



RESEARCH ARTICLE

Cultural Intelligence and Intellectual Capital: Evidence from External Audit Firms

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Abstract

Intellectual capital (IC) is acknowledged as a strategic advantage for improved performance, and cultural intelligence (CI) is becoming a more significant asset for managers, employees, entrepreneurs, and their organizations. This paper aims to present a new framework for managing IC within audit firms, considering the perspective of CI. The method of the present study is a descriptive survey in terms of data collection and applied from the standpoint of purpose. The statistical population of this study includes all auditors working in audit firms under the membership of the Society of Certified Public Accountants, and 319 individuals made up the statistical sample. The partial least squares approach was used to conduct structural equation modeling, which examined the impact of research variables on IC and fitted the suggested model. According to the study's findings, CI has a positive and significant relationship with the human, structural, and relational elements of IC and auditors will have more human capital (HC), structural capital (SC), and relational capital (RC) as IC rises. The research is exploratory and the framework offers opportunities for refinement. Future studies are required to confirm the framework's applicability to other organizations intended to serve as CI systems. Contribution to the IC research literature is highlighted, expanding the concept of IC value creation beyond the audit firms into wider society and developing a new perspective for managing IC in the audit firms adopting the CI approach. The framework can be used to manage IC strategically in all the systems interpreted as CI systems in which the role of IC creation from multiple actors is relevant. This makes comprehending how IC helps the region and society where the audit firms operate possible. This study is paramount since limited empirical evidence exists, particularly in developing/underdeveloped countries worldwide. The paper's originality lies in combining topics typically covered by literature in different fields, such as IC management and CI perspective. The CI approach provides a novel contribution to managing IC and is intended to inspire future research.

Keywords:

Cultural Intelligence, Human Capital, Intellectual Capital, Relational Capital, Structural Capital

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1. Introduction

The global community needs the existential philosophy of the auditing profession. Auditors are necessary for society and the general public to receive attesting services and for auditors to maintain, survive, and carry out their duties. As a result, auditors play a crucial role among those in each society who are affected by it and have corresponding effects on it. As a result, auditor performance directly or indirectly impacts other crucial facets of the Accounting Information System (AIS) and the caliber of financial reporting, affecting all spheres of society. As a result, to accomplish its objectives, the auditing profession must choose and develop its human resources (which are its most important resources and, in fact, valuable IC) in a way that ensures that not only does the level of their intelligence and IC not negatively impact society, but that all members of society also profit from the benefits of achieving audit goals. International business is significantly challenged by environmental hazards and uncertainties, cultural and regulatory differences, and these factors (Aharoni et al., 2011). Coping with such institutional environmental dynamism and challenges requires a considerable share of senior managers' work and is a vital determinant for success and failure (Henisz and Swaminathan, 2008). In recent decades, audit firms have engaged in an important transformation process to make them more autonomous, economically efficient and competitive. This transformation is taking place in the context of social, economic, cultural, and political change, in which the audit firms are moving towards an organizational model that is more consistent with the promotion of economic development and in synergy with institutions and industries. This paper aims to combine the perspective of CI with IC management, developing a new practical framework that incorporates how IC can be managed and created in audit firms to increase the audit firm's impact on society.

Iran is made up of a variety of ethnic ethnicities, each of which has its own cultural environment. These institutions, which usually draw their human elements, both personnel and managers, from the country and beyond, are likely to be culturally diverse due to their multi-ethnic and multicultural makeup. Akpan and Inyang (2018) contend that a workplace with diverse cultures should allow for some degree of inclusiveness to improve workers' job performance. They clarified that this inclusivity necessitates CI and should consider various factors, including language, cultural norms, religion, genealogy, and social class.

Here, "CI" refers to people's capacity to function well in situations defined by cultural diversity and their ability to successfully adjust to new and unfamiliar cultural settings (Ang et al., 2015). In particular, it is a type of non-academic intelligence that shows a person's capability to operate easily in settings representative of various cultural backgrounds. In contrast to other non-academic intelligence, like emotional intelligence, which is culture-specific and does not translate across the cultural spectrum in today's multicultural workplaces, it includes a collection of mental, motivational, and behavioral skills (Presbitero, 2016). Cultural intelligence can improve job performance when used to recognize and manage cultural differences within a company.

Two topics have received the majority of attention in recent studies on CI. First, several people have talked about how the workplace is changing, how mono cultural organizations are generally declining, and how modern organizations are becoming more multicultural. These articles often offer anecdotal proof of the importance of CI in assisting workers in these businesses to deal with the difficulties posed by cultural diversity. Second, a different line of research has examined how cultural savvy among expats affects worker performance. According to the literature, CI among expatriates results in improved performance. Yet, both sets of studies focused on international judgments of CI rather than the fact that CI is multidimensional. According to earlier conceptualizations, the four components of CI are metacognitive, cognitive, motivational, and behavioral. This research focuses on the effect of the different dimensions on the job performance

of academic staff in tertiary institutions in Iran. Among the key principles of the audit firm, the engagement of auditors to achieve the goal is more pressing today than in the past. Audit firms have moved from focusing exclusively on their traditional teaching and research missions towards a more active role in economic and cultural growth.

Recent reviews of the IC literature find that the audit firm is one of the least researched IC areas. Therefore, what researchers classify as services is continually evolving and will continue to evolve. Thus, there is a lack of IC research about audit firms, given the differences between it and other economic sectors and the continued blurring of the lines between public and private services that create value for citizens. Therefore, audit firms' IC research is an area worth exploring, especially in the context of the change in how these services are delivered and paid for. Additionally, some researchers "stress how important it is for future audit firms' IC research to address important and innovative current issues such as the changes in education" The distinguishing features of the new audit firm raise the problem of identifying proper frameworks for managing and analyzing IC performance, particularly in terms of IC and knowledge assets culturally generated by all the audit firm auditors and their impact within the wider societal and regional ecosystem. The concept of IC has recently been categorized differently by academics and business management. IC is a dynamic system of intangible, knowledge-based resources and activities capable of creating value for the auditors. IC has been described as intellectual material that has been formalized, captured and leveraged to produce a higher valued asset. An interesting conceptualization sees IC as the combination of intangible resources and activities that allows an organization to transform a bundle of material, financial and human resources into a system capable of creating auditor value and organizational innovation. However, the tripartite classification is the most widely accepted in the IC literature, in which IC is structured in three blocks: HC, SC and RC. It is important to note that the real value from IC resides in the sum of the elements that make up the whole and in the interconnections between them.

Generally, the activities comprise three dimensions in which audit firms engage externally: technology transfer and innovation, continuing education, and social engagement. This has been motivated by auditor demand for greater transparency, increasing competition between audit firms, greater autonomy, and the push by audit firms towards adopting new management and performance systems incorporating intangible assets and IC. The original motivations of the present study have been identified per the mission of the audit firm, inspired by CI. These are competence development, the highest purpose of the audit firm and affecting the development of capacities and skills of its HC, characterized by a mindset dedicated to innovation and development; technology transfer and innovation linked to the concept of capacity for action and achievement of development and innovation, with the logic of cost minimization and social engagement and regional development: the transmission of knowledge together with the development of entrepreneurial and intellectual skills creates wealth and development in the regional ecosystem.

2. Literature review

2.1. Cultural intelligence

CI evolved from theories and research on emotional and social intelligence. Still, previous research on these types of intelligence did not adequately address the complexities of working in cross-cultural contexts (Van Dyne et al., 2008). They introduced the construct of CQ based upon the gap in the literature that interpreted and explained culturally-based decision-making and behavioral differences in types of intelligence. They defined CI as the ability to recognize new patterns in cultural interactions and respond appropriately to these patterns. According to Ang et al. (2007),

cultural intelligence is a specific form of intelligence focused on learning, evaluating, and behaving effectively in different situations characterized by cultural diversity. It is a multidimensional construct that allows an individual to continuously learn and coexist with people from other cultures. It is composed of four intelligence bases: metacognitive, which refers to an individual's awareness of interactions with people from other cultures; cognitive, which refers to the specific knowledge one has about the rules, habits, and conventions in new cultural backgrounds; motivational, which captures an individual's motivation to learn and act effectively in various situations; and behavioral, which is conceptualized as an individual's flexibility (Chen, 2015). Metacognition, cognition, and motivation are all within the head as mental capabilities, whereas behaviors manifest as explicit actions.

CI is the ability to become adaptable to understand other cultures, learn from ongoing interactions, and gradually reshape one's thinking. A person's ability to successfully adapt to unfamiliar cultural settings goes beyond general cultural knowledge. Due to increased globalization, CI is becoming a preferred skill among leaders and becoming even more important in a digital setting. The emphasis is gradually shifting away from leadership training and toward organization-wide training. According to research, CI has four dimensions: cognitive, metacognitive, motivational, and behavioral. Cognitive cultural intelligence is an individual's understanding of cultural values, norms, and beliefs. It entails a comprehension of cultural differences as well as cultural universals. Cultural differences are characteristics that differ across cultures, whereas all cultures share cultural universals. The ability to be attentive, pick cues from cross-cultural interactions, and reflect on existing knowledge to modify it is called metacognitive CI. People with a high level of metacognitive CI understand how culture influences behavior (Dyne et al., 2012). Being mindful during intercultural interactions is critical because it allows one to consciously apply cultural knowledge. Individuals with motivational CI are interested in and confident in cross-cultural interactions. Self-efficacy and intrinsic motivation are regarded as critical components of cross-cultural interaction success. Motivational CI has also been shown to improve cultural effectiveness. The ability of an individual to exhibit a set of verbal and nonverbal actions when interacting with people from different cultures is referred to as behavioral CI. People with high behavioral and CI can adapt their behavior patterns. It forecasts individuals' cultural adaptation and task performance.

2.1.1. Metacognitive intelligence

Metacognitive CI is the ability to acquire and comprehend cultural knowledge. As such, metacognitive CI reflects the ability to consider prevalent cross-cultural assumptions and modify them as necessary, thereby assisting individuals in having a better understanding of their cultural preferences both before and during cross-cultural exchanges (Eisenberg et al., 2013). According to Chen et al. (2011), people with high metacognitive CI are more aware of how their culture influences their behavior and understanding of intercultural situations. Self-awareness, other-awareness, and situational awareness are all part of this awareness.

Specific metacognitive self-regulated mental processes are mentioned to understand the nature of metacognitive CI. These are planning, being aware, and checking. Planning has a strategic foundation and is initiated prior to encountering another culture. Before taking action, it is necessary to think about culture and reflect on what needs to be done. In real-time, awareness is aware of cultural thinking and knowledge of oneself and others. Chen et al. (2014). While planning refers to accepting consciousness, awareness refers to people's real-time understanding of how culture influences their mental processes and behaviors, as well as the mental processes and behaviors of others in intercultural interactions and situations. When experience does not match

expectations, checking entails reviewing assumptions and adjusting mental maps. It employs contrasting the expected and actual outcomes of intercultural communication. All three sub-dimensions of metacognitive CI prompt a person with high metacognitive CI to plan, reflect on the situation during the actual contact, and adjust behavior accordingly.

2.1.2. Cognitive intelligence

Cognitive CI is the accumulation of general cultural knowledge and cultural differences. The perception of cultural environment elements leads to understanding how the system arranges patterns of behavior and interactions within a culture and why behaviors and interactions differ across cultural settings. This general knowledge is divided into two categories: cultural general knowledge and context-specific knowledge.

Culture-general knowledge is understanding the universal elements that make up a cultural environment. It provides an essential organizational framework for considering potential methods of comparing different cultures and comprehending the similarities and differences. Context-specific knowledge concerns informative knowledge about how cultural characteristics manifest in a specific environment and procedural knowledge about how to be effective in that environment. A business environment, diplomatic environment, peacekeeping forces, educators, or demographic subgroups based on gender, age, and education are all examples of environments or domains. Individuals working in multicultural tertiary institutional settings must be well-versed in the norms and expectations of these subcultures to perform effectively. Context-specific knowledge refers to an insider understanding of operating within a specific environment. In contrast, culture-general knowledge refers to a broader comparison across cultures based on outsider understanding and comparisons (Morris et al., 1999).

2.1.3. Motivational intelligence

The ability to direct attention and energy toward learning about and functioning in culturally diverse situations is reflected in motivational CI. Engle and Crowne (2014) state that such motivational capacities control cognition and behavior, facilitating goal achievement. The expectancy-value theory of motivation states that the direction and magnitude of energy directed toward a specific task are determined by the expectation that the task will be completed and the value associated with completing the task (Du Plessis, 2011). Those with high motivational CI direct their attention and energy toward cross-cultural situations because they are intrinsically interested in cross-cultural effectiveness (Guðmundsdóttir, 2015).

2.1.4. Behavioral intelligence

The ability to exhibit appropriate verbal and nonverbal actions while interacting with people from different cultures is reflected in behavioral CI. Sub-dimensions of behavioral CI include verbal, nonverbal, and speech acts. The term "verbal behavior" refers to vocalization flexibility. A person's behavior can be modified by altering the pace of their speech, the amount of warmth or enthusiasm they display, or the use of pauses or silence. Nonverbal communication is using gestures, facial expressions, and body language to communicate. Some cultures are more expressive than others in nonverbal communication. A non-local outsider's task is to learn appropriate nonverbal communication methods through metacognitive CI and adjust his or her behavior accordingly.

2.2. Intellectual capital

IC theory has been widely used since the last decade (Cheng et al., 2010). Cheng et al. (2010).

According to the initial definitions, "intellectual action" is something other than "pure thinking." This stance implies that IC is a more dynamic ideological process than fixed capital (Hang Chan, 2009). IC is a multidisciplinary concept with various interpretations in business and commerce (Hwanglee, 2010). According to the definition, IC is the ability of intangible resources to create and sustain a competitive advantage. In reality, IC refers to the knowledge available in an organization on two levels: individual and organizational. Individual level knowledge, skills, and talent; organizational level includes each customer's specific database, technology, methods, and organizational processes (Joshi and Ubha, 2009). IC is generally defined as a collection of intangible assets, also known as knowledge assets (Sudarsanam et al., 2006). This type of capital provides a new resource for the organization to compete with (Bontis et al., 2002), and it includes that portion of the organization's total capital or assets that is based on knowledge and that the organization owns (Anvari and Seraji 2005). Others define IC as organizational resources related to wealth creation via investment in knowledge, information, intellectual property, and experience (Stewart, 1997). According to the Stewart Model, IC has HC and relational dimensions. HC is the foundation of IC and is regarded as a critical component in carrying out its responsibilities. HC refers to human members' capabilities, skills, and expertise that create valuable assets for the organization. SC refers to an organization's non-human reserves and knowledge, such as databases, organizational charts, instructions for implementing processes, strategies, executive programs, or anything else that has a higher value for the organization than its material values. Organizational culture, organizational learning, operational processes, and information systems are all examples of SC. RC is all resources related to the business entity's external communications, including relationships with customers, suppliers, and participants in research and development projects. Many experts classify IC into three categories (Tayles et al., 2007; Marr, 2008):

HC includes employees' knowledge and skills, as well as their professional experience, expertise, level of education, and creativity. SC includes databases, software systems, distribution networks, organizational charts, common cultures, strategies, and policies;

Marketing networks, customer communications, customer loyalty, governmental and industrial networks, and contacts or partners are all examples of RC.

In today's dynamic and risky international communication, auditors must obligate themselves to adhere to cultural values and, as a result, acquire CI and create IC to ensure the auditing profession's survival. This process will improve the quality of services auditors provide, ultimately satisfying members of society and ensuring the auditing profession's survival. Auditors with higher levels of CI will be more valuable intellectual assets to the auditing profession. As a result, auditors with higher intelligence are expected to have a greater sense of responsibility, and their actions will be more consistent with their values and beliefs, resulting in higher performance. Intelligence, experience, auditing and accounting standards, auditing guidelines, the ability to defend, non-bias of decision, doubt, and independence of the auditor (as influencing factors on reasoning) at various levels, adherence to ethics, cultural principles free of fraud, knowledge and skill in the desired industry, and openness and transparency of information are all factors that can improve auditors' reasoning.

Organizations, particularly professional institutions such as the auditing profession, are experiencing extensive and increasing changes in cultural, economic, social, educational, and technological issues, as well as spiritual teachings and beliefs. If auditors respond quickly to changes and developments, they can solve issues and problems. Human resources and the management of IC in providing and promoting human resources, which aligns with auditors' personal characteristics and intelligence, are two of the most important factors that should be considered significant in the auditing profession. We will not be able to deal effectively with new

problems if we apply structures, attitudes, and knowledge that have been useful in the past, as "Einstein" warned (Marquardt, 2002). Thus, applying and focusing on the dimensions of CI can result in a massive transformation of the auditing profession. Despite the importance of these aspects of intelligence in the creation of IC, more attention should be paid to their role because intelligence awareness can help do better in the processes of hiring, transferring, and promoting auditors, which will lead to a decrease in auditor turnover and, eventually, an increase in their job satisfaction and performance. On the other hand, IC is recognized as a strategic asset for improved performance, and IC management (ICM) is critical to an organization's competitiveness (Moghimi and Ramezan, 2011).

A review of previous research on IC in the auditing profession revealed that no effective activities have yet been carried out in this field, and the scattered and limited works done in this regard indicate that IC in various dimensions can be influenced by various factors such as organizational behavior, individual characteristics, intelligence, and so on. Because moral motivations can play an important role in paying attention to the human aspects of IC, organizations, businesses, and various professional institutions, including the auditing profession, are expected to perform their duties competently, appropriately, and even better to strengthen IC. However, the inappropriate state of IC and its components prevails and initially comes to people's, society's, and stakeholders' minds.

Where auditors see the benefits of remote auditing, they value the degree of adaptability and work efficiency that teleworking provides. Audit firms will see improved audit activity outcomes if they embrace emerging technologies in the new digital workplace. Nonetheless, as the transition to remote audit increases auditor liability and audit risks, auditors are more cautious and, in some cases, hesitant about future scenarios of remote audit if innovative emerging audit technologies and integrated governance, risk management, and compliance (GRC) are not used or are not properly implemented. Whatever the future holds for the new digital audit workplace, it is clear that auditors working from home face unique challenges because what they gain in efficiency is offset by benefits that are more difficult to quantify, such as innovative thinking and creativity (Farcane et al., 2023). According to recent research findings, higher levels of CQ are associated with supportive and culturally sensitive strategies, active participation in the host environment, the importance of intrinsic motivation, and the ability to appropriately adjust behavior. Furthermore, academics with higher levels of CQ were found to have important capabilities such as engaging local actors and embracing local culture and people (Tharapos and O'Connell, 2023). Work engagement mediates both the relationship between expatriates' CQ and task performance and the relationship between expatriates' CQ and premature return intention. Cultural distance moderates the positive relationship between CQ and work engagement, as well as work engagement's mediating effects (Chen et al., 2024). An exploratory study found that motivational CI positively and significantly affect cultural adjustment (work adjustment, general adjustment, and interaction adjustment, in that order). That cultural distance negatively moderates motivational CI and work adjustment for expatriate talent (Song et al., 2023).

The results of a recent research hypothesis test revealed that the limitations of accrual-based earnings management and the efficiency of IC influence asymmetric cost behavior. Indeed, the findings confirm that the limitations of accrual-based earnings management increase asymmetric cost behavior and cost stickiness. In contrast, the efficiency of IC, particularly the HC and SC coefficients, increases cost stickiness and asymmetric cost behavior. The findings also revealed that the physical capital coefficient reduces cost stickiness and asymmetric cost behavior (Badiei et al., 2023). A recent study found that RC is important in adopting open innovation. Indeed, RC positively and significantly impacts the three open innovation practices investigated: openness to

external sources of information and knowledge, R&D collaborations, and other incoming activities (Elbouzidi, 2023).

According to a recent study, high levels of CI positively impact an individual's innovative behavior. Furthermore, interpersonal trust levels would moderate CI influence on individual students' innovative behaviors. According to these findings, the majority of Indonesian citizen students who participated in student exchanges or studied abroad had a high level of CI. This study looked at the impact of CI on individuals' innovative behavior, also known as cross-cultural interaction. Furthermore, this study concentrated on Indonesian citizen students who participated in student exchanges or studied abroad. This type of research has not been thoroughly conducted or even discussed in academic circles. As a result, it was necessary to contextualize this issue within the context of science education and management science (Kistyant et al., 2022). Another study found that perceived management CI significantly positively affects pro-diversity climates. Climates supportive of diversity are also negatively and significantly associated with perceived discrimination. Furthermore, a pro-diversity climate fully mediates the effect of perceived management CI on perceived discrimination. This study demonstrates that ensuring top management has CI may not be enough for a company to successfully address workplace discrimination. Rather, top management must foster an organizational climate that values the racial diversity of foreign migrant employees (Charoensukmongkol and Phungsoonthorn, 2022). A recent study found that having or studying CI is important. CI will greatly aid us in communicating and expressing various ideas and mindsets of people from other cultures, resulting in innovative work behaviors and creative solutions (Neslon et al., 2022). According to a recent study, managerial ability is significantly and negatively associated with the overall extent of IC disclosure and all three components of IC (HC, SC, and RC). Further analysis reveals a positive and significant interaction between managerial ability and firm performance, implying that the negative relationship between managerial ability and IC disclosure is less pronounced for high-performing firms (Rajabalizadeh and Oradi, 2022). Another study found that the financial performance of banking companies mediated the relationship between IC and good corporate governance (GCG). Apart from good corporate governance (GCG), the only thing that can improve financial performance and corporate value is GCG, measured by the ratio of independent commissioners to audit quality. Meanwhile, the financial performance and corporate value of banking companies listed on the Indonesia Stock Exchange that are audited by the Big 4 will be greater than the financial performance and corporate value of banking companies not audited by the Big 4 (Anik et al., 2021).

According to the findings of a recent study, the seven mental patterns of managers in the direction of competent human resource selection in the post-corona era are high emotional intelligence, analytical and innovative thinking, digital skills, adaptability, intelligence skills, and active learning (Saedi et al., 2021). According to one study, there is a link between IC, organizational ethics, and organizational performance. Furthermore, IC and organizational ethics can predict organizational performance. The organization's ethics and IC are regarded as the most important organizational assets and resources for gaining a competitive advantage among organizations (Bjørnson and Dingsøy, 2008).

Considering the CI perspective, this paper aims to provide a new framework for managing IC inside external audit firms. We are looking for a conceptual framework with a cultural perspective in the auditing profession by evaluating IC based on CI, which has not been found in any previous research, to determine the level of IC among auditors. The review of theoretical approaches suggests a set of requirements for creating and managing IC and provides the necessary components for building an integrated framework for IC practice in the audit firm. Thus, the purpose of this

section is to introduce the framework developed for the management of IC within the audit firm intended as a CI system, starting from an introduction about the audit firm's plan for a CI system and moving towards the description of the framework's main components related to management and measurement of IC. The framework aims to support the audit firm as a cultural CI in which the tangible and intellectual assets are coordinated towards achieving social engagement and regional development. The application of CI is aimed at leveraging collaboration to create more favorable conditions for managing IC within an audit firm in which involvement from both internal and external auditors of the region/ecosystem where the audit firm is located is involved. The underlying assumption of the framework is the bidirectional relationship of CI with HC, SC and RC because these components of IC create the processes and structures that bring together the audit firm with businesses and institutions. In addition, RC creates value for all audit firm members and develops CI impact for its auditors. SC creates an environment that facilitates the development of CI in the audit firm (Secundo et al., 2015). Based on these theoretical foundations and previous research, the current study intends to investigate the effects of CI on IC. The following main question is proposed: Is there a link between CI and IC?

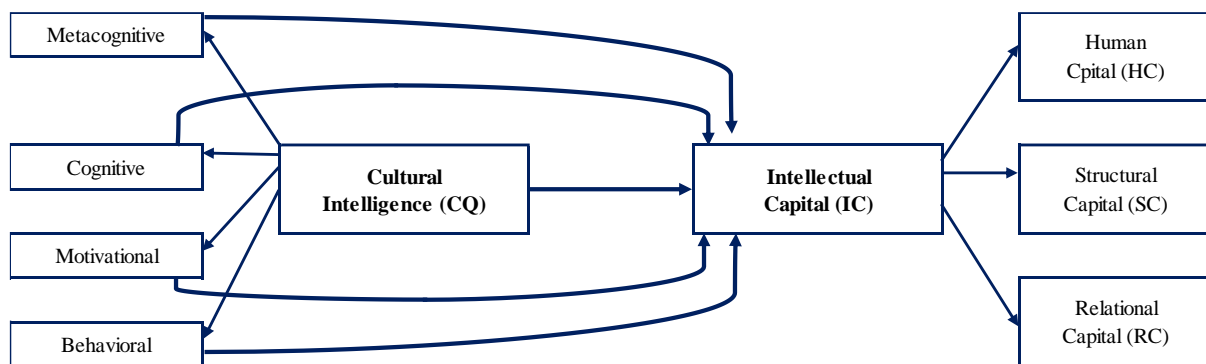


Figure 1. Conceptual model of the research

Research hypotheses are as follows by the research questions, theoretical foundations, stated backgrounds, and conceptual model in Figure 1:

H1: There is a significant relation between CI and IC.

H2: There is a significant relation between Metacognitive Intelligence and IC.

H3: There is a significant relation between Cognitive Intelligence and IC.

H4: There is a significant relation between Motivational Intelligence and IC.

H5: There is a significant relation between Behavioral Intelligence and IC.

H6: IC has a significant positive effect on HC.

H7: IC has a significant positive effect on SC.

H8: IC has a significant positive effect on RC.

3. Research methodology

The method of the present study is a descriptive survey in terms of data collection and applied from the point of view of purpose. The statistical population of this study includes all auditors working in auditing firms and audit organizations under the membership of the Society of Certified Public Accountants in Iran in 2022. This method is similar to multiple regression aspects because SEM methodology has been used for data analysis. The sample size determination principles used in multiple regression analysis can be applied to determining the statistical sample in SEM. The

number of samples required for Cochran's formula field research in an infinite population has been determined. The equation of the mentioned formula is in the form of the following formula:

$$n = \frac{Z^2 \alpha / 2 p(q)}{d^2}$$

Where in:

n: Number of samples

p: Success ratio in society

q: Unsuccess ratio in society

Z $\alpha/2$: The value of the standard variable corresponding to the confidence level

d: Accepted error

The required number of samples was 385 participants, based on the above formula and a 5% margin of error. More paper questionnaires were distributed randomly throughout the community to observe conservatism, with 319 returned questionnaires usable and their data analyzed. Table (1) shows the demographic characteristics of the sample, including gender, age, education, and work experience of the participants in this study.

A questionnaire was used to collect data. The two questionnaires used are both standard and expert, and researchers have approved their content validity. Confirmatory Factor Analysis (CFA) and Average Variance Extracted (AVE) were used to test the convergent validity of the model structures. The factor loads of each variable must be greater than 0.4 and significant for the convergent validity test, which is used in confirmatory factor analysis using the structural factor method, so the coefficient of significance or t-value of each variable must be greater than 1.96 and less than -1.96. The Average Variance Extracted (AVE) should, on the other hand, be greater than 0.4. The minimum value for establishing reliability is 0.7 (CR for Composite Reliability), an alternative to Cronbach's alpha in structural equation analysis (Hooman, 2008). The value of composite reliability (CR) obtained in this study for research variables is greater than 0.7, indicating that the reliability of these variables can be assured.

The variables were measured using a standard questionnaire with 62 questions. To assess the variable "CI," the standard Ang and Earley questionnaire with 20 questions and four dimensions: Metacognitive, Cognitive, Motivational, and Behavioral was used. In addition, the standard Bontis questionnaire with 42 questions and three dimensions, HC, SC, and RC, was used to assess the variable IC." The responses are based on a 5-point Likert scale. There are five options, with a score of 1 representing the lowest motivation and a score of 5 representing the highest. The SEM method for testing research hypotheses employs PLS with the assistance of Excel, SmartPLS3, and SPSS26 software for data processing and statistical tests.

SEM is a statistical method that simultaneously studies the relationship of multiple variables in a pattern. One of the main reasons researchers use this approach is that SEM is a comprehensive way to test theories. Another reason is that this method considers measurement error, allowing researchers to report on their data analysis while accounting for measurement error.

4. Findings

Descriptive statistics are concerned with the arrangement and classification of data and the graphical representation and calculation of values such as mean, median, and so on, which indicate the characteristics of each member of the statistical population. The information obtained from a group in descriptive statistics describes the same group. Table (1) shows the description of the participants at the levels of each of the demographic variables:

Table 1. Demographic Characteristics of the Participants

Gender	Frequency	Percentage	Age	Frequency	Percentage
Female	92	28.840	Less than 30 years	82	25.710
Man	227	71.160	30 to 40 years	104	32.600
			41 to 50 years	97	30.410
			More than 50 years	36	11.280
Total	319	100.000	Total	319	100.000
Education	Frequency	Percentage	Work Experience	Frequency	Percentage
Bachelor's Degree	127	39.810	Less than 10 years	116	36.370
Master's Degree	134	42.010	10 to 15 years	73	22.880
Ph.D.	58	18.180	16 to 20 years	61	19.120
			More than 20 years	69	21.630
Total	319	100.000	Total	319	100.000

Table (2) shows the descriptive statistics for the research indicators, including the number of participants, the lowest value (Min), the highest value (Max), the Mean, Standard Deviation (SD), Skewness, and Kurtosis coefficients.

Table 2. Description of the Participants based on the Research Indicators

Variable	Min.	Max.	Mean	Std.Dev.	Skewness	Kurtosis
Metacognitive Intelligence	1	5	3.062	1.082	-0.565	-0.686
Cognitive Intelligence	1	5	3.220	0.766	-0.286	-0.474
Motivational Intelligence	1	5	3.927	0.781	0.289	-0.010
Behavioral Intelligence	1	5	2.535	0.840	0.635	-0.045
Cultural Intelligence (CI)	1.350	5	2.936	0.694	-0.016	-0.324
Human Capital (HC)	1	5	3.619	0.611	-0.697	1.456
Structural Capital (SC)	1	5	3.551	0.677	-0.682	0.927
Relational Capital (RC)	1	5	3.645	0.627	-0.938	1.916
Intellectual Capital (IC)	1	5	3.605	0.572	-0.834	1.858

Table (2) shows that CI and IC average values were 3.951 and 3.605, respectively.

The Kolmogorov-Smirnov test is used to ensure that the data is normal. The null hypothesis based on "the data distribution is normal" is tested at the 5% error level when testing the data's normality. As a result, if the test's significance value is greater than or equal to 0.05, there is no reason to reject the null hypothesis because the data is normal. The results of the data normality test revealed that the data related to the research variables is not normal. The PLS method with SmartPLS3 software was used to investigate the research hypotheses.

In contrast to the covariance-based method (LISREL, AMOS software), SEM using the PLS method lacks chi-square-based model fit indices to check the degree of conformity of the theoretical model with the collected data. This is determined by the PLS method's predictive nature. As a result, the fit indices developed as part of this approach are concerned with determining the model's ability to predict the dependent variables, such as the communality indices or the GOF index. To fit the variance-based SEM test or the PLS method, all researchers used the same framework, which is as follows: evaluation of the measurement model (outer model) that is reflective or combined; structural model test (inner model); overall model test.

A measurement model is a component of the overall model that includes questions about that component. The fit of measurement models is evaluated using three criteria: reliability, convergent validity, and divergent validity. The degree to which a measurement tool produces the same results when used under the same conditions is determined by its reliability. This means the questionnaire will be reliable if the researcher runs it again or in parallel and the results are the same. The

reliability is assessed in three ways: factor loading coefficients, Cronbach's alpha coefficients, and composite reliability.

Table 3. Reliability and Discriminant Validity and Investigating the Divergent Validity of Main Components

Variable	Met. I.	Cog. I.	Mot. I.	Beh. I.	HC	SC	RC
Metacognitive Intelligence	0.954						
Cognitive Intelligence	0.465	0.781					
Motivational Intelligence	0.621	0.507	0.848				
Behavioral Intelligence	0.529	0.335	0.681	0.868			
Human Capital (HC)	0.256	0.403	0.309	0.105	0.724		
Structural Capital (SC)	0.311	0.461	0.286	0.113	0.726	0.739	
Relational Capital (RC)	0.397	0.503	0.337	0.157	0.64	0.716	0.728
Cronbach's Alpha	0.967	0.870	0.901	0.918	0.929	0.928	0.931
Composite Reliability (CR)	0.976	0.902	0.927	0.939	0.941	0.939	0.940
AVE	0.911	0.609	0.718	0.754	0.524	0.546	0.531

The criterion value for factor loading coefficient appropriateness is 0.4. The coefficients of the factor loadings related to the research factors in this study are greater than 0.4. We can confirm the research's reliability and convergent validity because the appropriate values for Cronbach's alpha, composite reliability, and AVE are 0.7, 0.7, and 0.5, respectively, and all of the criteria in the measurement of factor loadings have appropriate values. Divergent validity is the third criterion for assessing the fit of measurement models, and it addresses a number of issues.

As shown in Table (3), the AVE of each factor is greater than the correlation value of two factors in marked cells with dark colors. As a result, using the Fornell-Larcker criterion, we confirm the research's divergent validity.

A new index called the Heterotrait-Monotrait Ratio, or HTMT has been introduced to assess divergent validity. The acceptable range for the HTMT criterion is 0.85 to 0.9. If this criterion is less than 0.9, divergent validity is acceptable (Henseler et al., 2015).

Table 4. Review of HTMT Criterion Matrix

Variable	Met. I.	Cog. I.	Mot. I.	Beh. I.	HC	SC	RC
Metacognitive Intelligence	-						
Cognitive Intelligence	0.492	-					
Motivational Intelligence	0.664	0.548	-				
Behavioral Intelligence	0.561	0.348	0.745	-			
Human Capital (HC)	0.276	0.446	0.341	0.129	-		
Structural Capital (SC)	0.329	0.512	0.316	0.142	0.789	-	
Relational Capital (RC)	0.416	0.557	0.368	0.170	0.694	0.769	-

The HTMT criterion for all pairs of variables is less than 0.9, according to Table (4). The three cross-loading Table methods, the Fornell-Larcker criterion, and the HTMT criteria confirm the research model's validity.

After examining the fit of measurement models, it is time to fit the research structural model. Unlike the measurement model, the structural model is concerned with hidden factors and their relationships rather than questions (manifest variables). The first and most basic of these criteria is the t-value, which is used to assess the fit of the research model.

The t-value is an important criterion for measuring the relationship between model factors. If the value exceeds 1.96, it indicates that the relationship between the factors is correct and the research hypotheses are confirmed at the 5% error level. It should be noted that the numbers only show the accuracy of the relationship; they cannot measure the intensity of the relationship between the factors.

Table 5. Investigating Relationships within the Structural Model

Relationship		Standard Coefficients	t-value	p-value
Metacognitive I.	→ CQ	0.825	40.528	0.000
Cognitive I.	→ CQ	0.707	19.469	0.000
Motivational I.	→ CQ	0.884	59.870	0.000
Behavioral I.	→ CQ	0.788	32.610	0.000
IC	→ HC	0.878	55.564	0.000
IC	→ SC	0.913	94.176	0.000
IC	→ RC	0.884	56.302	0.000
CQ	→ IC	0.333	4.961	0.000

*Note: CQ refers to Cultural Quotient, or CI.

According to the contents of Table (5), there is a significant relationship between the variables because the T-value for these relationships is greater than 1.96 (an indication of the correctness of the relationship between the factors and as a result of confirming the research hypotheses at the 5% error level).

In a study, the R^2 coefficient is related to the model's endogenous (dependent) hidden factors. R^2 is a measure that shows the impact of an exogenous factor on an endogenous factor, and values of 0.19, 0.33, and 0.67 are considered weak, medium, and strong results, respectively. The R^2 value for exogenous or independent factors is zero.

The validity index of redundancy is used to assess the model's validity. The redundancy index, also known as Stone-Geyser Q^2 , assesses the structural model's quality for each endogenous factor while accounting for the measurement model. Suppose the values of these indicators become zero or less than zero for a dependent factor. In that case, it indicates that the relationships between the model's other factors and that dependent factor are not well explained, and the model must be modified as a result. These criteria determine the model's predictive power, and values of this index for one of the endogenous factors of 0.02, 0.15, and 0.35 indicate weak, moderate, and strong predictive power, respectively.

Table 6. Review of R^2 , Q^2 and F^2 Criteria

Variable	R^2	Q^2	F^2
Metacognitive Intelligence	0.681	0.581	2.135
Cognitive Intelligence	0.499	0.274	0.997
Motivational Intelligence	0.782	0.526	3.581
Behavioral Intelligence	0.620	0.436	1.633
Human Capital (HC)	0.771	0.363	3.372
Structural Capital (SC)	0.833	0.414	4.992
Relational Capital (RC)	0.782	0.038	3.594
Intellectual Capital (IC)	0.279	0.209	0.162

According to the Table contents, the R^2 criterion for most dependent variables is strong, and the Q^2 criterion for dependent variables is strong. The Cohen's F^2 criterion determines the strength of the relationship between the model's constructs. The R^2 index measures effect size and analyses the relationship between the constructs. The values 0.02, 0.15, and 0.35 represent one structure's small, medium, and large impact on another. The F^2 criterion is strong for the majority of variables, according to the contents of Table (6).

Table 7. Test Results of the Research Hypotheses

Hypotheses		Standard Coefficients	t	p	Results
H1: CQ	→ IC	0.231	3.431	0.000	Confirmed
H2: Metacognitive I.	→ IC	0.247	3.568	0.000	Confirmed
H3: Cognitive I.	→ IC	0.264	3.753	0.000	Confirmed
H4: Motivational I.	→ IC	0.226	2.964	0.000	Confirmed
H5: Behavioral I.	→ IC	0.283	3.869	0.000	Confirmed
H6: IC	→ HC	0.878	55.564	0.000	Confirmed
H7: IC	→ SC	0.913	94.176	0.000	Confirmed
H8: IC	→ RC	0.884	56.302	0.000	Confirmed

Measurement and structural models are included in the overall model. The GOF criterion is related to the structural models' overall part. This means that with this criterion, the researcher can control the fit of the overall model after checking the fit of the measurement model and the structural model of this research (Tenenhaus et al., 2004). Tenenhaus et al. (2004), taking the three values of 0.01, 0.25, and 0.36, introduced as weak, medium, and strong values for GOF, and obtaining a value of 0.656 for GOF demonstrates the model's appropriate fit. In general, based on the steps taken to confirm the measurement model and validity and calculations, followed by the test of the relationships between the variables, it should be stated that the model presented by this research is confirmed, and we can now examine the research hypothesis. According to Table (7), all research hypotheses were confirmed. However, the findings were consistent with those of international studies conducted by Tharapos and O'Connell (2023), Kistyanto et al. (2022), and Anik et al. (2021) in terms of the fact that metacognitive, cognitive, motivational, and behavioral aspects of auditors' CI can improve intellectual capital's dimensions of HC, SC, and RC. The framework describes an approach that all audit firms can use to enhance their intangible resources and endorse the capacity of their auditors, on which a profitable interaction with the external environment is based. The model outlines explanations that motivate HC to achieve the audit firms' goal, identifying the motivations, activities, and processes that allow for effective management of strategic IC. Additionally, audit firms, interpreted as CI systems, have potentially a pivotal role in their regions' social and economic development because they are a critical "asset" of the region. Therefore, the conceptual framework developed allows the analysis of the impact of managing IC according to an individual perspective (audit firm level) and a cultural perspective (society and regional level). According to this model, auditors use their intuition to confirm something achieved previously in real-life cultural judgments and, ultimately, to describe their cultural judgments, values, and behaviors. According to research in this field, the components of CI that are related to others are also positively related to IC. According to the findings of this study, CI is positively and significantly related to all aspects of IC, which is consistent with the findings of other studies. Even though HC, SC, and CC are beyond the fulfillment of economic and legal obligations, and individuals do not consider profit maximization when implementing these types of capitals, it is necessary to observe these capitals to prevent social and economic damages, and according to these findings, cultural auditors place a higher value on IC in all aspects. As a result of the findings of this study, it is suggested that to evaluate and improve the IC of organizations, regulatory bodies, and decision-making authorities, consider cultural principles and standards more than ever before and consider CI as a factor affecting adherence to IC. This paper's main contribution to the IC literature is to provide a new practical framework whereby IC in the evolving audit firm is created and managed. The underlying assumption behind the framework is to consider the audit firm as a CI system in which the tangible and intellectual assets are coordinated towards the achievement of strategic goals. An application of the framework is provided to the emerging model of the audit firm, the traditional missions of which – teaching and research – are being broadened to include

new mission activities that facilitate audit firms' engagement with society and regional development.

Applying the framework in practice adds to building IC knowledge by completing the cycle of developing normative frameworks and testing their validity in real work settings. The need for audit firms to have greater involvement with their wider community and the general concern to ensure the informational transparency of these institutions makes it advisable to present information on IC management. General methods for evaluating intangibles within audit firms are justified on the one hand in the political and managerial challenges that audit firms have to manage and disclose information to auditors and on the other hand by the consideration that national and supranational organizations recognize the central role of audit firms in the contemporary knowledge-based society. Below are some reasons why audit firms strategically manage IC: 1) Audit firms produce knowledge through scientific and technical research, teaching or entrepreneurial activities (technology transfer, licensing, etc.). Audit firms' inputs and outputs are largely intangible assets. 2) The greater autonomy of audit firms regarding their organization, management and budget distribution requires greater social accountability to facilitate and satisfy the information needs of internal and external auditors. However, IC approaches need to be reinvented to facilitate a more balanced approach to management, measurement, and reporting that contributes to the strategic management of audit firms. The focus should be on developing IC theory in practice and effective IC management through praxis to provide a better view of the process of developing IC and the impact of IC in action. It is possible to effectively implement IC practices without necessarily needing concrete IC measures because organizational measurement needs continually evolve depending on factors such as the characteristics of individual organizations, changing internal and external political, social and economic environments, and evolving business plans and strategies". The review of theoretical approaches and previous experience in IC management in audit firms suggested a set of requirements for defining and measuring IC in audit firms and provided the necessary criteria and methods for building an initial normative integrated framework to manage IC in audit firms. This is distinctly different from a research approach, which seeks to develop measurement approaches concentrating on measuring IC performance in current practice. Indeed, the approach here is a model that aims to shape praxis and performance rather than measure performance outcomes. The CI approach is adopted to design the new framework, starting from the assumption that the audit firm is a CI system.

5. Discussion and conclusion

The current study examined the relationship between CI and IC dimensions using Bontis' proposed model among all auditors working in auditing firms and audit organizations who are members of the Society of Certified Public Accountants. As previously stated, IC is the ability of intangible resources to create and maintain a competitive advantage, and the influence of CI factors on IC dimensions is undeniable. The research is exploratory and the framework offers opportunities for refinement. A new perspective for managing IC in audit firms adopting the CI approach is developed. Contribution to the ecosystem of IC research is highlighted, expanding the concept of IC value creation beyond the audit firm into wider society. The framework can be used to manage IC strategically in all the systems interpreted as CI systems in which the role of IC creation from multiple actors is relevant. This makes it possible to understand how IC helps create value for society and the region in which the audit firm operates. The paper's originality brings together issues usually dealt with within the literature in separate domains, such as IC management and CI perspective. CI is an unexplored field in audit firms' IC management. The CI approach provides a

novel contribution to managing IC and is intended to inspire future research. In this regard, previous research findings demonstrated that CI could lead an organization to IC, and auditors' high cultural values reflect their high IC. CI is a variable that helps to explain cultural reasoning. The creation and management of IC is thus an operational priority to evaluate the alignment between the strategic orientation and the performance within the audit firms contributing to social engagement and regional development.

However, given the impact of CI on judgments and decision-making and the fact that cultural factors influence the prominence of CI, this theory should be tested again to determine which components are most important in Iran and are used in judgments. Many organizations have found that paying attention to physical and financial resources cannot guarantee survival in recent years, as the current economic paradigm has shifted from a machine-oriented industrial economy to a mind-oriented knowledge economy. Nowadays, the concurrent use of physical and financial capital, IC and human resources aided by CI can create a sustainable competitive advantage and even provide reasons for the auditing profession's survival. IC formation and evolution due to improved CI are critical to the auditing profession's effectiveness and efficiency. In general, auditors acquire the stages of socialization and entry into society through their experiences in the profession's formal and informal educational systems (Hussami et al., 2011). As a result, in many cases, society's expectations of auditors are linked to the development of culture and the expansion of their social capital. CI and its various components can have an impact on IC. These factors can not only improve auditing performance but also play an important role in the auditing profession's social, economic, and even political development (such as improving the status and dignity of accountants and auditors in society and playing an active role in the accounting and auditing profession involving the members of the profession more effectively in the macro-national decision-making by the politicians).

This study examined the impact of auditors' CI on IC. The findings of the first hypothesis test revealed that CI and its components (metacognitive, cognitive, motivational, and behavioral) are among the factors influencing auditors' IC in their judgment and decision-making from a cultural perspective. Auditing is reassuring for shareholders and other financial auditing and reporting users. In addition to this assurance, professional commitment is an essential feature that can strengthen CI and prevent improper intentions from being avoided during the audit process. This survey shows that concerns decrease when relationships between auditors and society improve and the auditing profession is honest. As a result, auditors' propensity to maintain ethics and professional commitment is enhanced. People who see their future as being aligned with the organization's goals are more committed to adopting the desired characteristics of the organization and are willing to act in the organization's interests while avoiding conflict with the client. Auditors dedicated to their profession strive to adhere to professional standards, principles, and rules and respect professional requirements. As a result, those with a strong professional commitment are more sensitive to cultural issues. The findings of this section of the study are consistent with previous research (Tuan Mansor et al., 2020; Meutia et al., 2018; Taylor and Curtis, 2010). In this regard, relevant auditing managers are suggested to create suitable conditions to improve auditors' professional commitment while providing desirable requirements for establishing friendly relations among auditors and offering efficient and effective incentives. In addition to the applicants' knowledge and expertise, auditing firms and auditing organizations should seriously consider individuals' CI and IC when recruiting auditors, and skilled psychologists should be employed in this regard. Furthermore, ongoing training on the importance of ethics and its positive effects on the IC of the auditing profession should be provided. Furthermore, it is recommended that the Iranian Association of Certified Public Accountants codify guidelines for developing regulations related to reporting non-

cultural behaviors that jeopardize economic health in accordance with the enforcement of the Administrative Health Law, notify audit firms, and consider assessing audit firm quality. The results of the second, third, and fourth hypotheses imply that auditors' IC will have more HC, SC, and RC as they increase. Auditors can be influenced by environmental and psychological factors, which can have a complex impact on disclosure purposes. Auditors typically have a track record of success in the workplace, and gaining positions that others can rely on is critical for them; as a result, they will have more IC. The findings of this hypothesis are consistent with the findings of one study (Winfield, 1994) but do not agree with the findings of another study (Liyanarachchi and Adler, 2011).

Naturally, any research begins with a sketch in the researcher's mind. It is nurtured and identified in its domains, dimensions, and methodology, eventually leading to findings and results through data collection and analysis. As a result, there may be some obstacles and limitations along the way, with the main limitation of this research being the use of the questionnaire, which has inherent limitations. Based on this limitation, respondents may not be cautious when answering questions or their conditions, and moods may change under environmental conditions, causing them to misinterpret the answers and challenging the generalization of the results to the population, which is beyond the researcher's control. Another limitation of this study was the country's lack of research in this field, which limited the researcher to studying the background in Iran and comparing the results with local studies. The main criteria of CI and IC were used in this survey. Other variables, such as the size of the audit firm, can be used in future research. Furthermore, researchers can conduct the same research on the subject under consideration in this study at the level of auditors of governmental organizations (Court of Audit).

In recent decades, researchers have paid close attention to the concept of IC, and paying attention to social interests has become more important than economic and legal rules. This concept is now one of the most important issues in the academic and business worlds. Auditors consider it in their decisions, whether voluntarily or compulsorily because implementing IC provides several obvious and hidden benefits to the auditing profession and society. By raising awareness in this area, identifying the factors influencing auditors' perceptions of IC can thus effectively improve organizations' sense of responsibility and accountability. CI has a positive relationship with HC and the structural and relational aspects of IC, according to the findings of this study. Because managers and employees choose to observe different aspects of IC, cultural programs and strengthening cultural attitudes reinforce an organization's cultural culture and draw auditors' attention to perceiving and observing IC. This eventually leads auditors to combine society's expectations with the organization's human, structural, and relational goals in their decisions to ensure survival and long-term benefits.

IC examines the main dynamics influencing economic competition in knowledge economics from various perspectives. It must be a driving force in the auditing process, with the pattern of success being the development of IC, including administrative management skills. Nowadays, the transition from negative behavior in human resource management to positive attitudes among auditors is unavoidable, manifested in the creation of favorable conditions for knowledge acquisition, skill improvement, and universal development of working power. HC investments are long-term investments that should not be overlooked by managers who are focused on short-term objectives. It is critical to create an environment in the economic and political systems that will encourage organizations to participate in the creation of HC as a basic component of IC, thereby increasing motivation to invest in it. Organizations that use their ability to find and develop HC to gain a competitive advantage to the greatest extent possible will be highlighted shortly. The beginning of the third millennium heralds a period in which the nature of organizations shifts.

Auditors must deal with new methods while utilizing existing resources. A new epoch brings with it new hopes as well as hidden dangers. One of them is a careless attitude toward recognizing an unusually rapid development. Society, customers, technology, and competition are all constantly changing. If an organization wants to succeed, it must change; otherwise, the key competence can easily become the key inconvenience, resulting in a setback.

The new millennium is known for the constantly accelerating changes and economics based on IC, which are critical to underpin and efficiently manage. The importance of knowledge cannot be overstated. It is taken into account at the global, national, and organizational levels. IC Management (ICM) is a contemporary challenge. Searching for possibilities and methods of quantifying the return on investment in human resource development and an effort in strategic management in the form of IC Management (ICM) should be essential components. The findings of this study show that CI, as one of the ethics mechanisms, can help auditors build IC. As science and technology advance, communities become more sophisticated and specialized. Organizations are no exception as societal institutions.

Committed, motivated, and skilled HC is created in today's highly competitive world simply by considering individual needs and training and educating human resources. Ethics, transparency, and CI against wrongdoing are more important than ever in such circumstances. The auditors' professional commitment reflects their adherence to rules and regulations. The code of professional conduct for auditors, which encourages them to follow professional ethics, is possibly the most important rule of the auditing profession. CI is a cultural component in the public interest because it can prevent potential harm (illegal, immoral, and illegitimate activities) to external and internal stakeholders. As a result, auditors' commitment to their profession and its requirements, including the code of professional conduct, is likely to improve their CI. Auditors and those who use auditing services must be committed to their profession. Members of this profession must be expected to go above and beyond society's rules and regulations while adhering to cultural and professional principles. This research undoubtedly helps to understand and recognize auditors' attitudes in both the private and public sectors. These findings could be used to develop cultural principles of the profession and policy in attracting auditors, particularly those certified by the Exchange and Securities Organization and the Iranian Association of Certified Public Accountants.

References

1. Aharoni, Y., Tihanyi, L. and Connelly, B. L. (2011). Managerial decision-making in international business: A forty-five-year retrospective. *Journal of World Business*, 46(2), pp. 135-142. <https://doi.org/10.1016/j.jwb.2010.05.001>
2. Akpan, A. P. and Inyang, A. B. (2018). Motivation and Employee Engagement in the Civil Service: The Nigerian Experience. *Saudi Journal of Economics, Finance and Management*, 2(3), pp. 85-93.
3. Al-Hussami, M., Saleh, M. Y., Hayajneh, F., Abdalkader, R. H. and Mahadeen, A. I. (2011). The effects of undergraduate nursing student–faculty interaction outside the classroom on college grade point average. *Nurse Education in Practice*, 11(5), pp. 320-326. <https://doi.org/10.1016/j.nepr.2011.02.004>
4. Ang, S., Van Dyne, L., and Rockstuhl, T. (2015). Cultural intelligence – Origins, conceptualization, evolution, and methodological diversity. In M.J. Gelfand, C. Chiu and Y. Hong (Eds.), *Handbook of advances in culture psychology* (pp. 273–323). New York: Oxford University Press, New York, NY
5. Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C. and Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision

- making, cultural adaptation and task performance. *Management and organization review*, 3(3), pp. 335-371. <https://doi.org/10.1111/j.1740-8784.2007.00082.x>
6. Anik, S., Chariri, A. and Isgiyarta, J. (2021). The effect of intellectual capital and good corporate governance on financial performance and corporate value: A case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), pp. 391-402. <https://doi.org/10.13106/jafeb.2021.vol8.no4.0391>
 7. Anvari, A., Seraji, H. (2005). Measuring intellectual capital and intellectual capital of the relationship between the market value of stock market companies in Tehran Stock Exchange, *Journal of Accounting and Auditing*, 39, pp. 49-62.
 8. Badiei, H., Rastgoo, N. and Beytari, J. (2023). Cost stickiness; Emphasis on the limitations of earnings management and the efficiency of intellectual capital. *Journal of Management Accounting and Auditing Knowledge*, 12(46), pp. 411-428. (In Persian).
 9. Bjørnson, F. O. and Dingsøyr, T. (2008). Knowledge management in software engineering: A systematic review of studied concepts, findings and research methods used. *Information and software technology*, 50(11), pp. 1055-1068.
 10. Bontis, N., Crossan, M. M. and Hulland, J. (2002). Managing an organizational learning system by aligning stocks and flows. *Journal of Management Studies*, 39(4), pp. 437-469. <https://doi.org/10.1111/1467-6486.t01-1-00299>
 11. Charoensukmongkol, P. and Phungsoonthorn, T. (2022). The effect of cultural intelligence of top management on pro-diversity work climate and work attitudes of Myanmar migrant workers in Thailand. *Equality, Diversity and Inclusion: An International Journal*, 41(5), pp. 760-777. <https://doi.org/10.1108/EDI-11-2020-0339>
 12. Chen, A. S. Y. (2015). CQ at work and the impact of intercultural training: An empirical test among foreign laborers. *International Journal of Intercultural Relations*, 47, pp. 101-112. <https://doi.org/10.1016/j.ijintrel.2015.03.029>
 13. Chen, A. S. Y., Lin, Y. C. and Sawangpattanakul, A. (2011). The relationship between cultural intelligence and performance with the mediating effect of culture shock: A case from Philippine laborers in Taiwan. *International Journal of Intercultural Relations*, 35(2), pp. 246-258. <https://doi.org/10.1016/j.ijintrel.2010.09.005>
 14. Chen, A. S. Y., Wu, I. H. and Bian, M. D. (2014). The moderating effects of active and agreeable conflict management styles on cultural intelligence and cross-cultural adjustment. *International Journal of Cross Cultural Management*, 14(3), pp. 270-288. <https://doi.org/10.1177/1470595814525064>
 15. Chen, Y., Yang, Z., Liu, B., Wang, D., Xiao, Y. and Wang, A. (2024). How cultural intelligence affects expatriate effectiveness in international construction projects. *Engineering, Construction and Architectural Management*, 31(4), pp. 1696-1714. <https://doi.org/10.1108/ECAM-03-2022-0247>
 16. Cheng, M. Y., Lin, J. Y., Hsiao, T. Y. and Lin, T. W. (2010). Invested resource, competitive intellectual capital, and corporate performance. *Journal of intellectual capital*, 11(4), pp. 433-450. <https://doi.org/10.1108/14691931011085623>
 17. Du Plessis, Y. (2011). Cultural intelligence as managerial competence. *Alternation*, 18(1), pp. 28-46.
 18. Eisenberg, J., Lee, H. J., Brück, F., Brenner, B., Claes, M. T., Mironski, J. and Bell, R. (2013). Can business schools make students culturally competent? Effects of cross-cultural management courses on cultural intelligence. *Academy of Management Learning & Education*, 12(4), pp. 603-621. <https://doi.org/10.5465/amle.2012.0022>
 19. Elbouzidi, H. (2023). Empirical study of the relationship between intellectual capital and open

- innovation within companies in agribusiness. *International Journal of Accounting, Finance, Auditing, Management and Economics*, 4(1-2), pp. 329-345.
20. Engle, R. L. and Crowne, K. A. (2014). The impact of international experience on cultural intelligence: An application of contact theory in a structured short-term programme. *Human Resource Development International*, 17(1), pp. 30-46. <https://doi.org/10.1080/13678868.2013.856206>
 21. Farcane, N., Bunget, O. C., Blidisel, R., Dumitrescu, A. C., Deliu, D., Bogdan, O. and Burca, V. (2023). Auditors' perceptions on work adaptability in remote audit: a COVID-19 perspective. *Economic Research-Ekonomska Istraživanja*, 36(1), pp. 422-459. <https://doi.org/10.1080/1331677X.2022.2077789>
 22. Guðmundsdóttir, S. (2015). Nordic expatriates in the US: The relationship between cultural intelligence and adjustment. *International Journal of Intercultural Relations*, 47, pp. 175-186. <https://doi.org/10.1016/j.ijintrel.2015.05.001>
 23. Hang Chan, K. (2009). Impact of intellectual capital on organizational performance: An empirical study of companies in the Hang Seng Index (Part 2). *The Learning Organization*, 16(1), pp. 22-39.
 24. Henisz, W. and Swaminathan, A. (2008). Institutions and international business. *Journal of International Business Studies*, 39(4), pp. 537-539. <https://doi.org/10.1057/palgrave.jibs.8400381>
 25. Henseler, J., Ringle, C. M. and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), pp. 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
 26. Hooman, HA. (2008) Structural equation modeling using LISREL software. 1St ed. Samat Publications, Tehran, Iran. (In Persian).
 27. Hwanglee, S. (2010), uses fuzzy AHP to develop an intellectual capital valuation model for assessing their performance contribution in a university, *Expert Systems with Applications*, 37, pp. 41-47.
 28. Joshi, M. and Ubha, D. S. (2009). Intellectual capital disclosures: the search for a new paradigm in financial reporting by the knowledge sector of Indian economy. *Electronic Journal of Knowledge Management*, 7(5), pp. 575-582.
 29. Kistyanto, A., Rahman, M. F. W., Adhar Wisandiko, F. and Setyawati, E. E. P. (2022). Cultural intelligence increase student's innovative behavior in higher education: the mediating role of interpersonal trust. *International Journal of Educational Management*, 36(4), pp. 419-440. <https://doi.org/10.1108/IJEM-11-2020-0510>
 30. Liyanarachchi, G. A. and Adler, R. (2011). Accountants' whistle-blowing intentions: The impact of retaliation, age, and gender. *Australian Accounting Review*, 21(2), pp. 167-182. <https://doi.org/10.1111/j.1835-2561.2011.00134.x>
 31. Marquardt, M.J. (2002). Building the learning organization: Mastering the 5 elements for corporate learning. 2nd ed, Nicholas Brealey Publishing, London
 32. Marr, B. (2008). Intangible asset measurement. *Accountants Today*, 21(11), pp. 16-18.
 33. Meutia, I., Adam, M. and Nurpratiwi, T. (2018). The effect of professional commitment and ethical consideration on the desire to do whistleblowing with locus of control as a moderating variable (study on the banking sector in Palembang). *Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah*, 6(3), pp. 363-370. <https://doi.org/10.22437/ppd.v6i3.5971>
 34. Moghimi, S.M., Ramezan, M. (2011). Window on modern concepts of management. Bulletin management, organizational psychology. Tehran: Rahdan Publication, Tehran, Iran
 35. Morris, A.J., Kwok, A. G., Ames, D. Y. and Lickel, C. (1999). The interactive effect of cultural

- intelligence and openness on task performance. *Research and Practice in Human Resource Management*, 20(1), pp. 1-12.
36. Neslon, A., Revyani, D. and Setyawan, A. (2022). The Effect of Multiculturalism and Cultural Diversity on Innovative Work Behavior with Cultural Intelligence as Mediation. *Ecobisma (Jurnal Ekonomi, Bisnis Dan Manajemen)*, 9(2), pp. 59-68.
 37. Presbitero, A. (2016). Cultural intelligence (CQ) in virtual, cross-cultural interactions: Generalizability of measure and links to personality dimensions and task performance. *International Journal of Intercultural Relations*, 50, pp. 29-38. <https://doi.org/10.1016/j.ijintrel.2015.11.001>
 38. Rajabalizadeh, J. and Oradi, J. (2022). Managerial ability and intellectual capital disclosure. *Asian Review of Accounting*, 30(1), 59-76. <https://doi.org/10.1108/ARA-11-2020-0180>
 39. Saedi, A., Ahang, F. and Imani, A. M. (2021). An Analysis and Evaluation of the Mentality of Managers in Relation to the Competency-Based Selection of Human Resources in the Post-Corona Era (Case Study: Public Organizations of Lorestan Province). *Journal of Research in Human Resources Management*, 13(4), pp. 191-219. <https://dorl.net/dor/20.1001.1.82548002.1400.13.4.6.6>
 40. Secundo, G., Elena-Perez, S., Martinaitis, Ž. and Leitner, K. H. (2015). An intellectual capital maturity model (ICMM) to improve strategic management in European universities: A dynamic approach. *Journal of intellectual capital*, 16(2), pp. 419-442. <https://doi.org/10.1108/JIC-06-2014-0072>
 41. Song, H., Varma, A. and Zhang Zhang, Y. (2023). Motivational cultural intelligence and expatriate talent adjustment: an exploratory study of the moderation effects of cultural distance. *The International Journal of Human Resource Management*, 34(2), pp. 344-368. <https://doi.org/10.1080/09585192.2021.1966491>
 42. Stewart, T.A. (1997). *Intellectual Capital: The New Wealth of Organizations*, Currency Doubleday, New York, NY.
 43. Sudarsanam, S., Sorwar, G. and Marr, B. (2006). Real options and the impact of intellectual capital on corporate value. *Journal of intellectual capital*, 7(3), pp. 291-308. <https://doi.org/10.1108/14691930610681410>
 44. Tayles, M., Pike, R. H. and Sofian, S. (2007). Intellectual capital, management accounting practices and corporate performance: Perceptions of managers. *Accounting, Auditing & Accountability Journal*, 20(4), pp. 522-548. <https://doi.org/10.1108/09513570710762575>
 45. Taylor, E. Z., and Curtis, M. B. (2010). An examination of the layers of workplace influences in ethical judgments: Whistleblowing likelihood and perseverance in public accounting. *Journal of business Ethics*, 93, pp. 21-37. <https://doi.org/10.1007/s10551-009-0179-9>
 46. Tenenhaus, M., Amato, S. and Esposito Vinzi, V. (2004). A global goodness-of-fit index for PLS structural equation modelling. *In Proceedings of the XLII SIS scientific meeting*, 1(2), pp. 739-742.
 47. Tharapos, M. and O'Connell, B. T. (2023). What processes do academics undertake in an international teaching experience that reveal their cultural intelligence?. *Accounting Education*, 32(1), pp. 1-33. <https://doi.org/10.1080/09639284.2022.2028641>
 48. Tuan Mansor, T. M., Mohamad Ariff, A. and Hashim, H. A. (2020). Whistleblowing by auditors: the role of professional commitment and independence commitment. *Managerial Auditing Journal*, 35(8), pp. 1033-1055. <https://doi.org/10.1108/MAJ-11-2019-2484>
 49. Van Dyne, L., Ang, S. and Koh, C. (2008). Development and validation of the CQS, in Ang, S. and Van Dyne, L. (Orgs), *Handbook of Cultural Intelligence: Theory, Measurement and Applications*, Sharpe, New York, NY, pp. 16-38.

50. Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L. and Koh, C. (2012). Sub-dimensions of the four factor model of cultural intelligence: Expanding the conceptualization and measurement of cultural intelligence. *Social and personality psychology compass*, 6(4), pp. 295-313. <https://doi.org/10.1111/j.1751-9004.2012.00429.x>
51. Winfield, M. (1994). Whistleblowers as corporate safety net. *Whistleblowing: Subversion or corporate citizenship*, 37(1), pp. 21-32.