

The effect of organizational culture on the implementation of accounting information systems with the mediating role of types of capital

Sadeq Hassoon Mozan Moza, Mahdi Moradi*, Mahdi Salehi

*Department of Accounting, Faculty of Economics and Administrative Sciences
Ferdowsi University of Mashhad, Mashhad, Iran*

Abstract

This paper primarily investigates the pivotal role of organizational culture in implementing accounting information systems. The study also explores the mediating role of various types of capital, including intellectual, social, human, and spiritual capital. The collected data are analyzed through a questionnaire. 191 participants have completed questionnaires. SPSS, Stata, and SmartPLS software are used for data analysis, and hypotheses are checked using various statistical methods. The results showed that organizational culture is a factor in improving the implementation of accounting information systems. Intellectual, human, and spiritual capital mediates the relationship between organizational culture and implementation, but social capital does not influence this relationship. This study has investigated the effect of organizational culture on the implementation of accounting information systems. The findings, which underscore the importance of intellectual, human, and spiritual capital in mediating this relationship, while social capital was found to have no influence, provide a robust foundation for further research and practical applications in the field. This research provides valuable insights into the complex interplay between organizational culture, capital types and the implementation of accounting information systems, reassuring the academic community of the soundness of the research.

Keywords: organizational culture, accounting information systems, intellectual capital, social capital, human capital, spiritual capital

1. Introduction

One of the critical challenges regarding organizational health is related to information flow (Chen, 2022). This problem has become particularly important because information processes show a

quantitative and qualitative change in the cognitive structure that affects the knowledge of the organization's people (Chi6n et al., 2020). Therefore, the line between knowledge and ignorance lies in the privilege of information, and whoever has more information is more capitalist because information technology is a business of knowledge and information (Khan et al., 2020). Good information management and activities related to the management of information backgrounds improve organizational efficiency (Kwarteng et al., 2022). Considering the impact of information on activities and decisions, organizational elements seek to understand the value of information. Perceived value is the basis of many behaviors and includes the action and reaction between user mindsets and the characteristics of products and services (Namazi and Rezaei, 2023); the results of previous studies indicate that perceived value itself is a factor that creates satisfaction and the continuation of behavior (Napitupulu, 2023). According to Nuryanto et al. (2020), the value of information is the degree of influence it has on planning. However, estimating it generally without considering the knowledge related to tasks and time is not easy. The value of information is defined by the consequences of a choice in uncertain situations (Thuneibat et al., 2022). In other words, individuals may be willing to pay for information depending on the degree of uncertainty and risk they perceive. They may pay more for access to additional or improved information. Therefore, the perceived value of information is equal to the expected benefits of obtaining information and depends on factors such as the perceived uncertainty of decision-makers, the cost of using information, and the value of alternatives. It depends. From the perspective (Upadhyay and Kumar, 2020), the perceived value of information is the extent to which the user considers the information valuable and depends on the expertise of the information provider compared to other providers. Considering the extent of influence and strong dependence of today's society on information and communication technology and information systems (Yoshikuni et al., 2023) and emphasizing it as an inevitable and competitive necessity in the electronic business environment (Afifa et al., 2023) managers' perception of its value has a strong effect on its greater use in the organization (Al-Dmour, 2018). For information systems to be successfully used in the organization, the perceived value of information should be considered. One of the important dimensions in this field is the focus on organizational factors such as human issues, which is emphasized in the work of Hutahayan (2020). Also, the application of information systems can lead to the improvement of organizational performance (Mart6nez-Pel6ez et al., 2023). For this purpose, it is necessary to analyze information systems' infrastructure requirements, examine users' needs, and link

information technology with the organization's strategy. In addition, increasing employee skills (Raouf et al., 2021) and organizational culture related to information play an important role in creating, sharing, and using information. This aspect of organizational culture is known as "organizational information culture." Paying attention to organizational information culture as an important factor in implementing information systems is important because it is the basis for creating, disseminating, and using information in the organization (Sapta et al., 2021). A similar culture among members can help reduce uncertainty in communication and increase the organization's readiness in complex and changing conditions (Xi et al., 2023). This is one of the most important concerns of information specialists. Also, according to Sunarta and Astuti (2023), weakness in organizational culture is one of the main obstacles to the success of organizations in the digital age because organizational culture shapes the organization's response to challenges (Heryanto and Sudibyo, 2017). As a result, the development of information technology should be in harmony with the organizational culture and move toward facilitating the search and access to information (Haldorai et al., 2022).

Organizational culture refers to a process in which mental resources such as knowledge and information are transformed and used as the primary and material resources (Asiaei et al., 2022). This culture includes shared social patterns that define the organization's behaviors, norms, values, and deep beliefs about the role and importance of information (Hadid and Al-Sayed, 2021). Also, organizational culture provides a framework in which information communication is formed, and the nature of norms and values related to the creation, sharing, and use of information are examined (Khademi and Saberi-Hekami, 2018). From the point of view of Monteiro and Cepêda (2021), organizational culture has dimensions such as information integrity, information sharing, professional activity, transparency, control, and informality of information. In particular, information control and integrity are linked to organizational values that emphasize collecting and using accurate and valid information to control and monitor internal operations. On the other hand, information sharing and professional activity indicate values and norms that strengthen cooperation and innovation in the organization. Information transparency also means the freedom to report errors and failures, while formality refers to the organization's emphasis on using official information versus informal sources (Le et al., 2020). As a result, these dimensions of organizational culture impact the perception of the value of information and the use of information systems. More simply, in organizations where attitudes and norms are based on the value of

information, people will be more willing to use information. This culture will strengthen positive attitudes towards information. Since organizations generate a large amount of data during their activities, the management and proper use of this data requires the use of information systems and information technologies. However, for these systems to properly achieve their goals, the factors influencing the use of information should be examined. Research shows that organizational information culture is a new approach to information management that has been less studied. Most of the studies have focused on organizational culture and have mostly focused on evaluating the success of information systems (Srisathan et al., 2020).

Ardianti et al. (2023) showed that managers use information technology for an average of 10 hours per week and consider information systems valuable for their decisions. These managers, especially at the operational level, have valued computer-based information systems for providing helpful information and assisting in effective decision-making. Afifa et al. (2023) also showed that organizational culture is vital in understanding and accepting new technologies, especially in knowledge management and information and communication technology. AI-Matari et al. (2022) also found that although information policies and organizational culture are developed separately, they are closely related. The perceived value of information depends on factors such as the speed, repetition, and accuracy of information providers' responses, and the information seeker's goals (such as learning or decision-making) can moderate this relationship. Due to the high volume of information and data in today's business world, new information technologies help organizations, primarily institutionally owned companies, to store and process information effectively and make better decisions (AI-Hashimy et al., 2022). If accounting information systems cannot provide fast and timely information, these companies will not be successful in today's competitive and risky environment. To face these challenges, companies should benefit from various capital techniques to provide timely and economic financial information and improve their information systems and intellectual capital (Hutahayan, 2020). Business intelligence is how large organizations, such as institutionally owned companies, collect, analyze, and distribute information from internal and external sources to make better decisions. In this regard, different types of capital help companies provide high-quality and timely information for their strategic decisions, reduce risks, and create competitive advantages (Sumardjo and Supriadi, 2023). The support of senior managers and the simultaneous use of information systems and intellectual capital play an important role in the success of this process. As a result, this research investigates the effect of types of capital on the

relationship between organizational culture and the implementation of accounting information systems. The general result of the review of the few existing related backgrounds is that organizational culture can be an empowering platform for using the results of information technology, knowledge management, and information systems to improve organizational performance, intellectual capital, and job satisfaction. Meanwhile, organizational culture is a multi-dimensional and complex issue, and different levels can be seen in different organizations. These factors justify further studies in this field. Therefore, according to the above, this study examines whether organizational culture affects the information system and whether types of capital mediate the relationship between organizational culture and the information system.

2. Theoretical principles and hypothesis development

2.1. The relationship between organizational culture and the implementation of accounting information systems

Organizational culture is one of the critical success factors of projects that deal with organizational changes (Abadiyah et al., 2020). A strong organizational culture can play a primary role in creating motivation and cooperation among employees. A dynamic and robust culture shares the organization's fundamental values (Bhatti et al., 2020). Studies have shown that the atmosphere of relationships between employees and the existing issues governing the organization significantly impact the implementation of information systems. When the organization is involved with cultural problems, the employees' resistance causes the system to be abandoned entirely or implemented with reforms and without the support of much planning (Faeq and Ismael, 2022). A study shows that one of the reasons for many failures in implementing the organization's resource planning system is the need for more attention to the organizational culture. Today, many companies need to pay more attention to the organizational culture when implementing their resource planning system. Both in the implementation phase of the ERP system and its upgrade phase, paying attention to the organizational culture, especially risk-taking indicators, and involving users are vital and important variables (Bhatti et al., 2020). The studies that have dealt with the issue of culture and ERP systems can be divided into two categories; the first category is the studies that have investigated the national culture, and the other category is the studies that have dealt with the field of organizational culture. to (Ismanto et al., 2020). He pointed out that they will not be addressed because they are outside the focus area of this research.

Kordab et al. (2020) found that certain aspects of culture have evolved along with the technology of organizational culture, and the culture of organizational culture can explain why a system is adopted at a mediating level.

Lei et al. (2020) showed that people in urban areas emphasize using official information sources, while in rural communities, the emphasis is on verbal communication and informal information exchange. In addition, geographic dispersion, lack of awareness about information and information literacy, lack of alignment of information services with needs, financial and human barriers, and lack of appropriate information policy are among the most critical challenges related to the organizational culture of Maldives. Muafi et al. (2020) listed the characteristics of four types of organizational culture: result-oriented, rule-oriented, relationship-oriented, and risk-oriented. They believe that organizational culture is related to the organization's effectiveness. Nhon et al. (2020) showed a positive and significant relationship between the formal training of employees and the self-perceived level of project management characteristics. Pathiranage et al. (2020) found that the groups and individuals of these Dutch organizations work well together, and information systems management and organizational culture are related. The research results strongly correlate organizational culture variables and information systems management. Shahzad et al. (2023) found that managers prefer internal-personal information sources. In addition, the ranking of information sources is different according to managers' union affiliation.

Yang et al. (2021) showed that organizational culture affects the general way of information management. Since investing in information systems is vital to facilitate absorbing and managing information, organizations should develop an information culture to develop electronic government and create, use, and manage information. Andrej et al. (2023) showed that between risky organizational culture and externalization of knowledge. There is a significant relationship between rule-based organizational culture and knowledge synthesis, result-oriented information culture and knowledge internalization, and relationship-oriented organizational culture and knowledge socialization. Saeidi et al. (2021) found that among the six dimensions of information culture based on Chu's framework, three of them, including integrity, professional activity, and informality, flow among the studied institutions. Meanwhile, there is a relationship between the dimension of organizational culture integration with job satisfaction, leadership style, and performance self-expression. Dana et al. (2021) found that organizational culture, as a valuable component of strategic information management, introduces a framework for developing

information management strategies in business. They believe that the information culture of the organization's managers and employees significantly impacts solving information-related problems. Therefore, the first hypothesis is presented as follows:

H1: There is a significant relationship between organizational culture and implementing accounting information systems.

2.2. The relationship between organizational culture and the implementation of accounting information systems with the mediating role of types of capital

Types of capital affect the influence and power of companies. Companies with substantial human and intellectual capital have particular sensitivities due to the different nature of their activities, and the discussion of stakeholder theory is more prominent in them. In other words, in these companies, discussing the theory of stakeholders is more important than the theory of agency. Intellectual capital plays a vital role in the success of companies (Alawaqleh et al., 2021). Intellectual capital is a set of internal factors directly affecting the organization, especially listed companies (Anning-Dorson, 2021). Al-Omoush et al. (2022) showed that the management of intellectual resources, which is the title of the main field of management accounting studies, has emerged because intellectual capital and management accounting are mixed. In fact, according to the informational and managerial role of accounting, management has shown many reasons regarding the relationship between management accounting and various indicators of intellectual capital. It helps the primary value-creation process. The management accounting system designs a set of financial and non-financial management indicators to achieve the specific strategies and goals of the companies by combining the existing knowledge and new knowledge, as well as the available gaps for exploiting and using new knowledge. It is identified as increasing the social capital portfolio and improving intellectual capital indicators in high-risk and competitive conditions (Phornlaphatrachakorn and Kalasindhu, 2021). Al-Omoush et al. (2022) considered intellectual capital as a factor that is affected by anything and affects anything. Alassaf et al. (2020) showed that accounting information systems support the development of intellectual capital to improve its indicators (human capital, intellectual capital, and social capital. Ashok et al. (2021) showed a significant positive relationship between the company's intellectual, human, and intellectual capital indicators in improving accounting information systems. Baronian (2022)

showed significant relationships between the stages of the social capital process and the indicators of accounting information systems.

Social capital involves acquiring, managing, and analyzing massive amounts of data about the company's stakeholders and existing relationships. Through social capital, companies can use the information systems provided most effectively to obtain timely and quality information for decision-making, and by reducing existing risks and threats, competitive advantages are created (Lutfi et al., 2022). Social capital is closely related to management accounting systems as a data analysis source. Both play a role in improving the indicators of accounting information systems with their information perspective. The most important common point of human and spiritual capital and social capital is the subject of information and decision-making. The breadth and age of intellectual capital mean it can use accounting information systems to facilitate critical tasks and improve companies by modernizing the organizational culture and accounting information systems (Cadden et al., 2020).

Cui et al. (2022), considered intellectual capital a factor that is affected by anything and affects anything. Dahiyat et al. (2023) showed that organizational culture increases the expertise of management accountants due to the introduction of new and advanced decision-making techniques. On the other hand, it has a promoting effect on increasing management accounting techniques. Dhar et al. (2022) showed that business intelligence is related to the decision-making process based on environmental conditions in large companies.

Therefore, the second to fifth hypothesis is proposed as follows:

H2: Intellectual capital mediates the relationship between organizational culture and the implementation of accounting information systems.

H3: Social capital mediates the relationship between organizational culture and the implementation of accounting information systems.

H4: Human capital mediates the relationship between organizational culture and implementing accounting information systems.

H5: Intellectual capital mediates the relationship between organizational culture and the implementation of accounting information systems.

3. Research methodology

In the following, the collected data are analyzed through the questionnaire to examine the research model, discover the relationship between the variables, and test the research hypotheses. SPSS, Stata, and SmartPLS software will be used for data analysis, and hypotheses will be checked using various statistical methods.

4. Findings

4.1. Descriptive statistics

First, descriptive statistics of demographic questions are presented in Table (1). 191 participants completed the questionnaires. Most of the respondents were men, and most of them had master's degrees. Most people have an accounting position with 5 to 10 years of experience.

Table 1. Frequency of demographic data

	No.	Frequency		No.	Frequency
Gender			Position		
Female	30	15.71	Accounting	98	51.31
Male	161	84.29	Financial manager	76	39.79
Education			University professor	17	8.90
Less than a bachelor's degree	12	6.28	Work experience		
Bachelor's	76	39.79	Less than 5 years	30	15.71
Master's degree	93	48.69	5-10 years	90	47.12
Ph.D	10	5.24	11-20 years	40	20.94
			21-25 years	16	8.38
Total			Above 25 years	15	7.85

The designed questionnaire consists of 6 main sections, including organizational culture, intellectual capital, human capital, social capital, spiritual capital, and implementation of accounting information systems. The options before each question include completely agree, agree, neither agree nor disagree, disagree, and completely disagree, coded with numbers 1 to 5.

4.2. Inferential statistics

Cronbach's alpha coefficient, composite reliability coefficient, and average extracted variance were checked to check the validity and reliability of the research questionnaire. The alpha coefficient for the designed questionnaire is equal to 0.911, which is in the appropriate range. The average variance index was extracted to evaluate the structure's validity, and the Fornell and Larcker criteria were used. According to table (2), the AVE index for model variables is higher than 0.5; therefore, the convergence validity of the measured model is suitable. Also, to check the goodness of fit indices of measurement models, several methods were used; the summary of these tests and their acceptable ranges are summarized in Table (3). According to these results, it can be concluded that the model fit is suitable for the data, and the results obtained from it can be reliable.

Table 2. Reliability and validity findings of the research

Cronbach's Alpha	Composite reliability coefficient	AVE
0.911	0.862	0.751

Table 3. The goodness of fit criteria

Indicator	Sign	Calculation	Acceptable	Ideal
χ^2 significance	χ^2	<0.002	0.05 < $p \leq 1.00$	0.01 < $p \leq 0.05$
Optimized chi-square	χ^2/df	2.033	0 < $\chi^2/df \leq 5$	0 ≤ $\chi^2/df \leq 3$
good for him	GFI	0.897	0.80 ≤ $GFI < 0.95$	0.95 ≤ $GFI \leq 1.00$
Adjusted goodness	AGFI	0.875	0.80 ≤ $GFI < 0.95$	0.95 ≤ $GFI \leq 1.00$
Root mean square residual	RMR	0.052	0 < $RMR \leq 0.10$	0 ≤ $RMR \leq 0.05$
Comparative fit index	CFI	0.903	0.90 ≤ $CFI < 0.97$	0.97 ≤ $CFI \leq 1.00$
The root mean square of the estimation error	RMSEA	0.048	0.05 < $RMSEA \leq 0.08$	0 ≤ $RMSEA \leq 0.05$

The research variables were obtained by averaging the received answers to the questions in their sub-set, whose diagram will be drawn in Figure (1) below. In addition, in Table (4), the main

components of the research, the number of questions, Cronbach's alpha, and factor analysis of each part of the questionnaire were also calculated. The questionnaire has a suitable internal structure because Cronbach's alpha is between 0.765 and 0.940. In the following table (5), the descriptive statistics of the variables were calculated.

Table 4. Components; Number of questions, Cronbach's alpha and factor analysis results

Components	Questions	Cronbach's Alpha	Factor analysis
Organizational culture	16	0.908	0.877-0.971
Intellectual capital	16	0.891	0.879-0.991
human capital	16	0.926	0.772-0.954
Social capital	17	0.911	0.874-0.972
Spiritual capital	13	0.936	0.762-0.974
1. Religiosity	4	0.940	0.883-0.928
2. Creativity	4	0.913	0.879-0.979
3. Ethics	3	0.938	0.772-0.974
4. Health	2	0.889	0.835-0.917
Implementation of accounting information systems	10	0.765	0.672-0.971

Since the third option is neither agree nor disagree, a comparison of averages has been made by using a t-test and examining the average of less than three according to the arrangement of answers. According to the result of the t-test presented in Table (6), the null hypothesis of equality and greater than 3 for all the main variables of the research is rejected at the 99% confidence level. Therefore, as was said before, the people participating in the questionnaire significantly agreed with components such as organizational culture, intellectual, human, social, and spiritual capital and implementation. Accounting information systems have expressed.

Table 5. Descriptive statistics of hidden research variables

Variables	Latin	Observations	Mean	Std. Dev.	Min.	Max.
Organizational culture	CUO	191	1.919	0.445	1.000	3.188
Intellectual capital	CAI	191	1.986	0.443	1.000	3.188
human capital	CAH	191	1.972	0.506	1.000	3.250

Social capital	CAS	191	1.969	0.337	1.235	2.853
Spiritual capital	CAP	191	1.821	0.372	1.000	2.625
1. Religiosity	CAPR	191	1.787	0.487	1.000	3.000
2. Creativity	CAPC	191	1.791	0.449	1.000	2.750
3. Ethics	CAPE	191	1.888	0.428	1.000	3.000
4. Health	CAPH	191	1.819	0.497	1.000	3.000
Implementation of accounting information systems	AIR	191	1.863	0.412	1.100	4.200

Table 6. Comparison of averages

Variables	Latin	Observations	Mean	Difference	t statistic	Prob
Organizational culture	CUO	191	1.919	-1.081	-33.562	0.000
Intellectual capital	CAI	191	1.986	-1.014	-31.646	0.000
human capital	CAH	191	1.972	-1.028	-28.075	0.000
Social capital	CAS	191	1.969	-1.031	-42.317	0.000
Spiritual capital	CAP	191	1.821	-1.179	-43.805	0.000
1. Religiosity	CAPR	191	1.787	-1.213	-34.459	0.000
2. Creativity	CAPC	191	1.791	-1.209	-37.193	0.000
3. Ethics	CAPE	191	1.888	-1.112	-35.937	0.000
4. Health	CAPH	191	1.819	-1.181	-32.800	0.000
Implementation of accounting information systems	AIR	191	1.863	-1.137	-38.161	0.000

After that, in Table (7), the Pearson correlation coefficient between the hidden components of the research was obtained. The correlation coefficient of the organizational culture variable with the information systems implementation variable (AIR) equals 0.458 at the 99% confidence level. The components of intellectual capital reinforce each other and have a direct and meaningful effect on each other. In the meantime, the effect of these components on spiritual capital (CAP) is such that the most significant effect belongs to creativity (CAPC), ethics (CAPE), health (CAPH), and religiosity (CAPR) with coefficients. The correlation is 0.845, 0.828, 0.792 and 0.740. Capital

indices also reinforce each other. The correlation between the four capital indicators is positive and significant at 99% confidence. Among these variables, the highest correlation with the information systems implementation variable (AIR) belongs to human capital (CAH), social capital (CAS), spiritual capital (CAP), and intellectual capital (CAI), with correlation coefficients of 0.533. They have 0.526, 0.474, and 0.388.

Table 7. Correlation matrix of hidden research variables

	<i>Air</i>	<i>Caph</i>	<i>Cape</i>	<i>Capc</i>	<i>Capr</i>	<i>Cap</i>	<i>Cas</i>	<i>Cah</i>	<i>Cai</i>	<i>Cuo</i>
<i>Cuo</i>										1
<i>Cai</i>									1	0.594
<i>Cah</i>								1	0.577	0.595
<i>Cas</i>							1	0.628	0.384	0.475
<i>Cap</i>						1	0.472	0.615	0.713	0.589
<i>Capr</i>					1	0.740	0.369	0.445	0.625	0.273
<i>Capc</i>				1	0.502	0.845	0.442	0.654	0.619	0.657
<i>Cape</i>			1	0.681	0.446	0.828	0.443	0.445	0.509	0.470
<i>Caph</i>		1	0.565	0.548	0.397	0.792	0.272	0.430	0.526	0.496
<i>Air</i>	1	0.260	0.323	0.434	0.500	0.474	0.526	0.533	0.388	0.458

Note: All calculated coefficients are significant at the 99% level.

In Figure (1), the output and the effect of the hidden and apparent variables of the questionnaire according to the previous results to evaluate the views of managers and accountants on the influence of organizational culture as well as the mediating role of intellectual, human, social and spiritual capitals on the implementation of systems Accounting information has been drawn in Iraq. As shown in this figure, organizational culture positively and significantly affects the implementation of accounting information systems. Similarly, intellectual, human, social, and spiritual capital also positively and significantly affect the implementation of accounting information systems.

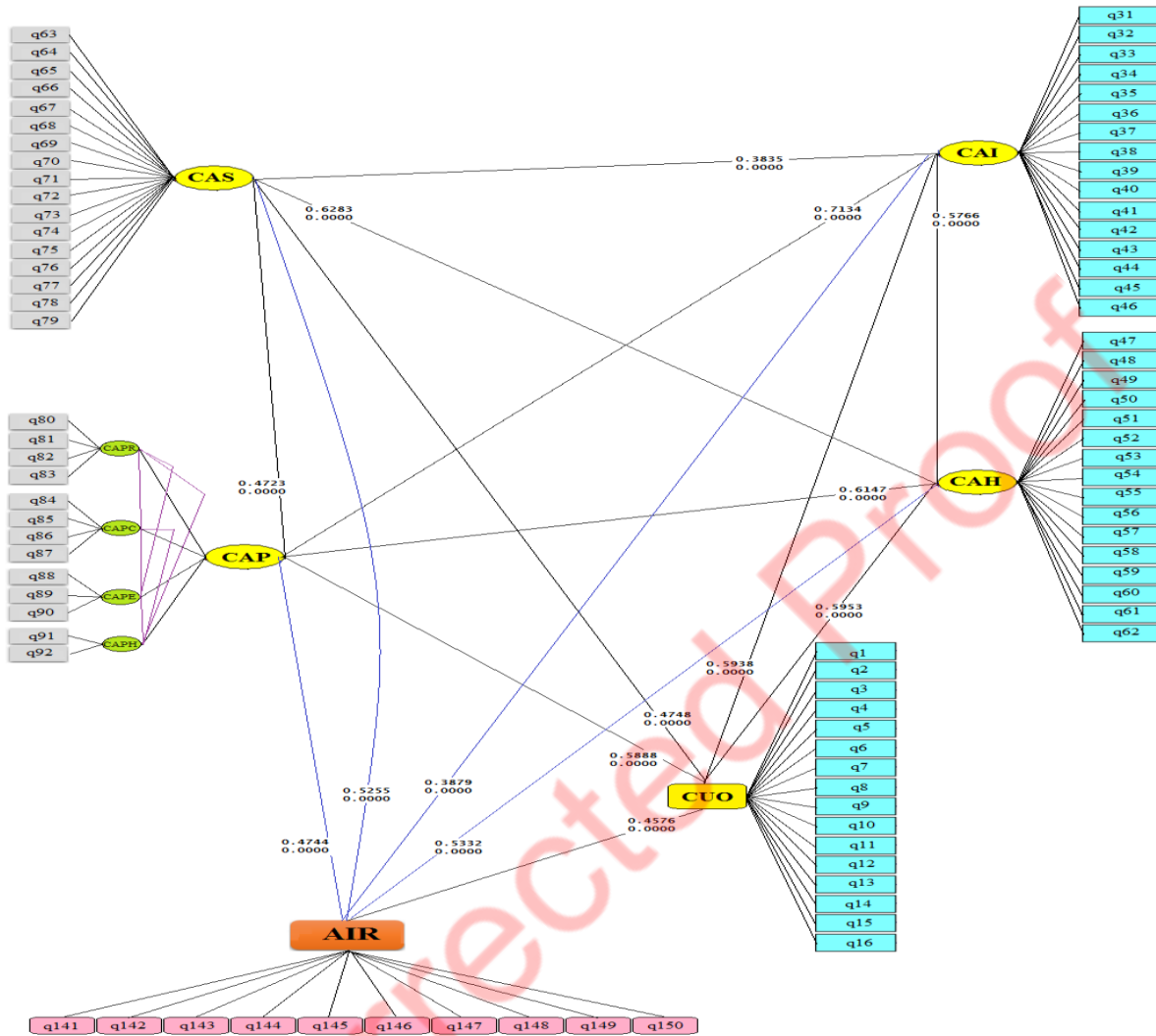


Figure 1. The output and the effect of the hidden and apparent variables

In the following, covariance analysis is used when there is more than one independent variable in the Mancova method. To use this method, the normality of the distribution of the variables was checked using the Kolmogorov-Smirnov test. Table (8) shows the results of this test. The null hypothesis of this test is that the variables have a normal distribution. According to the presented results, all the variables have a normal distribution.

Table 8. Normality test of variables

Variables	p-value	Variables	p-value
-----------	---------	-----------	---------

CUO	0.823	CAP	0.663
CAI	0.798	CHT	0.702
CAH	0.350	AIR	0.909
CAS	0.270		

Another critical assumption of covariance analysis is the homogeneity of regression coefficients. The interaction of the pre-tests with each group's hypotheses was insignificant, indicating the homogeneity of the regression coefficients. As can be seen, the non-significance indicates compliance with the assumption of the regression slope in Table (9), so the assumption F of the homogeneity of the regression coefficients is also established. Considering the establishment of covariance analysis assumptions, this statistical test is allowed.

Table 9. Results of regression slope homogeneity test

	Total squares	Mean squares	Degree of freedom	Statistic	Significance
The effect of organizational culture on the implementation of accounting information systems	8.971	8.971	1	0.763	0.623
The effect of intellectual capital on the implementation of accounting information systems	2.170	2.170	1	0.550	0.415
The effect of social capital on the implementation of accounting information systems	10.223	10.223	1	0.621	0.783
The effect of human capital on the implementation of accounting information systems	0.170	0.170	1	0.920	0.352
The effect of intellectual capital on the implementation of accounting information systems	1.400	1.400	1	0.680	0.409

The results of Table (10) indicate that the necessary conditions for using covariance analysis are met. The results of the one-way covariance test are presented in Table (11). The results of the variance analysis show that the significant value is greater than 0.05, so the research hypothesis cannot be rejected.

Table 10. One-way covariance test results

	Source	Total squares	Mean squares	F statistic	df	Significance	OTA
The effect of organizational culture on the implementation of accounting information systems	Pre-test*error group	8.971	8.971	1	0.763	0.623	0.120
The effect of intellectual capital on the implementation of accounting information systems	Pre-test*error group	2.170	2.170	1	0.550	0.415	0.150
The effect of social capital on the implementation of accounting information systems	Pre-test*error group	10.223	10.223	1	0.621	0.783	0.130
The effect of human capital on the implementation of accounting information systems	Pre-test*error group	0.170	0.170	1	0.920	0.352	0.080
The effect of intellectual capital on the implementation of accounting information systems	Pre-test*error group	1.400	1.400	1	0.680	0.409	0.030

The correlation test results in Table (11) show that the F value at the 99% level is significant for most research hypotheses, including the effect of social, intellectual, and human capital on the implementation of accounting information systems. In addition, the effect of intellectual capital on the implementation of accounting information systems has been accepted at the 95% confidence level.

Table 11. The results of the intergroup effects test

	Total squares	Mean squares	F statistic	Degree of freedom	Significance
The effect of organizational culture on the implementation of accounting information systems	3.689	3.689	2.169	1	0.004
The effect of intellectual capital on the implementation of accounting information systems	11.225	11.225	12.460	1	0.000
The effect of social capital on the implementation of accounting information systems	100.635	100.635	143.322	1	0.000
The effect of human capital on the implementation of accounting information systems	6.752	6.752	9.400	1	0.000
The effect of intellectual capital on the implementation of accounting information systems	4.580	4.580	4.580	1	0.047

After that, the ordinary least squares (OLS) method was used to investigate the effect of hidden variables on implementing information systems more closely. Table (12) shows the effect results, including coefficient and significance level. As it is known, hidden variables, including organizational culture and intellectual, social, human, and spiritual capital, affect the implementation of accounting information systems at the 99% confidence level. Structural

equations were used to investigate the interactive effects of these variables following the research hypotheses and consider the demographic variables.

Table 12. The direction of the effect of hidden variables on the implementation of information systems

Effect direction	Coefficient	P-value	Conclusion
AIR ← CUCO	0.423	0.000	Organizational culture affects the implementation of accounting information systems.
AIR ← CAI	0.361	0.000	Intellectual capital affects the implementation of accounting information systems.
AIR ← CAS	0.612	0.000	Social capital affects the implementation of accounting information systems.
AIR ← CAH	0.434	0.000	Human capital affects the implementation of accounting information systems.
AIR ← CAP	0.525	0.000	Intellectual capital influences the implementation of accounting information systems.
AIR ← (CAI*CUO)	0.124	0.000	Intellectual capital mediates the relationship between organizational culture and implementation of accounting information systems.
AIR ← (CAS*CUO)	0.177	0.000	Social capital mediates the relationship between organizational culture and implementation of accounting information systems.
AIR ← (CAH*CUO)	0.141	0.000	Human capital mediates the relationship between organizational culture and implementation of accounting information systems.
AIR ← (CAP*CUO)	0.152	0.000	Intellectual capital mediates the relationship between organizational culture and implementation of accounting information systems.

After that, the structural equation method is used to check the research hypotheses more precisely. Table (13) presents the fitting results separately for intellectual, social, human, and spiritual capitals. In the first model (Model 1), the Cuo variable coefficient at the 99% confidence level equals 0.937. Therefore, organizational culture becomes the factor in improving the implementation of accounting information systems, and the first hypothesis is accepted at the 99%

confidence level. In addition, intellectual capital also becomes a factor in improving the implementation of accounting information systems at the 99% confidence level. The coefficient of this variable was equal to 0.668. The interactive variable $Cai * Cuo$ coefficient is also positive and significant. Therefore, the second hypothesis that intellectual capital mediates the relationship between organizational culture and implementing accounting information systems is also confirmed at the 99% confidence level.

In the second model, the coefficient of the Cas variable was obtained at the 99% confidence level, equal to 0.683. Therefore, social capital is also a factor in improving the implementation of accounting information systems. The interactive variable $Cas * Cuo$ coefficient was estimated to be positive but insignificant. Therefore, the third hypothesis is not confirmed. After that, the Cah variable coefficient was obtained at the 99% confidence level equal to 0.537. Therefore, human capital is also a factor in improving the implementation of accounting information systems. Also, the interactive variable $Cah * Cuo$ coefficient is positive and significant. Therefore, the fourth hypothesis, that human capital mediates the relationship between organizational culture and implementing accounting information systems, is also confirmed at the 99% confidence level.

Table 13. Fitting structural equation regressions

Variable	Model 1		Model 2		Model 3		Model 4	
	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
<i>Cuo</i>	0.937	0.000	0.412	0.001	0.400	0.063	0.573	0.014
<i>Cai</i>	0.668	0.000						
<i>Cai * Cuo</i>	0.312	0.004						
<i>Cas</i>			0.683	0.000				
<i>Cas * Cuo</i>			0.090	0.139				
<i>Cah</i>					0.537	0.006		
<i>Cah * Cuo</i>					0.114	0.000		
<i>Cap</i>							0.738	0.002
<i>Cap * Cuo</i>							0.185	0.038
<i>Gender</i>	0.021	0.787	0.074	0.317	0.073	0.333	0.069	0.379
<i>Education</i>	-0.007	0.874	0.010	0.800	-0.010	0.805	0.052	0.253
<i>Position</i>	-0.052	0.156	-0.061	0.085	-0.051	0.141	-0.083	0.024

<i>Experience</i>	0.022	0.417	0.035	0.163	0.030	0.249	0.022	0.410
<i>Constant</i>	-0.006	0.988		0.479	0.459	0.262	-0.023	0.961

In the fourth model, the coefficient of spiritual capital was fitted at the 99% confidence level equal to 0.738. Therefore, intellectual capital is also a factor in improving the implementation of accounting information systems. The interactive variable $Cap^* Cuo$ coefficient is also positive and significant. Therefore, the fifth hypothesis, that intellectual capital mediates the relationship between organizational culture and implementing accounting information systems, is also confirmed at the 95% confidence level. In general, according to the applied regressions, it can be concluded that among the components of capital, spiritual capital and social capital have the greatest effect, and human capital and intellectual capital have the least effect on implementing accounting information systems in Iraq.

In the following, quantile regression has been used to evaluate the coefficients obtained in different percentages of the variable implementation of accounting information systems. In table (14), the coefficient of organizational culture in lower values of AIR is small and becomes more intense with the increase in the implementation of accounting information systems. On the contrary, intellectual capital has a larger coefficient in smaller amounts of accounting information systems implementation. With the increase of the AIR variable, these coefficients become smaller and smaller. Hence, considering that the intensity of the two variables of organizational culture and intellectual capital increase in the opposite direction, the interactive variable $Cai^* Cuo$ has the most effect in the middle quartiles and the first quartile at the level of 95% and in the fourth quartile, it is not significant on the AIR variable.

In the second model, the influence coefficient of the social capital variable decreases in the last quartile. The interactive variable $Cai^* Cuo$ is also significant and positive in the first two quartiles at 99%. In the last two quartiles, unlike the estimate of the structural equation system. Therefore, social capital mediates the relationship between organizational culture and implementing accounting information systems below the average. The influence coefficient of the human capital variable also increases with the increase in the implementation of accounting information systems. Nevertheless, human capital mediates the relationship between organizational culture and the implementation of accounting information systems in smaller amounts of accounting information systems implementation. The influence coefficient of intellectual capital also increases in the last

quadrants of implementing accounting information systems. Nevertheless, intellectual capital in the last quadrant, unlike the first three quadrants, does not mediate the relationship between organizational culture and the implementation of accounting information systems.

Table 14. Fit of quantile regressions

Variable	25%		50%		75%		100%		
	Coefficien t	P- Valu e	Coefficien t	P- Valu e	Coefficien t	P- Valu e	Coefficien t	P- Valu e	
<i>Mode</i>	<i>Cuo</i>	0.610	0.017	0.670	0.000	0.802	0.000	0.913	0.039
<i>l1</i>	<i>Cai</i>	0.836	0.000	0.924	0.000	0.638	0.000	0.116	0.575
	<i>Cai*</i>	0.287	0.029	0.225	0.000	0.347	0.000	0.046	0.720
	<i>Cuo</i>								
<i>Mode</i>	<i>Cuo</i>	0.700	0.000	0.892	0.004	1.045	0.000	1.031	0.000
<i>l2</i>	<i>Cas</i>	1.213	0.000	1.665	0.000	1.064	0.253	0.801	0.268
	<i>Cas*</i>	0.400	0.002	0.634	0.005	0.362	0.415	0.592	0.095
	<i>Cuo</i>								
<i>Mode</i>	<i>Cuo</i>	0.323	0.000	0.511	0.000	0.959	0.000	0.749	0.429
<i>l3</i>	<i>Cah</i>	0.238	0.000	0.759	0.000	1.053	0.000	0.862	0.268
	<i>Cah</i>	0.308	0.001	0.435	0.000	0.230	0.000	0.300	0.073
	*								
	<i>Cuo</i>								
<i>Mode</i>	<i>Cuo</i>	0.871	0.000	0.706	0.000	1.194	0.001	0.925	0.001
<i>l4</i>	<i>Cap</i>	0.706	0.000	1.021	0.000	1.473	0.000	1.147	0.044
	<i>Cap</i>	0.383	0.000	0.423	0.000	0.579	0.001	0.047	0.673
	*								
	<i>Cuo</i>								

After that, the impact of sub-indices of spiritual capital, including religiosity, creativity, ethics, and health, on implementing accounting information systems and their mediating role in the relationship between organizational culture and AIR variables were investigated. In Table (15), religiosity and ethics increase the implementation of accounting information systems at the 90% confidence level, but they have no effect on the relationship between organizational culture and

the AIR variable. On the contrary, creativity at 99% confidence and health at 95% confidence are factors in improving the implementation of accounting information systems in Iraq. These variables affect the relationship between organizational culture and AIR variable at the 95% confidence level, and their mediating role is confirmed.

Table 15. Investigating the mediating role of intellectual capital components

Variable	Model 1		Model 2		Model 3		Model 4	
	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value	Coefficient	P-Value
<i>Cuo</i>	0.635	0.000	0.805	0.021	0.849	0.031	0.979	0.018
<i>Capr</i>	0.681	0.070						
<i>Capr*</i>	0.166	0.231						
<i>Cuo</i>								
<i>Capc</i>			0.743	0.010				
<i>Capc*</i>			0.284	0.015				
<i>Cuo</i>								
<i>Cape</i>					0.631	0.061		
<i>Cape*</i>					0.258	0.148		
<i>Cuo</i>								
<i>Caph</i>							0.623	0.033
<i>Caph*</i>							0.319	0.048
<i>Cuo</i>								

5. Discussions and conclusion

Organizational culture includes shared values, norms, and behaviors that are formed in the organization and determine how employees interact with technological changes and innovations (Danish et al., 2021). Organizations with open and innovative cultures are usually more receptive to new technologies encountered, and this makes the accounting information systems to be implemented in a better way. By strengthening cooperation and coordination among organizational members, organizational culture provides the basis for accepting information systems and using them to improve decisions and internal control. In addition to examining the relationship between organizational culture and accounting information systems, this research also examines the role of

capital types in this relationship. For example, intellectual capital, which includes the organization's knowledge, skills, and experiences, can improve the productivity of accounting information systems. Also, social capital can facilitate the successful implementation of systems by strengthening relationships between organization members and creating cooperation networks. Human capital, which includes the development of employees' skills and their empowerment, plays an important role in the adoption and optimal use of these systems. Finally, intellectual capital can also help to better implement accounting information systems by influencing the values and beliefs of employees to strengthen organizational commitment. This type of capital helps to strengthen the sense of belonging and gives meaning to the work in the organization. It can lead to the improvement of interactions between members and increase the effective use of information systems. As a result, investigating the mediating effects of types of capital in the relationship between organizational culture and the implementation of accounting information systems can provide effective solutions to improve organizational performance. The analysis of these relationships shows that organizational culture alone cannot guarantee the success of implementing accounting information systems. However, the mediating role of types of capital is significant. Organizational culture can affect the effective use of existing funds and improve the process of implementing information systems through the synergy of these funds. Therefore, to achieve optimal results, organizations should not only focus on strengthening their organizational culture but also develop their human, social, and structural capital and use them in a coordinated way to implement accounting information systems. The following are the results of the research:

The research results showed a significant relationship between organizational culture and the implementation of accounting information systems. Therefore, organizational culture can influence how information systems are accepted and used in the organization and improve the performance of these systems. When the organizational culture is positive and especially emphasizes innovation, continuous learning, and support for technology, accounting information systems are implemented better. In such environments, employees are more willing to accept technological changes and can more easily adapt to new technologies. This leads to increasing the effectiveness of information systems and improving accounting processes. On the other hand, a negative organizational culture or resistance to change can hinder the successful implementation of accounting information systems. For example, cultures that emphasize strict hierarchies or fear of mistakes and failure may increase employee resistance to technological change and reduce the

effectiveness of information systems. Therefore, this result points to the importance of creating and strengthening an appropriate organizational culture to improve the implementation of information systems in the organization. The results of the research are consistent with the results of Pathirana et al. (2020), who found that groups and individuals in Dutch organizations work well together, that information systems management and organizational culture are related to each other, and the results of Yang et al. (2021) showed that organizational culture affects the general method of information management. Dana et al. (2021) also found that the information culture of managers and employees of the organization greatly impacts solving problems related to information, which is in line with the results of the present study.

The results also show that intellectual, human, and spiritual capital mediates the relationship between organizational culture and the implementation of accounting information systems. In organizations with well-developed intellectual capital, employees have the necessary knowledge and skills to use information technologies. With a better understanding of the benefits and capabilities of accounting information systems, these people can play a key role in adopting and implementing these systems. On the other hand, an open and supportive organizational culture, which emphasizes knowledge sharing and innovation, can contribute to forming strong intellectual capital. In such organizations, specialized knowledge and professional experiences are constantly shared between individuals and teams, which leads to increased efficiency of information systems. By influencing employees' ability to understand and work with complex technologies, human capital can reduce implementation barriers and allow organizations to use accounting information systems more effectively. In other words, a strong relationship between human capital and organizational culture makes employees more prepared for technology-related changes, facilitating information systems' implementation. With its emphasis on ethical values, intellectual capital can promote transparency, honesty, and trust in information systems, promoting the effective and optimal use of these systems. The research results are consistent with the results of Alassaf et al. (2020), who showed that accounting information systems support the development of intellectual capital to improve its indicators (human capital, spiritual capital, and social capital). Also, the results of Ashok et al. (2021) showed a significant positive relationship between the company's investment amount in the indicators of intellectual capital, human capital, and spiritual capital in the improvement of accounting information systems. The results of Baronian (2022),

who showed significant relationships between the stages of the social capital process and the indicators of accounting information systems, align with the results of the present study.

The results also indicated that social capital does not affect the relationship between organizational culture and the implementation of information systems. In some Iranian organizations, social capital may need to be fully developed or limited to informal relationships and small groups. These limitations can make social capital unable to play an effective mediating role concerning the implementation of accounting information systems. Especially in work environments where formal and hierarchical relationships prevail, social capital may not act as a facilitating factor in technological change.

References

- Abadiyah, R., Eliyana, A. and Sridadi, A. R. (2020). Motivation, leadership, supply chain management toward employee green behavior with organizational culture as a mediator variable. *International Journal of Supply Chain Management*, 9(3), pp. 981-989.
- Afifa, M. A., Saleh, I. and Van, H. V. (2023). Accounting information quality in the digital era—a perspective from ERP system adoption?. *Global Knowledge, Memory and Communication*, (ahead-of-print). <https://doi.org/10.1108/GKMC-03-2023-0101>
- Alassaf, D., Dabić, M., Shifrer, D. and Daim, T. (2020). The impact of open-border organization culture and employees' knowledge, attitudes, and rewards with regards to open innovation: an empirical study. *Journal of Knowledge Management*, 24(9), pp. 2273-2297. <https://doi.org/10.1108/JKM-02-2020-0122>
- Alawaqleh, Q. A. (2021). The effect of internal control on employee performance of small and medium-sized enterprises in Jordan: The role of accounting information system. *The Journal of Asian Finance, Economics and Business*, 8(3), pp. 855-863. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0855>
- Al-Dmour, A. (2018). The impact of the reliability of the accounting information system upon the business performance via the mediating role of the quality of financial reporting. *The International Journal of Accounting and Business Society*, 26(1), pp. 78-111. <https://doi.org/10.21776/ub.ijabs.2018.26.1.5>

Al-Hashimy, H. N. H., Said, I. and Ismail, R. (2022). Evaluating the Impact of Computerized Accounting Information System on the Economic Performance of Construction Companies in Iraq. *Informatica*, 46(7), pp. 14-24.

Al-Matari, A. S., Amiruddin, R., Aziz, K. A. and Al-Sharafi, M. A. (2022). The impact of dynamic accounting information system on organizational resilience: the mediating role of business processes capabilities. *Sustainability*, 14(9), A. 4967. <https://doi.org/10.3390/su14094967>

Al-Omoush, K. S. (2022). Understanding the impact of intellectual capital on E-business entrepreneurial orientation and competitive agility: an empirical study. *Information Systems Frontiers*, 24(2), pp. 549-562. <https://doi.org/10.1007/s10796-020-10092-7>

Andrej, N., Breznik, K. and Natek, S. (2023). Managing knowledge to improve performance: The impact of leadership style and knowledge management on organizational performance with moderation effects via PLS-SEM. *Journal of the Knowledge Economy*, 14(2), pp. 1672-1701. <https://doi.org/10.1007/s13132-022-00957-4>

Anning-Dorson, T. (2021). Organizational culture and leadership as antecedents to organizational flexibility: implications for SME competitiveness. *Journal of Entrepreneurship in Emerging Economies*, 13(5), pp. 1309-1325. <https://doi.org/10.1108/JEEE-08-2020-0288>

Ardianti, Y., Priharta, A. and Rustiana, S. H. (2023). The influence of accounting information systems, good corporate governance, corporate social responsibility on company performance mediated by organizational culture. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 7(1), pp. 1-27.

Ashok, M., Al Badi Al Dhaheri, M. S. M., Madan, R. and Dzandu, M. D. (2021). How to counter organisational inertia to enable knowledge management practices adoption in public sector organisations. *Journal of Knowledge Management*, 25(9), pp. 2245-2273. <https://doi.org/10.1108/JKM-09-2020-0700>

Asiaei, K., Jusoh, R., Barani, O. and Asiaei, A. (2022). How does green intellectual capital boost performance? The mediating role of environmental performance measurement systems. *Business Strategy and the Environment*, 31(4), pp. 1587-1606. <https://doi.org/10.1002/bse.2971>

Baronian, L. (2022). The regime of truth of knowledge management: the role of information systems in the production of tacit knowledge. *Knowledge Management Research & Practice*, 20(2), pp. 191-201. <https://doi.org/10.1080/14778238.2021.1967797>

Bhatti, A., Rehman, S. U. and Rumman, J. B. A. (2020). Organizational capabilities mediates between organizational culture, entrepreneurial orientation, and organizational performance of SMEs in Pakistan. *Entrepreneurial Business and Economics Review*, 8(4), pp. 85-103.

Cadden, T., Millar, K., Treacy, R. and Humphreys, P. (2020). The mediating influence of organisational cultural practices in successful lean management implementation. *International Journal of Production Economics*, 229(1), A. 107744. <https://doi.org/10.1016/j.ijpe.2020.107744>

Chen, C. H. (2022). The mediating effect of corporate culture on the relationship between business model innovation and corporate social responsibility: A perspective from small-and medium-sized enterprises. *Asia Pacific Management Review*, 27(4), pp. 312-319. <https://doi.org/10.1016/j.apmr.2022.01.001>

Chión, S. J., Charles, V. and Morales, J. (2020). The impact of organisational culture, organisational structure and technological infrastructure on process improvement through knowledge sharing. *Business Process Management Journal*, 26(6), pp. 1443-1472. <https://doi.org/10.1108/BPMJ-10-2018-0279>

Cui, F., Lim, H. and Song, J. (2022). The influence of leadership style in China SMEs on enterprise innovation performance: the mediating roles of organizational learning. *Sustainability*, 14(6), A. 3249. <https://doi.org/10.3390/su14063249>

Dahiyat, S. E., Khasawneh, S. M., Bontis, N. and Al-Dahiyat, M. (2023). Intellectual capital stocks and flows: Examining the mediating roles of social capital and knowledge transfer. *VINE Journal of Information and Knowledge Management Systems*, 53(1), pp. 11-42. <https://doi.org/10.1108/VJIKMS-06-2020-0110>

Dana, L. P., Rounaghi, M. M., Enayati, G. and Researcher, M. I. (2021). Increasing productivity and sustainability of corporate performance by using management control systems and intellectual capital accounting approach. *Green Finance*, 3(1), pp. 1-14.

Danish, R. Q., Cheema, A. U., Shekh, L., Ali, H. F., Saeed, S. and Hasnain, M. (2021). Effects Of Intellectual Capital On Organizational Performance: The Mediating Role Of Performance Measurement System. *The journal of contemporary issues in business and government*, 27(1), pp. 3093-3109.

Dhar, B. K., Stasi, A., Döpping, J. O., Gazi, M. A. I., Shaturaev, J. and Sarkar, S. M. (2022). Mediating role of strategic flexibility between leadership styles on strategic execution: A study on

Bangladeshi private enterprises. *Global Journal of Flexible Systems Management*, 23(3), pp. 409-420. <https://doi.org/10.1007/s40171-022-00310-3>

Faeq, D. K. and Ismael, Z. N. (2022). Organizational culture as a mediator between employee dissatisfaction and turnover intention. *International Journal of English Literature and Social Sciences*, 7(5), pp. 95-108. <https://dx.doi.org/10.22161/ijels.75.17>

Hadid, W. and Al-Sayed, M. (2021). Management accountants and strategic management accounting: The role of organizational culture and information systems. *Management accounting research*, 50, A. 100725. <https://doi.org/10.1016/j.mar.2020.100725>

Haldorai, K., Kim, W. G. and Garcia, R. F. (2022). Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource management. *Tourism Management*, 88, A. 104431. <https://doi.org/10.1016/j.tourman.2021.104431>

Heryanto, G. and Sudibyoy, Y. (2017). The Influence of Organizational Culture on Corporate Performance: Using Management Accounting System as the Mediating Variable. *OIDA International Journal of Sustainable Development*, 10(01), pp. 35-48.

Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. *Benchmarking: An International Journal*, 27(4), pp. 1289-1318. <https://doi.org/10.1108/BIJ-02-2018-0034>

Ismanto, H., Widiastuti, A., Muharam, H. and Pangestuti, I. R. D. (2020). The impact of risk and financial knowledge, business culture and financial practice on SME performance. *Calitatea*, 21(179), pp. 3-9.

Khademi, A. and Saberi-Hekami, M. (2018). The Effect of Organizational Culture on Organizational Performance with Role of Mediator Intellectual Capital. *Journal of System Management*, 4(1), pp. 1-26.

Khan, W. A., Hassan, R. A., Arshad, M. Z., Arshad, M. A., Kashif, U., Aslam, F. and Wafa, S. A. (2020). The effect of entrepreneurial orientation and organisational culture on firm performance: The mediating role of innovation. *International Journal of Innovation, Creativity and Change*, 13(3), pp. 652-677.

Kordab, M., Raudeliūnienė, J. and Meidutė-Kavaliauskienė, I. (2020). Mediating role of knowledge management in the relationship between organizational learning and sustainable

organizational performance. *Sustainability*, 12(23), A. 10061.
<https://doi.org/10.3390/su122310061>

Kwarteng, A., Simpson, S. N. Y. and Agyenim-Boateng, C. (2022). The effects of circular economy initiative implementation on business performance: the moderating role of organizational culture. *Social Responsibility Journal*, 18(7), pp. 1311-1341. <https://doi.org/10.1108/SRJ-01-2021-0045>

Le, H. M., Nguyen, T. T. and Hoang, T. C. (2020). Organizational culture, management accounting information, innovation capability and firm performance. *Cogent Business & Management*, 7(1), A. 1857594. <https://doi.org/10.1080/23311975.2020.1857594>

Lei, H., Leungkhamma, L. and Le, P. B. (2020). How transformational leadership facilitates innovation capability: the mediating role of employees' psychological capital. *Leadership & Organization Development Journal*, 41(4), pp. 481-499. <https://doi.org/10.1108/LODJ-06-2019-0245>

Lutfi, A., Alkelani, S. N., Al-Khasawneh, M. A., Alshira'h, A. F., Alshirah, M. H., Almaiah, M. A., ... and Ibrahim, N. (2022). Influence of digital accounting system usage on SMEs performance: The moderating effect of COVID-19. *Sustainability*, 14(22), A. 15048. <https://doi.org/10.3390/su142215048>

Martínez-Peláez, R., Ochoa-Brust, A., Rivera, S., Félix, V. G., Ostos, R., Brito, H., ... and Mena, L. J. (2023). Role of digital transformation for achieving sustainability: mediated role of stakeholders, key capabilities, and technology. *Sustainability*, 15(14), A. 11221. <https://doi.org/10.3390/su151411221>

Monteiro, A. and Cepêda, C. (2021). Accounting information systems: scientific production and trends in research. *Systems*, 9(3), p. 67. <https://doi.org/10.3390/systems9030067>

Muafi, M., Siswanti, Y., Diharto, A. K. and Salsabil, I. (2020). Innovation culture and process in mediating human capital supply chain on firm performance. *The Journal of Asian Finance, Economics and Business*, 7(9), pp. 593-602. <https://doi.org/10.13106/jafeb.2020.vol7.no9.593>

Namazi, M. and Rezaei, G. (2024, April). Modelling the role of strategic planning, strategic management accounting information system, and psychological factors on the budgetary slack. *In Accounting Forum* (Vol. 48, No. 2, pp. 279-306). Routledge. <https://doi.org/10.1080/01559982.2022.2163040>

Napitupulu, I. H. (2023). Internal control, manager's competency, management accounting information systems and good corporate governance: Evidence from rural banks in Indonesia. *Global Business Review*, 24(3), pp. 563-585. <https://doi.org/10.1177/0972150920919845>

Nhon, H. T., Thong, B. Q. and Trung, N. Q. (2020). The effects of intellectual capital on information communication technology firm performance: A moderated mediation analysis of environmental uncertainty. *Cogent Business & Management*, 7(1), A. 1823584. <https://doi.org/10.1080/23311975.2020.1823584>

Nuryanto, U. W., Mz, M. D., Sutawidjaya, A. H. and Saluy, A. B. (2020). The impact of social capital and organizational culture on improving organizational performance. *International Review of Management and Marketing*, 10(3), p. 93.

Pathiranage, Y. L., Jayatilake, L. V. and Abeysekera, R. (2020). A Literature Review on Organizational Culture towards Corporate Performance. *International Journal of Management, Accounting & Economics*, 7(9), 1-23.

Phornlaphatrachakorn, K. and Kalasindhu, K. N. (2021). Digital accounting, financial reporting quality and digital transformation: evidence from Thai listed firms. *Journal of Asian Finance*, 8(8), pp. 409-0419.

Raof, R., Basheer, M. F., Shabbir, J., Ghulam Hassan, S. and Jabeen, S. (2021). Enterprise resource planning, entrepreneurial orientation, and the performance of SMEs in a South Asian economy: The mediating role of organizational excellence. *Cogent Business & Management*, 8(1), A. 1973236. <https://doi.org/10.1080/23311975.2021.1973236>

Saeidi, P., Saeidi, S. P., Gutierrez, L., Streimikiene, D., Alrasheedi, M., Saeidi, S. P. and Mardani, A. (2021). The influence of enterprise risk management on firm performance with the moderating effect of intellectual capital dimensions. *Economic Research-Ekonomska Istraživanja*, 34(1), pp. 122-151. <https://doi.org/10.1080/1331677X.2020.1776140>

Sapta, I. K. S., Sudja, I. N., Landra, I. N. and Rustiarini, N. W. (2021). Sustainability performance of organization: Mediating role of knowledge management. *Economies*, 9(3), p. 97. <https://doi.org/10.3390/economies9030097>

Shahzad, M. A., Jianguo, D. and Junaid, M. (2023). Impact of green HRM practices on sustainable performance: mediating role of green innovation, green culture, and green employees' behavior. *Environmental Science and Pollution Research*, 30(38), pp. 88524-88547. <https://doi.org/10.1007/s11356-023-28498-6>

Srisathan, W. A., Ketkaew, C. and Naruetharadhol, P. (2020). The intervention of organizational sustainability in the effect of organizational culture on open innovation performance: A case of thai and chinese SMEs. *Cogent business & management*, 7(1), A. 1717408. <https://doi.org/10.1080/23311975.2020.1717408>

Sumardjo, M. and Supriadi, Y. N. (2023). Perceived organizational commitment mediates the effect of perceived organizational support and organizational culture on organizational citizenship behavior. *Calitatea*, 24(192), pp. 376-384.

Sunarta, I. N. and Astuti, P. D. (2023). Accounting Information System Quality and Organizational Performance: the Mediating Role of Accounting Information Quality. *International Journal of Professional Business Review*, 8(3), pp. e01192-e01192. <https://doi.org/10.26668/businessreview/2023.v8i3.1192>

Thuneibat, N. S. M., Ali, B., Alqaraleh, M. H. and Thneibat, H. (2022). The mediating role of innovation on the relationship between information technologies and reducing tax evasion. *Information Sciences Letters*, 11(2), pp. 13-23. <http://dx.doi.org/10.18576/isl/110505>

Upadhyay, P. and Kumar, A. (2020). The intermediating role of organizational culture and internal analytical knowledge between the capability of big data analytics and a firm's performance. *International Journal of Information Management*, 52, A. 102100. <https://doi.org/10.1016/j.ijinfomgt.2020.102100>

Xi, M., Fang, W. and Feng, T. (2023). Green intellectual capital and green supply chain integration: The mediating role of supply chain transformational leadership. *Journal of Intellectual Capital*, 24(4), pp. 877-899. <https://doi.org/10.1108/JIC-12-2021-0333>

Yang, Y., Liu, Q., Song, J. and Zhou, M. (2021). The influence mechanism of financial shared service mode on the competitive advantage of enterprises from the perspective of organizational complexity: A force field analysis. *International Journal of Accounting Information Systems*, 42, A. 100525. <https://doi.org/10.1016/j.accinf.2021.100525>

Yoshikuni, A. C., Dwivedi, R., Dultra-de-Lima, R. G., Parisi, C. and Oyadomari, J. C. T. (2023). Role of emerging technologies in accounting information systems for achieving strategic flexibility through decision-making performance: An exploratory study based on North American and South American firms. *Global Journal of Flexible Systems Management*, 24(2), pp. 199-218. <https://doi.org/10.1007/s40171-022-00334-9>