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<https://jurnal.citrabakti.ac.id/index.php/jil>**THE RELATIONSHIP BETWEEN CORPORATE ORIENTATION AND ICT MANAGEMENT IN HIGHER EDUCATION**Verry Ronny Palilingan¹⁾, Syerri Yullita Sumual²⁾, and Tomi Itje³⁾^{1,2)}Educational Management, State University of Manado³⁾Christian Education, Halmahera University*Corresponding author email: ronnypalilingan@unima.ac.id**Article History***Receive:*
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February 14, 2026**Abstract**

ICT management is a system that ensures the use of ICT is aligned with the organization's overall strategy and goals. Corporate orientation is understood as the application of modern governance principles such as efficiency, accountability, and professionalism in university management, but there are fundamental problems in the use of ICT. This study aims to analyze the relationship between corporate orientation and the management of Information and Communication Technology (ICT) in higher education through a case study at the University of Halmahera. This study uses a descriptive qualitative approach, with data collection techniques through interviews, observation of campus information systems, and document analysis. The data analysis technique in this study is *Thematic Analysis*. The results of the study show that corporate orientation contributes significantly in strengthening ICT management, especially in strategic planning, operational standards, data security, and information system integration. However, there are obstacles such as limited human resource competencies, uneven understanding of work culture, and limited technological infrastructure. This research emphasizes the importance of corporate orientation in supporting digital transformation and strengthening higher education ICT governance.

Keywords: Orientation, Corporate, ICT, Higher Education.

Abstrak. Manajemen TIK merupakan suatu sistem yang memastikan bahwa penggunaan TIK selaras dengan strategi dan tujuan organisasi secara keseluruhan. Orientasi korporasi dipahami sebagai penerapan prinsip-prinsip tata kelola modern seperti efisiensi, akuntabilitas, dan profesionalisme dalam pengelolaan perguruan tinggi, namun terdapat permasalahan mendasar dalam pemanfaatan TIK. Penelitian ini bertujuan untuk menganalisis hubungan antara orientasi korporasi dan manajemen Teknologi Informasi dan Komunikasi (TIK) di pendidikan tinggi melalui studi kasus di Universitas Halmahera. Penelitian ini menggunakan pendekatan kualitatif deskriptif, dengan teknik pengumpulan data melalui wawancara, observasi sistem informasi kampus, dan analisis dokumen. Teknik analisis data yang digunakan adalah Analisis Tematik. Hasil penelitian menunjukkan bahwa orientasi korporasi berkontribusi signifikan dalam memperkuat manajemen TIK, khususnya pada perencanaan strategis, standar operasional, keamanan data, dan integrasi sistem informasi. Namun demikian, terdapat kendala seperti keterbatasan kompetensi sumber daya manusia, pemahaman budaya kerja yang belum merata, serta keterbatasan infrastruktur teknologi. Penelitian ini menekankan pentingnya orientasi korporasi dalam mendukung transformasi digital dan memperkuat tata kelola TIK perguruan tinggi.

Kata-kata kunci: Orientasi, Korporasi, TIK, Pendidikan Tinggi

Background

The development of digital technology in the last two decades has driven significant changes in almost all aspects of life, including in the field of higher education (Subroto, et.al., 2023). Universities are no longer only required to produce competent graduates, but also to manage the entire academic and administrative process effectively, efficiently, and transparently (Siregar, et.al., 2023). Global pressure on increasing institutional competitiveness further strengthens the need for universities to adapt through strengthening organizational governance and the use of Information and Communication Technology (ICT) (Suhardi, et.al., 2025). In this context, corporate orientation is one of the increasingly relevant managerial approaches. Corporate orientation refers to the application of business management principles such as operational efficiency, accountability, performance-based management, and professionalism in the decision-making process. The application of these principles is considered to be able to increase the competitiveness and effectiveness of educational institutions through a governance system that is more structured and responsive to change.

As the need for digitalization increases, ICT management is a key component to support institutional transformation. Akhmad, et.al, (2024) stated that ICT not only functions as an operational tool, but has evolved into a strategic asset that determines the success of data management, educational services, decision-making, and relationships between universities and stakeholders. Therefore, effective ICT management requires an integrated managerial approach and oriented towards the strategic goals of the organization. Halmahera University as a developing higher education institution also faces demands to carry out digital transformation. Efforts to improve academic information systems,

administration, and the use of digital platforms are part of the university's response to the needs of modern governance. However, the effectiveness of ICT management does not only depend on the availability of technology, but also on how corporate orientation is applied in university management, including in terms of policy formulation, organizational structure, inter-unit coordination, and human resource competence. Although various studies have discussed ICT management and university governance, studies linking the two from a corporate orientation perspective are still relatively limited, especially in the context of regional private universities.

Corporate orientation in higher education refers to the ability of universities to manage resources professionally, efficiently, and accountably. Shattock (2003) emphasized that the success of universities is largely determined by the ability of management to carry out the principles of modern governance. In the context of digital transformation, ICT management has a big role in supporting institutional performance. Laudon & Laudon (2020) stated that well-managed ICT can improve decision-making effectiveness and organizational transparency. Strengthening ICT management must be integrated with the strategic orientation of the institution, including in terms of planning, implementation, and evaluation of information systems.

Corporate orientation refers to the application of modern management principles—such as efficiency, effectiveness, accountability, professionalism, and performance-based management into college governance. Shattock (2003) states that the success of universities is largely determined by its ability to manage resources professionally and responsively to environmental changes. In corporate-oriented organizations, decision-making is more structured, data-driven, and prioritizes transparency and accountability. Schubert and Andersson (2019) emphasized that the corporate orientation in higher education encourages institutions to adopt a more strategic and competitive managerial culture so as to support increased competitiveness. The corporate approach does not eliminate the academic character of the university, but it does provide a clearer governance structure in asset management, human resources, and institutional policies. ICT in higher education is not only an operational tool, but a strategic asset that supports all aspects of the institution's work.

Laudon and Laudon (2020) explained that a good information system increases decision-making effectiveness, operational efficiency, and organizational transparency. Therefore, ICT must be managed with strong governance principles, including strategic planning, information security, data management, and system performance evaluation. According to Weill and Ross (2004), effective ICT governance requires clarity in decision-making rights (*Right of Decision*), the role of ICT units, coordination mechanisms, and integration between ICT strategies and organizational strategies. Without such integration,

the implementation of information systems tends to be ineffective, fragmented, and not in line with the needs of the institution. Corporate orientation has a direct influence on ICT management. The principles of efficiency and accountability encourage educational institutions to develop transparent and standardized digital systems. The principle of data-based management requires universities to have a reliable, secure, and integrated information system. Bryson (2018) shows that good strategic planning will strengthen the integration between technology and organizational goals. Thus, the stronger the corporate orientation of a university, the greater its ability to optimize ICT as an instrument of institutional transformation. Purwanto, et.al., 2024 states that successful ICT management requires strategic alignment (*Strategic alignment*) between organizational policies and technology strategies. This alignment can only be achieved when the organization has a clear and consistent corporate orientation. Digital transformation requires universities to have adaptive and innovation-based governance. Tapscott (2014) states that institutions that are able to integrate technology strategically will have a greater competitive advantage. In the context of higher education, this includes the digitization of academic services, administration, online learning, and institutional data management. Oliver and Brown's (2019) study shows that the main obstacles to digital transformation are the lack of human resource readiness, limited infrastructure, and weak institutional coordination. In this context, it is important for researchers to conduct a study on corporate orientation affecting ICT at Halmahera University. Therefore, this study seeks to fill this gap by conducting an in-depth exploration of how corporate orientation affects ICT management at Halmahera University. A qualitative approach was chosen to explore a more comprehensive understanding of the dynamics, challenges, and opportunities that arise in the implementation of corporate-based governance. This research is expected to gain a better understanding of the relationship between corporate orientation and ICT management and its implications for improving the quality of university governance as a whole. The findings of this research are also expected to provide strategic recommendations for policy makers in strengthening the digital transformation of higher education.

Method

This study uses a descriptive qualitative approach. The data collection technique included in-depth interviews with 8 lecturers as informants, 4 education staff, and 2 informants from the ICT management element of the University of Halmahera on the Relationship Between Corporate Orientation and ICT Management in Higher Education at the University of Halmahera, while observations were made on the operational activities of the campus information system through SIAKAD and document analysis was carried out on

internal policies. ICT guidance, and management reports. Data analysis is carried out through *the Thematic Analysis* approach, which is carried out with stages carried out including data reduction, data presentation, drawing conclusions/verification related to the Relationship Between Corporate Orientation and ICT Management in Higher Education at Halmahera University. Miles and Huberman (1994) stated that data analysis uses data reduction techniques, data presentation, and conclusion drawn.

Results and Discussion

Result

The results of the study show that the corporate orientation at Halmahera University is reflected through the application of the principles of efficiency, accountability, and professional management. In the context of ICT management, corporate orientation affects various aspects such as planning, implementation, maintenance, and evaluation. The informant explained that the application of corporate governance principles encourages the strengthening of academic and administrative information systems. However, significant challenges are still in the form of lack of human resource training, limited infrastructure, and lack of integrated digital policies. The discussion shows that a strong corporate orientation has the potential to significantly strengthen ICT management, in line with the theories of Shattock (2003) and Laudon & Laudon (2020).

Table 1. Research results

Aspects	Research Findings	Implication
ICT Strategic Planning	ICT planning began to be integrated in the Strategic Plan and policies of the University of Halmahera.	Align digital strategies with institutional policy directions.
Information System Development	SIKAD, staffing systems, and student applications are used but have not been fully integrated.	Improve efficiency and transparency; need integration between systems.
Data Governance and Security	Routine backups, sharing of access rights begin to be implemented.	Improve data reliability and security.
Human Resources and Technology Competence	The technical competence of human resources is still limited and training is not routine.	It is necessary to increase the capacity of human resources in a sustainable manner.
Technology Infrastructure	Networks, servers, and hardware are still limited.	Requires infrastructure investment for optimal digital services.
Interunit Coordination	Coordination is still weak, some units work in silos.	Integrated governance and cross-unit coordination SOPs are needed.

Discussion

Research shows that corporate orientation plays a significant role in improving the structure and direction of University ICT management. This finding is in line with the idea of Fitroh, et.al., (2022) who states that strategic *alignment* is the key to the effectiveness of ICT management. According to Indrayani, (2011) to increase the effectiveness of ICT implementation, which will clearly affect the effectiveness of the achievement of educational implementation carried out by the institution, the factors that affect the effectiveness of ICT implementation in institutional management, especially in terms of academic administration, need to be further researched. This is intended to make the academic management process in higher education more effective and efficient so that it can support the achievement of high performance from the institution. On the other hand, the University of Halmahera already has a Strategic Plan and university policies, ICT development has a clearer basis. However, the implementation of corporate orientation is still limited to the policy level. At the operational level, work standards have not been consistently applied, and coordination across units has not been optimal. This shows that there is a *gap* between policy and implementation.

The existence of various digital systems (SIAKAD, staffing, student services) shows that universities have entered the digital transformation stage. However, system fragmentation is a major obstacle influenced by connectivity infrastructure factors that are not fully integrated on all SIAKAD platforms. These findings are consistent with Weill & Ross (2004) who emphasize the importance of strong IT *governance* to ensure that systems work in an integrated manner. Satzinger to state that information is a collection of data that is collected, stored and processed in order to produce something useful. System fragmentation causes: duplication of data, inefficient work processes, difficulty in compiling comprehensive management reports. This shows that the corporate approach is not yet accompanied by an integrated system architecture.

Strategy is a comprehensive plan to achieve organizational goals. Strategy is also an overall approach related to the implementation of ideas, plans and execution of activities over a certain period of time. The strategy is divided into several components, namely: There are differences in competencies, scope and distribution of resources. Strategies basically have several types, namely: *corporate level strategy, business level strategy and functional level strategy*. Integration is defined as a renewal that becomes a complete and unanimous unity. Another definition of integration is a state in which ethnic groups adapt, and conform to the culture of the majority of the community, but still maintain their own culture. ICT implementation has become a key element in efforts to increase productivity, reduce operational costs, and provide essential flexibility in the face of dynamic market changes. Lubis and Nasution, (2024) in their research stated that an organization's ability to optimize

internal processes, collaborate effectively, and quickly access relevant information has the potential to make a significant difference in goal achievement and operational continuity. In addition, understanding the deeper importance of ICT's role in improving organizational efficiency and the need to investigate certain aspects related to ICT implementation and utilization.

The university already has backup procedures and access rights, there is no documented data security policy yet. This condition is not in accordance with *best practice standards* as stated by Laudon & Laudon (2020), which emphasizes the need for structured security policies, audits, and incident response protocols. The findings of the study show that Halmahera University has implemented several basic procedures related to data security, such as the implementation of periodic backups and the regulation of access rights for information system users. This practice is an important foundation in institutional data protection, especially in an increasingly complex digital environment. However, universities do not yet have a formally documented data security policy, such as *a data security policy*, *security-specific standard operating procedures* (SOPs), or incident handling guidelines (*incident response guidelines*).

The absence of written policies has several implications: the lack of uniform standards in managing security risks, weak consistency of implementation between work units, and potential vulnerabilities in the event of data breaches or system disruptions. This condition is not fully in line with the *best practices* of information security governance. Laudon and Laudon (2020) emphasized that modern organizations need a structured security framework, including formal policies, periodic audit procedures, monitoring systems, and incident handling protocols to ensure data availability, integrity, and confidentiality.

In the university context, the absence of documented guidelines hinders the formation of a strong security culture and reduces institutional readiness to face digital threats. Therefore, strengthening information security governance needs to be a strategic priority, through comprehensive policy formulation, alignment between units, and increasing the capacity of human resources related to cybersecurity. Joel, Abdussalaam & Yunengsih (2023) in their research states that Data security involves a series of technical and procedural measures to protect information from the security threat of system hacking by unauthorized persons. Data security guarantees include various aspects, such as network security, access security, data encryption and identity and user access management. Data security is a process of data protection that is not secure (Pratiwi, et.al., 2022).

Research found that ICT HR capabilities are not evenly distributed, with many staff not yet having advanced technical skills such as server management, API integration, or cybersecurity. In fact, the literature (Oliver & Brown, 2019) shows that human resources are

the most decisive component in digital transformation. These findings indicate the need for a long-term HR development strategy through training, professional certification, and the recruitment of experts. The results of the study show that the competence of human resources in the field of Information and Communication Technology (ICT) at Halmahera University is not evenly distributed. Some ICT management staff already have basic operational skills, such as routine application management and device maintenance. However, most do not have advanced technical skills, especially in strategic aspects such as server management, integration between systems through APIs, advanced database management, cybersecurity, and system development. This competency imbalance causes the digitalization process to run less than optimally and often depends on certain individuals who have more adequate expertise.

The literature emphasizes that the quality of human resources is a key factor in the success of digital transformation. Oliver and Brown (2019) state that technology cannot function as a strategic instrument without the support of adequate human capacity in managing, developing, and evaluating information systems. The success of an organization in achieving a goal is largely determined by the quality and ability of the Human Resources (HR) in it (Zubaidi, et.al., 2019). Regarding the integrative resource-based theoretical framework, it has provided empirical results by supporting the opinion that information technology creates economic value by acting as leverage and by utilizing human resources and other physical resources owned by companies (Ghozali and Hapsari, 2006). Thus, the technical and managerial capabilities of ICT human resources greatly determine the effectiveness of ICT governance and the ability of organizations to adapt to technological developments.

This condition indicates the need for a systematic and sustainable human resource development strategy. Universities need to implement capacity building programs through regular training, professional certification, technical workshops, and collaboration with external institutions or experts. In addition, the recruitment of staff with more specific and experienced ICT competencies needs to be considered to strengthen the ICT management team. This approach not only improves the technical capabilities of human resources, but also strengthens the readiness of institutions to face the challenges of digital transformation in the future.

Network stability and limited server capacity have an impact on the performance of the university's digital systems. According to Tapscott (2014), infrastructure is the basis of the digital economy and institutional transformation. With inadequate infrastructure, universities find it difficult to achieve optimal efficiency and effectiveness. The findings of the study show that the ICT infrastructure at Halmahera University still faces various limitations, especially in

terms of network stability and server capacity that is not optimal. Network instability causes frequent disruptions of access to academic information systems, digital administration services, and other internal applications that support campus activities (Aulia, et.al., 2024). Meanwhile, limited server capacity makes data storage, information access speed, and system integration processes less efficient. This condition hinders the smooth running of digital services and has the potential to reduce the quality of user experience, both for students and educators and education staff.

The literature shows that infrastructure is a key prerequisite for digital transformation. Tapscott (2014) emphasized that technological infrastructure is the foundation of the modern digital economy and is a determining factor for the success of institutions in utilizing technology strategically. A robust infrastructure enables organizations to create fast, reliable, secure, and sustainable digital services. On the contrary, weak infrastructure will limit the effectiveness of information system implementation, hinder digital innovation, and reduce organizational capacity to respond to evolving technological demands.

These infrastructure limitations suggest that universities need to make strategic investments in upgrading networks, servers, and supporting hardware. Strengthening infrastructure not only allows for better system integration, but is also an important step to improve operational efficiency, expand digital-based services, and encourage the implementation of more professional ICT governance. With a stronger technological foundation, the university is expected to improve the quality of services and support digital transformation more comprehensively.

The traditional work culture and low collaboration between units pose obstacles to the implementation of corporate orientation. According to Shattock (2003), corporate orientation requires a cultural change to be more professional, accountable, and performance-based. The results of the study show that the work culture at Halmahera University is still dominated by traditional patterns that tend to be hierarchical and individualistic. This pattern has an impact on the low level of collaboration between organizational units, so that the coordination process in ICT management does not run effectively. As a result, the implementation of digital policies and information system integration is often hampered by a lack of communication, misunderstandings between units, and a lack of standard coordination mechanisms. (Muthya, et.al., 2025) in his research states that organizational culture is a system of values, beliefs, and norms embraced by members of the organization in interacting and carrying out their duties. This is in line with Utami & Setiawardani (2023), organizational culture has an important role in shaping employee mindsets and behaviors, which has an impact on productivity and work effectiveness. Meanwhile, research conducted by Zainuddin & Nasikhah (2020) shows that a strong organizational culture can increase employee

motivation and loyalty, as well as help companies achieve their goals more effectively. In Sobirin's (2016) view, organizational culture is a collection of values, norms, and habits that develop and are upheld in the organization, which affects the behavior of members in carrying out organizational activities. In line with that, (Lubis & Nasution, 2023) states that organizational culture is a pattern of values and norms that are shared by members of an organization that form the behavioral characteristics of the organization, which serves as a guideline in carrying out activities and achieving organizational goals. Studies conducted by Aldo Nugroho et, al., (2025) and Apriyana & Fadilah (2022) highlight the importance of building an innovative culture that aligns with employee well-being and ensuring a communication and organizational structure that supports its effective implementation.

Based on the findings of previous research on organizational culture, it can be concluded that organizational culture in the context of ICT management needs to be responsive and coordinated, so that elements in each unit can play a synergistic role in supporting the strategic goals of the institution. Without a collaborative culture, decisions related to technology are often partial, uncoordinated, and less aligned with the institutional vision. This means that it is necessary to strengthen organizational culture through the implementation of more transparent, coordinated, and data-based work habits. In addition, the development of cross-unit SOPs, regular coordination forums, and leadership that encourages innovation and collaboration need to be strategic steps. Organizational culture change is an important part of digital transformation and will determine the success of the implementation of corporate orientation in university ICT governance.

Conclusion

This study concludes that corporate orientation has a strong and relevant relationship with the effectiveness of ICT management at Halmahera University. The application of modern governance principles supports the strengthening of the campus digital system, and professionalism has been proven to provide a clearer strategic direction in the management of university ICT. Corporate orientation strengthens aspects of strategic planning, information system development, data governance and security, and coordination between units, but in terms of human resources, it is necessary to increase the capacity of human resources, infrastructure, and more comprehensive policies.

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