Martos, 2012; Bontis *et al.*, 2018). Leitner (2011) argues that high levels of both HC and SC may lead to increased organizations' innovativeness. This means that employees' individual-level knowledge and skills, a company's structural

arrangements, and valuable relationships are mutually supportive. The single dimensions of IC may not independently lead to improvements in firm performance, but strengthening each dimension increases the likelihood of achieving such improvements (Inkinen, 2015). Indeed, empirical evidence shows, that HC does not have a direct effect on firm performance. According to Subramaniam and Youdt (2005), firms with greater SC dimensions, such as social and organizational capital, have a stronger influence on HC in terms of radical innovation. Several scholars (e.g. Cabrita and Bontis, 2008; Kim *et al.*, 2012; Jardon and Martos, 2009) have provided evidence that HC supports the other dimensions of IC, which in turn have a direct effect on firm performance. Similarly, Borbuza (2004) noted the central role of SC in enabling creative activities within an organization and allowing HC to contribute to organizational performance.

Given the above, a comprehensive understanding of the phenomenon cannot be achieved by focusing only on the direct relationships. Inkinen's (2015) meta-analysis examines the relationship between IC and firm performance, concluding that the relationship between IC dimensions and firm performance is often best understood through mediation models. For instance, according to Wu et al. (2007), SC fully mediates the effect of HC on innovative performance.

This paper continues the research on the mediating role of SC between HC and performance by testing the relationship of OLC as a mediator between IWB and organizational performance. In this study, "mediator" means a variable that explains the relationship between the independent variable(s) and the dependent variable, which is organizational performance. Together, it is expected that the interaction of IWB and OLC will positively influence organizational performance and it is possible to formulate the following hypothesis (Figure 2):

Hypothesis 3. Organizational leadership mediates the relationship between employees' innovative work behavior and organizational performance.

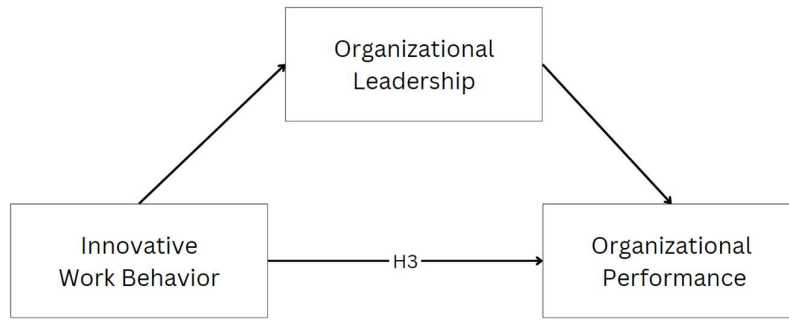


Figure 2. A research framework for the mediating role of SC between HC and organizational performance, H3

Hence, IC is a phenomenon of interactions, combinations, and transformations with HC influencing organizational performance through SC (Cabrita and Bontis, 2008), it is expected, that organizational leadership supports the generation and implementation of employee ideas, thereby improving organizational performance.

Research Methodology

Sample collection

The research study selected companies from the Estonian mechanical engineering industry, which is the largest industrial sector in Estonia. As of 2022, over 2,000 companies are operating in this sector. Approximately 4.2% of the total employed workforce is engaged in the mechanical engineering industry. In 2022, Estonia's total export of domestic goods amounted to 21.26 billion euros, with machinery industry products accounting for 2.4 billion euros of this (Statistics Estonia, 2024), making it a vital economic sector with a significant impact on the country's economy, employment, and export capability. However, the sector is characterized by comparatively low research and innovation activities, resulting in a limited introduction of new products and services. Modern management practices that encourage innovation are essential to ensure the long-term sustainability of this sector.

For representativeness, the sample was selected from manufacturing companies of different sizes (small, medium, large), engineering complexity (low, medium, high), and geographical regions of Estonia (Tallinn, Pärnu, Viljandi, and Tartu).

The survey was conducted from January to February 2024. Lime Survey software was used to collect the data anonymously from engineering department workers and IBM SPSS Statistics (Version 29.0.2.0) for further analysis. Since individual professionals served as the unit of analysis, all of the data were obtained from primary sources. The respondents were also asked to provide socio-demographic control variables. After that, control variables such as organizational size and engineering complexity were looked at using data from secondary sources, such as the company website, annual reports, and interviews with the CEOs.

A total of 284 questionnaires were completed by engineers and technical specialists from a total of 11 manufacturing companies. 78 questionnaires were declared invalid due to incompleteness. A further 31 questionnaires were invalidated during the audit because either all responses yielded the same result or repetitive patterns were observed. The final sample size was $n=175$. The valid response rate is 62%.

The sample of the respondents was characterized by the following parameters:

Sample size (n = 175); language: Estonian (87%), Russian (13%); gender: male (52%); female (48%); age: below 30 (18%); 30–50 (71%); above 50 (11%); education: secondary or vocational education (42%), diploma or bachelor degree (41%), master degree or higher (17%); work experience in the current organization: up to one year (14 %); 1–5 years (35%); 5–10 years (22%); 10–20 years (22%); above 20 years (6%).

The results show that a majority of the respondents fall within the age range of 30 to 50 years old and have established professional careers. Over half of the respondents (58%) possess a university degree. In terms of gender distribution, slightly more than half of the respondents identify as male (52%). Therefore, it can be assumed that the data set is sufficiently representative.

Methods

Three questionnaires were utilized to gather the information:

The OLC questionnaire developed by Kivipõld and Vadi (2010) consists of three main factors: alignment and cohesion, the architecture of the internal network and control-feedback system with four closed statements for each factor, 12 in total, and uses closed-ended statements with a 7-point frequency scale from 1 (strongly disagree) to 7 (completely agree).

The organizational performance questionnaire is developed by Kivipõld and Vadi (2010). The structure of this questionnaire consists of a construct for performance assessment and includes six statements with a 7-point frequency scale from 1 (strongly disagree) to 7 (completely agree).

The IWB questionnaire was developed by Kleysen and Street (2001) and consists of five main factors: opportunity exploration (3 statements), generativity (2 statements), formative inquiry (3 statements), advocacy (3 statements), and application (3 opinions), a total of 14 opinions. The 6-item behavioral frequency scale was used to measure employees' innovative work behavior, where 1 (never), 2 (rarely), 3 (sometimes), 4 (often), 5 (very often), and 6 (always).

The original IWB questionnaire is in English and had to be adapted into the Estonian language, for which a round-trip translation (RTT) methodology was adopted. A total of nine experts were involved in the translation process, including six people as translators and three as experts. The expert group for validation and approval of translations included a strategic management professor from the University of Tartu, the author, and a professional playwright-dramaturg. The translators were equally native speakers of Estonian and English. First, three professional philologists independently translated the English questionnaire into Estonian. The three experts then translated the questionnaires again individually into English. Two experts were involved in comparing the RTT, the final adjustments were made taking into account the observations of the six philologists involved in the process, resulting in a common agreement. The questionnaire concluded with proofreading by a professional playwright-dramaturg.

The reliability of each construct was assessed using Cronbach's α test resulting in the following: aggregated OLC (0.91), aggregated IWB (0.95), and OP (0.91). The benchmark for Cronbach's value is 0.7 (Nunnally, 1978, p. 245). The Cronbach α values of the results obtained indicate that the questionnaire translations were successful and the data are suitable for further analysis.

Pearson correlation and multiplied linear regression analyses were used to estimate the association between OLC, IWB, and organizational performance. Furthermore, seven control variables were employed, two of which pertained to organizational characteristics, including organizational size and technical complexity, and five variables related to employees, including their spoken language, gender, age, education, and tenure in the current organization.

Results

The sample of 175 responses allowed to analyze the relationships between OLC, IWB, and organizational performance. The significant findings of the Pearson correlation are described in Table II.

Table II. Pearson correlation among variables (n=175), Mean and Standard deviation

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Language											
2. Complexity			-0.22**								
3. Size			-0.24**	0.54**							
4. Gender			-0.14	0.20**	0.44**						
5. Age			-0.04	0.11	0.02	0.01					
6. Education			-0.10	-0.08	-0.14	0.10	0.15*				
7. Experience			-0.08	0.13	-0.02	-0.06	0.42**	0.04			
8. IWB	4.01	1.16	-0.03	-0.00	-0.06	-0.15*	0.00	0.02	0.11		
9. OLC	4.93	1.59	0.05	0.13	-0.21**	-0.15*	-0.03	-0.02	-0.02	0.23**	
10. OP	5.34	1.32	-0.05	0.11	-0.16*	-0.11	-0.15	-0.05	0.00	0.21**	0.83**

Note: ** $p \leq 0.01$ level (2-tailed); * $p \leq 0.05$ level (2-tailed); language: Estonian (0), Russian (1); engineering complexity: low (0), medium (1), high (2); size: a constant number from 14 to 533; gender: male (0), female (1); age: ≤ 30 (0); 30–50 (1); ≥ 50 (2); education: secondary or vocational education (0), diploma or bachelor (1), master or higher (2); work experience: ≤ 1 Y (0); 1–5 Y (1); 5–10 Y (2); 10–20 Y (3); ≥ 20 years (4); IWB – innovative work behavior; OLC – organizational leadership capability; OP – organizational performance.

The results obtained illustrate that socio-demographic data do not demonstrate a significant relationship with innovative work behavior: language ($r = -0.03$, $p = 0.67$); ($r = 0.02$, $p = 0.78$); professional experience ($r = 0.10$, $p = 0.16$). Only gender ($r = -0.15$, $p \leq 0.05$) shows a weak but statistically significant relationship with innovative work behavior, suggesting that as the gender variable increases (from male to female), there is a slight decrease in IWB in the context of the current sample. Likewise, no significant correlations could be found between IWB and variables related to the type of organization, neither the size of the organization ($r = -0.06$, $p = 0.39$) nor its engineering complexity ($r = -0.00$, $p = 0.98$) show significant correlations with IWB, suggesting that, the type of organization, as represented by these variables, does not influence the innovative behaviors of its members.

The correlations between OLC and most of the socio-demographic control variables also remained insignificant; only gender again showed a weak relationship with organizational

leadership ($r = -0.15, p = \leq 0.05$) level. The results indicate a positive correlation between OLC and IWB ($r = 0.23, = \leq 0.01$). In addition, a positive effect of IWB on perceived organizational performance was found ($r = 0.21, p = \leq 0.01$). OLC showed a strong correlation with OP ($r = 0.83, p < 0.001$). Among the control variables, the results show a significant relationship between the size of the company and its engineering complexity ($r = 0.54, p < 0.00$), as the size of the company increases, its technical complexity also tends to increase.

To estimate the inter-relationship between OLC, IWB, and control variables, a two-step linear regression analysis was performed (Table III). In the first step, the aggregated OLC and IWB values were analyzed together with seven control variables (models 1 and 3). For the second step, aggregated OLC and IWB values were analyzed separately without control variables (models 2 and 4).

Table III. Regression Model for the Relationship between Organizational Leadership Capability, Innovative Work Behavior, and Organizational Performance, (n=175)

Variable	OLC		IWB		OP	
	Model 1 (β)	Model 2 (β)	Model 3 (β)	Model 4 (β)	Model 5 (β)	Model 6 (β)
(Constant)	3.85***	3.65***	3.29***	3.17***	4.23***	1.40***
Language	0.09		-0.13			
Complexity	0.47***		-0.10			
Size	-0.002***		0.00			
Gender	-0.03		-0.24			
Age	-0.05		-0.07			
Education	-0.03		0.08			
Experience	-0.07		0.10			
IWB	0.27**	0.31**			0.27**	0.02
OLC			0.17**	0.17**		0.79***
R2	0.16	0.05	0.09	0.08	0.04	0.69
Adjust R2	0.12	0.05	0.08	0.06	0.04	0.69
F-Stat	3.78***	9.78**	1.88*	9.78**	7.83**	192.04***

Note: *** $p \leq 0.001$; ** $p \leq 0.01$; * $p \leq 0.05$; + $p < 0.1$; language: Estonian (0), Russian (1); engineering complexity: low(0), medium (1) high (2); size: a constant number from 14 to 533; gender: male (0), female (1); age: ≤ 30 (0); 30-50 (1); ≥ 50 (2); education: secondary or vocational education (0), diploma or bachelor (1), master or higher (2); work experience: $\leq 1Y$ (0); 1-5 Y (1); 5-10 Y (2); 10-20 Y (3); ≥ 20 years (4). IWB – innovative work behavior; OLC – organizational leadership capability; OP – organizational performance.

The results of linear regression analysis demonstrate a positive significant effect of IWB on OLC ($\beta = 0.27, p \leq 0.01$), which supports H1, suggesting that IWB is positively

associated with OLC. As the level of IWB increases among employees, there is a corresponding improvement in the OLC. Model 3 shows that this relationship is reciprocal and OLC has a significant effect on IWB ($\beta = 0.17$, $p \leq 0.01$), which is consistent with H2, OLC positively influences IWB. As the OLC within a company improves, there is a corresponding increase in the level of IWB among its employees, suggesting that the organizational leadership supports its members' innovative work behavior. Therefore, the results confirm the positive significant reciprocal flow between IWB and OLC (Figure 3).

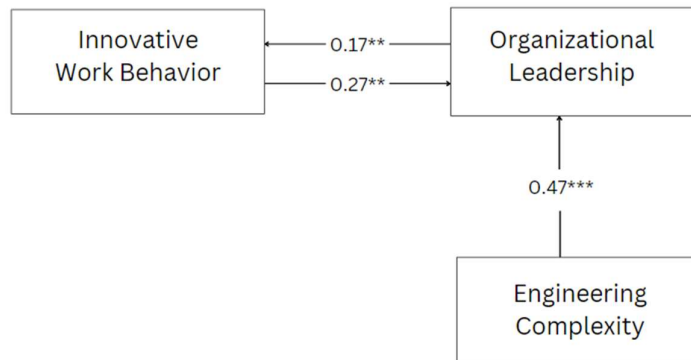


Figure 3. Regression model results, reciprocal relationship between IWB and OLC, relationship between OLC and Engineering Complexity

Note: *** $p \leq 0.001$; ** $p \leq 0.01$

In addition, the influence of various variables on OLC and IWB was explored, and the results demonstrate that socio-demographic data (spoken language, gender, age, work experience in the current job), as well as the organization-specific data (size of the company and engineering complexity), show no relationship with IWB within the sample of current research. Similarly, no significant influence of socio-demographic data on OLC was found. Interestingly, model 1 reveals that engineering complexity is positively related to OLC ($\beta = 0.47$, $p < 0.001$), meaning that factories with higher engineering complexity tend to exhibit stronger organizational leadership capabilities (Figure 1).

To examine H3, whether OLC had a mediating effect on organizational performance, Baron and Kenny's (1986) proposed conditions were examined (Table III). The results demonstrated that all four conditions were met:

1. The relationship between the independent variable IWB and the dependent variable organizational performance is significant ($\beta = 0.27, p \leq 0.01$).
2. The effect of the independent variable IWB on the mediator OLC is significant ($\beta = 0.31, p \leq 0.01$).
3. The mediator OLC influences the dependent variable organizational performance ($\beta = 0.79, p < 0.001$).
4. When the mediator OLC is entered into the regression model 6, the effect between IWB and organizational performance is disappeared ($\beta = 0.02, p = 0.70$).

Although the total effect of IWB on organizational performance could be seen as significant ($\beta = 0.27, p \leq 0.01$), the analysis shows that the direct effect of IWB on organizational performance is insignificant ($\beta = 0.02, p = 0.70$) and the significant indirect effect $\beta = 0.25$ (total effect 0.27 - direct effect 0.02 = indirect effect 0.25) is achieved through a mediator, OLC (Figure 4).

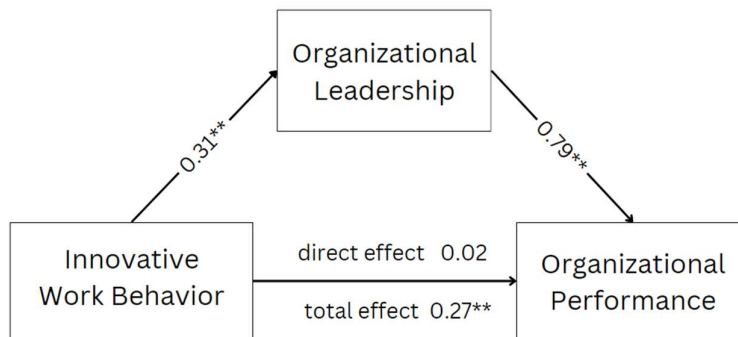


Figure 4. Regression model results, the mediating effect of OLC between IWB and OP
Note: ** $p \leq 0.01$

Thus, H3 was supported with an IWB indirect effect of 0.25. Organizational leadership fully mediates the effect of employees' IWB on organizational performance.

Discussion

This study contributed to research on IC stocks and flows by exploring the relationship of OLC with employee IWB and their impact on organizational performance in the mechanical engineering sector in Estonia. This is the first study to discuss the reciprocal flow of IC assets by suggesting that HC with its IWB generates SC in the sense of organizational leadership and, conversely, organizational leadership supports the IWB of individuals, which leads to overall organizational performance. The research paper outlines three main considerations.

First, the results obtained demonstrate the flow from IWB to OLC, suggesting that HC generates SC. The finding is consistent with the IC literature as SC does not renew itself, and only the provision of knowledge can increase it. Specifically, team members influence team leadership through their shared leadership roles. Therefore, employees' knowledge, skills, abilities, and expertise to create an effective environment for collective leadership are important. Different researchers suggest that following individual capabilities such as leadership and empowerment, collective orientation (Yammarino *et al.*, 2012), task orientation (Contractor *et al.*, 2012), and self-leadership (Carmeli *et al.*, 2006) are essential components contributing to the emergence of collective leadership. This paper contributes to research on collective leadership antecedents and suggests that employees with a higher capacity for IWB are more likely to engage in organizational leadership roles. After all, creative people are more likely to work with other creative people (Mumford, 2000). Additionally, the paper demonstrates that organizational leadership capability depends on the nature of an organization, arguing that companies with higher engineering complexity demonstrate higher organizational leadership capability to operate compared to factories with low engineering complexity.

Second, this paper illustrates the reverse flow from SC to HC, where organizational leadership is positively correlated with individual innovative work behavior, suggesting that SC supports HC. These results are consistent with previous studies in the IC field. Aramburu and Saez (2011) argued the significant influence of SC on the ideation phase of the innovation process in Spanish manufacturing companies. Delgado-Verde *et al.* (2011) study found that SC encourages employees with a proactive attitude, shared vision, values, and beliefs to reach the innovation aim. Furthermore, the findings of this paper

contribute to the recent managerial studies arguing that organizational leadership can enhance creativity and innovativeness by fostering a supportive environment that encourages employee involvement and motivation to generate and implement ideas not only on a team (Morgenson, 2010; Hoch 2013) but on an individual level (Vandavasi *et al.*, 2019; Jing *et al.*, 2022; Jonsson *et al.*, 2020; Jakobsen *et al.*, 2021) as well.

Third, OLC as a mediator between IWB and organizational performance was tested. According to the results obtained, IWB had an insignificant direct effect on organizational performance. This result suggests that individual capabilities alone are not conducive to company performance. However, we found that the interaction of IWB and OLC positively influenced organizational performance, suggesting that the importance of HC is strongly linked to SC. Unless individual knowledge is “networked, shared, and channeled” (Subramaniam and Youndt, 2005, p. 459), it provides little benefit to organizational performance. Again, these results are consistent with the IC literature, suggesting that the value of HC in organizations is inextricably linked to SC. Organizations that do not create synergy between their human and SC are unlikely to exploit the potential of their employees to enhance organizational performance, including radical innovation (Subramaniam and Youndt, 2005).

The results of this study have managerial implications in the field of strategic management. The research supports the idea that organizational leadership is a good predictor for desirable outcomes such as increased organizational performance. Since leadership is a collective phenomenon of a complex emergent system and is socially constructed (Uhl-Bien *et al.*, 2003), it is worth noting that members with higher innovative work behavior capabilities are more likely to build a successful organization. Therefore, for an organization to excel, it may be wise to accept this idea and modify its SC accordingly. Managers should invest time and effort in designing and creating SC that fosters interaction, enables the emergence of organizational leadership, and encourages individuals to consistently create, produce, and implement new useful ideas. The role of leaders is now seen in providing support, building a sense of trust (Mumford, 2000) fostering a dynamic system in which they are not always needed, and leaving these systems when they are working well (Jakobsen *et al.*, 2021). Another thing to consider is the engineering complexity of the operational sector; as production processes become

more intricate, greater attention must be devoted to developing organizational leadership practices to ensure success.

Despite its interesting results and contribution to the literature, this study also has some limitations that need to be addressed. The results of this research are only valid in the context of the Estonian mechanical engineering sector. The structure and engineering complexity level of companies may differ in other countries and settings, which may directly affect the interpretation of the current paper. Although the studies from Denmark (Jakobsen *et al.*, 2021; Jonsson *et al.*, 2020), Italy (Jonsson *et al.*, 2020), Israel (Jonsson *et al.*, 2020), China (Jing *et al.*, 2022), Pakistan (Shoukat *et al.*, 2022), Taiwan (Vandavasi *et al.*, 2019) in different industries such as healthcare (Jonsson *et al.*, 2020; Jakobsen *et al.*, 2021; Shoukat *et al.*, 2022), education (Liu *et al.*, 2020), high-tech firms (Jing *et al.*, 2022), and hospitality (Vandavasi *et al.*, 2019) contribute to the body of evidence and may support the idea of international generalization, further research using different industries and geographic regions is needed. The relevance and application of these findings may be greater in some contexts or settings than in others. One possible approach for future studies might be to examine how different constructs of the OLC might be related to the IWB of individuals.

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Resüme

INNOVAATILINE TÖÖKÄITUMINE JA ORGANISATSIOONILINE EESTVEDAMINE INTELLEKTUAALSE KAPITALI KONTEKSTIS

Reilika Jugolainena-Kļešņina

Kaasaegse teadmismahuka tootmissektori peamine väljakutse on oskus kujundada ja säilitada organisatsiooni konkurentsieelist kiiresti muutuval ärimaastikul, sest see nõuab pidevat innovatsiooni, paindlikkust ja võimet kiiresti kohaneda muutuvate turunõuete ja tehnoloogia arenguga. Tänapäevases dünaamilises ärikeskkonnas on ettevõtluses edu saavutamiseks oluline teadmine, et jätkusuutliku konkurentsieelise allikas on intellektuaalne kapital (Bontis *et al.*, 2018).

Intellektuaalne kapital (inglise keeles *intellectual capital*) on multidimensionaalne nähtus, mis hõlmab kõiki teadmisi ja pädevusi, mis muudavad organisatsiooni turul konkurentsivõimeliseks (Jardon ja Martos, 2012), ning tõstavad organisatsiooni väärtust, tulemuslikkust ja innovatsioonivõimet. Aja jooksul on intellektuaalsel kapitalil välja kujunenud mitu dimensiooni, mida võib kokku võtta kui inim- ja struktuurkapitali kogusummat (Roos *et al.*, 1998).

Inimkapitali, üksikisikute omanduses olevate ja kasutatavate teadmiste ja oskuste summat (Mura *et al.*, 2012), peetakse sageli intellektuaalse kapitali võtmedimensiooniks, kuna inimesed on organisatsioonis uute ideede ja teadmiste peamiseks allikaks (Subramaniam ja Youndt, 2005). Töötajate loovus ja innovaatiline töökäitumine, uudsete ideede genereerimise ja rakendamise kompleksne käitumine (Janssen, 2000), on inimkapitali väärtuslik vara. Inimesed annavad oma panuse organisatsioonile oma oskuste, võimete ja teadmiste näol ning ühendades jõud kujundavad nad struktuurikapitali – organisatsiooni struktuuri põimitud teadmised ja pädevused (Bollen *et al.*, 2005).

Tugevad sotsiaalsed sidemed inimeste vahel viivad vastastikuse mõju suurenemiseni (Granovetter, 1983). Kui inimesed mõjutavad üksteist ühiste eesmärkide nimel, siis võib ilmned kolektiivse eestvedamise fenomen, kus eestvedamise protsess tekib ja jaotub kogu organisatsiooni liikmete vahel (nt Yammarino *et al.*, 2012). Organisatsiooniline eestvedamine on omakorda kolektiivse eestvedamise teooria, mis hõlmab organisatsiooni struktuuri põimitud eestvedamise võimekust nii individuaalsel kui ka kolektiivsel tasandil (Kivipõld ja Vadi,

2010). Kui traditsiooniliselt eestvedamist on vaadeldud inimkapitali komponendina (nt Bozbura 2004; Kamukama *et al.*, 2010), siis organisatsiooniline eestvedamine on struktuurkapitali strateegiline vara.

Struktuur- ja inimkapital on omavahel tihedalt seotud, sest inimesed genereerivad omalt poolt struktuurkapitali ning tugeva struktuurkapitaliga organisatsioonid loovad omakorda toetava keskkonna, mis soodustab inimeste innovaatilist töökäitumist. Varasemates uuringutes vaadeldakse innovatsiooni ja innovaatilist käitumist valdavalt intellektuaalse kapitali soovitava väljundina (nt Wu *et al.*, 2007; Aramburu ja Saenz, 2011; Mura *et al.*, 2012; Castro *et al.*, 2013; Leitner, 2011; Delgado-Verde *et al.*, 2011; Beltramino *et al.*, 2020; Rehman *et al.*, 2022; Khan *et al.*, 2024), käesolev artikkel seevastu käsitleb innovaatilist töökäitumist kui olulist sisendit struktuurkapitali loomiseks, täites sellega uurimislünka.

Käesoleva uurimistöö peamine eesmärk seisneb intellektuaalse kapitali voogude määratlemises ning nende mõju hindamises organisatsiooni tulemuslikkusele. See saavutatakse testides innovaatilise töökäitumise ja organisatsioonilise eestvedamise vastastikust mõju ning uurides organisatsioonilise eestvedamise vahendavat efekti innovaatilise töökäitumise ja organisatsiooni tulemuslikkuse vahel.

Artikli teoreetiline osa selgitab intellektuaalse kapitali mõistet ja paigutab nii organisatsioonilise eestvedamise kui ka innovaatilise töökäitumise selle raamistikku. Järgnevalt vaadeldakse, kuidas senised uuringud on käsitlenud organisatsioonilise eestvedamise ja innovaatilise töökäitumise vahelist suhet. Empiirilises osas keskendutakse innovaatilise töökäitumise ja organisatsioonilise eestvedamise vastastike suhete uurimisele ning selgitatakse välja, milline on nende mõju organisatsiooni tulemuslikkusele.

Uurimistöö subjektideks on üksteist Eesti masinaehitusettevõtet. Andmed koguti organisatsioonilise eestvedamise võimekuse, organisatsiooni tulemuslikkuse ja innovaatilise töökäitumise küsimustike abil, mille lõplikuks valimiks oli 175 inseneri. Uuringu analüüs põhineb uuringuandmete kvantitatiivsel statistilisel hindamisel. Tulemused kinnitavad intellektuaalse kapitali varade vastastikust voogu – inimkapital koos oma innovaatilise töökäitumisega tekitab struktuurkapitali organisatsioonilise eestvedamise kontekstis ja vastupidi, organisatsiooniline eestvedamine toetab üksikisikute innovaatilist töökäitumist, mis viib organisatsiooni üldise tulemuslikkuseni.

Käesolev uuring panustab intellektuaalse kapitali varade ja voogude uurimisse. Selle tulemused avavad ukse kollektiivse eestvedamise eeltingimuste sügavamale mõistmisele, kinnitades, et kõrgema innovaatilise töökäitumise võimekusega töötajad on ka suurema tõenäosusega võimelised täitma kollektiivse eestvedamise rolle. Saadud andmed kinnitavad ka organisatsioonilise eestvedamise võimet luua toetavat keskkonda, mis soodustab töötajate loovust ja innovatsiooni.

Tulemused näitavad, et organisatsioonilise eestvedamise võimekus on otseselt seotud organisatsiooni struktuuri ja iseloomuga. Kõrgema insenertehnilise keerukusega ettevõtted demonstreerivad suuremat organisatsioonilise eestvedamise võimekust võrreldes madala insenertehnilise keerukusega ettevõtetega. See toob organisatsioonidele esile vajaduse luua sünergia oma inim- ja struktuurkapitali vahel, kuna need, kes seda ei suuda, ei suuda tõenäoliselt maksimeerida oma töötajate potentsiaali ega parandada organisatsiooni üldist tulemuslikkust, sealhulgas innovatsioonivõimet.

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