

ARTICLES

Strengthening Indonesian Customs Performance Based on Public Service Cultural Values During the Digitalisation Process

Muhamad Farid Mahmud, PhD (Management)¹, Rini Tesniwati, PhD (Accounting)², Sean Alan Haqany³

¹ Management Department, Gunadarma University, ² Accounting Department, Gunadarma University, ³ Government Science - Faculty of Social and Political Sciences, Sultan Ageng Tirtayasa University

Keywords: Adaptive culture, stakeholder engagement, Digital Transformation, Work from Anywhere, organisational performance

<https://doi.org/10.55596/001c.144311>

Vol. 19, Issue 2, 2025

Volatility of stakeholder satisfaction and supply chain logistics inefficiencies over the past decade pose significant challenges for Indonesian Customs in realising its vision, which is to become the world's leading customs and excise organisation. Various studies have consistently found that stakeholder satisfaction and service efficiency are intricately linked to the cultural values embedded within the organisation. This article endeavours to scrutinise, elucidate and deepen our understanding of the implications of implementing adaptive cultural values and promoting stakeholder engagement in fortifying organisational performance. It gives recommendations for these values for systematic implementation in the digital transformation process. Employing a mixed-methods approach incorporating both quantitative and qualitative methodologies, this study selectively samples respondents representing employees and officials of Indonesian Customs. Quantitative methodology is employed to scrutinise and expound on hypotheses, complemented by qualitative techniques such as observation, focus group discussions and in-depth interviews. Outcomes from this study underscore the substantial impact of stakeholders and adaptive cultural values on both digital transformation and performance, and intersection of these variables emphasises the significance of stakeholder focus and collaborative values, which influence efficiency, as well as being a catalyst and social driver of change.

1. Introduction

The predominant challenge facing customs public services worldwide is rooted in the inefficiencies inherent in business processes, as highlighted by European researchers who underscore the significant constraints on economic activity imposed by customs service procedures (Holzner & Peci, 2012). Customs administration (Customs) plays a pivotal role in generating state revenues, safeguarding domestic industries, and ensuring smooth supply chains. Furthermore, it aligns its practices with World Trade Organization (WTO) commitments for effective and efficient trade facilitation, working to prevent prohibited or unsafe exports and imports (De Wulf & Sokol, 2005). As a result, the ongoing focus of customs development is centred on enhancing public services to reduce trade costs, ensure economic security, and elevate a country's competitiveness and appeal for investment (Gupanova, 2018).

Phased customs organisation reform, incorporating the latest information technology, modification of import management to support exports, and restructuring of the management framework, reflects a commitment to adapting to evolving needs (De Wulf & Sokol, 2005). Recognising the broad impact and sustainability of customs public services, attention to their performance becomes imperative. Mohasab and others (2010) emphasise the correlation between service quality and stakeholder satisfaction, underscoring the importance of monitoring and enhancing service delivery. Within the Ministry of Finance of the Republic of Indonesia, notably within the Direktorat Jenderal Bea Dan Cukai (Directorate General of Customs and Excise, DGCE), digitalisation efforts have progressed since the beginning of the transformation in 2012, when the compulsory first-generation service application system was launched. This initiative aims to establish an integrated platform in the export and import goods supply chain, demonstrating a commitment to modernisation and efficiency.

Mahmud and Tesniwati (2023) found that organisational culture and digital transformation have a significant impact on organisational performance. In particular, organisational culture places a significant emphasis on integrity, which poses a major challenge to customs administrations globally. This challenge is exacerbated by the pervasive problem of corruption, which transcends national levels of development (McLinden & Durrani, 2013). Anticipating a positive shift, the integration of digitalisation in public services, coupled with cultural values, competency development, and stakeholder engagement, is expected to enhance Customs' performance in supporting domestic industries. Gwardzinska's (2012) research on customs services in the European Union reinforces this expectation. The use of adaptive work patterns is a noteworthy trend that deviates from accepted conventions without compromising organisational performance.

Spinuzzi (2012) and Yu and others (2019) found that flexible work schedules can boost employee productivity, lower pollution and traffic, promote teamwork and creativity, and save money. What part do culture, knowledge sharing, and stakeholder engagement play in the DGCE's digitalisation process, and how is it carried out? Moreover, is the impact of these elements on organisational performance mediated by digital transformation, and how does the role of work patterns improve organisational performance through moderating the digitalisation process? To comprehensively address this multifaceted inquiry, this study adopted a mixed-methods approach. Quantitative methods were used to analyse relationships between manifest (measurable) and latent (theoretical) variables, with subsequent qualitative validation through focus group discussions and in-depth interviews with expert customs officials.

This research incorporated manifest and latent variables, including mediating and moderating factors, ensuring a robust statistical analysis through the Structural Equation Model (SEM) method. This research is

expected to provide benefits, especially as a reference in the practice of human resource management and customs services at the DGCE, provide important information for stakeholders, and add to the body of knowledge in the field of management studies. It describes methods to improve organisational performance by implementing shared cultural values with stakeholder engagement, modernising knowledge exchange through collegiality, and producing the most adaptive work design as a strategic step, because the outcome of this research is not only to improve internal organisational performance and capacity over time, but also to impact aggregate production efficiency, product competitiveness in global trade, economic stability, public trust, and investor attractiveness. Practical relevance and views are also expanded to provide vital insights into how to implement this strategic initiative, which serves as an alternative role model.

2. Literature review

Several relevant concepts are outlined below regarding the background and objectives of this study, including the concept of motivation to improve performance, the importance of an adaptive organisational culture in supporting that motivation, the concept of stakeholders, knowledge transfer, and, in particular, the role of digital transformation and flexible workspaces in supporting organisational performance improvement. As a result, this study will attempt to explain these theories. Goal-setting theory, a major theory in this study, asserts that motivation is required to persuade an organisation to attain its goals. This approach combines digital transformation as a mediator, adaptive work patterns as moderators, and empowering values for people and stakeholders to ensure digitalisation consistency. Performance measurements are included in organisational goals. Customs, the primary agency in charge of monitoring national borders, has two responsibilities: administering state levies on export/import activities and enforcing international trade bans and restrictions; however, the scope and management of technical agencies varies by country (Grainger, 2016). To accommodate this, it is necessary to decide what type of management will be used during the change process. The relationship between causes and needs necessitates managerial and technological change, which is why Nickols (2016) defines change management in three steps: managing knowledge, reinforcing knowledge, and applying knowledge practically. To improve performance during digital transformation, organisations must consider the role of culture, knowledge transfer, and stakeholder engagement; working from anywhere serves as a moderating factor in this regard. The relevant concepts are explained below.

2.1. Goal-setting theory

Goal setting theory (GST) is a motivational theory that explains what causes a group of people or organisations to perform better than before or better than other groups on work-related tasks (Locke & Latham, 2013). Goals have two distinct characteristics: content and intensity. Goal content

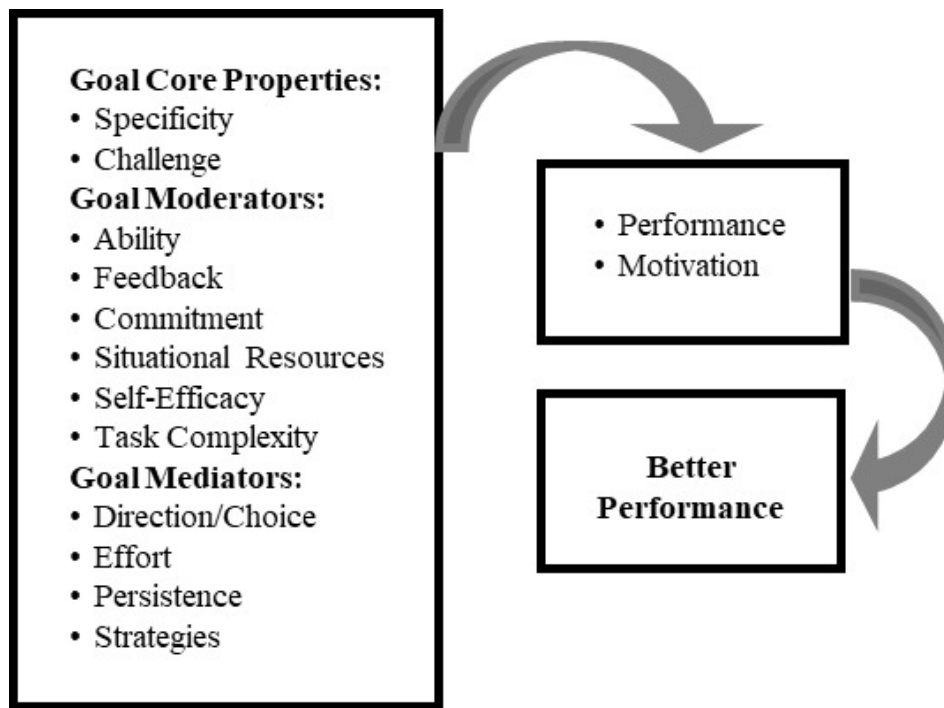


Figure 1. Framework of goal-setting theory.

Source: Locke & Latham (2002)

refers to the desired object or outcome (e.g., increased stakeholder satisfaction). Goal intensity refers to the amount of effort required to achieve a goal. Motivated action is defined by three key characteristics: direction, intensity, and duration. All three serve as performance mediators. These concepts underpin Customs' consideration of these factors to achieve its objectives. [Figure 1](#) depicts the relationship between goal setting and performance.

2.2. Adaptive organisational culture drives performance

Organisational culture is critical for achieving peak organisational performance (Wibowo, 2013). Culture can also vary within the same organisation due to differences in sub-occupations or religious, educational, or social groups represented by these differences, but each subculture has certain characteristics that dominate an organisation (Cameron & Quinn, 2006). An adaptive culture is one in which employees prioritise changing customer or stakeholder needs and support initiatives to keep up with these changes (McShane & Von Glinow, 2008). It can also be said that an adaptive organisational culture is a set of shared beliefs, values, and behaviours that demonstrate an organisation's awareness of and response to environmental changes, as well as its commitment to taking agile and flexible actions to address those changes (Constanza et al., 2016). The concept of adaptive culture emerged in response to criticisms about the potential inflexibility of organisational culture (Alvesson, 2002). One reason for thinking in this manner is the significance of organisational culture,

particularly its relationship to organisational learning, effectiveness, and performance (Yilmaz & Ergun, 2008; Zheng et al., 2010). Customs should keep this in mind as it embarks on its digital transformation.

2.3. Stakeholder analysis

Stakeholder analysis is also viewed as a method that can empower organisations to influence decision-making (Prell et al., 2016), including providing other initiatives and aspirations for creating adaptive public services based on the demands of the situation. Stakeholders, both external and internal, influence organisational performance (Hsieh, 2009). Stakeholder engagement in this study is the role of agencies outside Indonesian Customs and stakeholder communities in responding to services and conveying aspirations or initiatives for service improvement. Stakeholder engagement is measured by the following indicators: initiation (needs analysis), planning (setting goals), implementation (supervision) and evaluation. Based on the concepts, the important indicators for research are initiation, implementation and control.

2.4. Knowledge transfer drives performance

Knowledge or information is important for organisations in their efforts to preserve cultural values, learn new ideas, solve new problems and create competitive advantages in new situations in the present and in the future (Liao et al., 2015). Knowledge transfer can be interpreted as a process of exchanging knowledge from one organisation to another (Argote & Ingram, 2000; Duan et al., 2010; Rotsios et al., 2014). Knowledge can be obtained by various learning methods, both formal and informal. Several researchers have found that a model, which links organisational learning with organisational performance, based on the results of research on organisational learning at the individual, group and organisational levels (Marsick & Watkins, 1999), can increase innovation (Cavusgil et al., 2003) and knowledge transfer within organisations (Jiang & Li, 2009), which will later help improve organisational performance (Shiryan et al., 2012).

2.5. Digital transformation and flexible working spaces

Digital transformation is the combined effect of multiple digital innovations involving new variables (and constellations of variables), structures, practices, values, and beliefs that change, threaten, replace, or complement the existing processes in an organisation, ecosystem, industry, or field (Hinings et al., 2018), consistent networking of all economic sectors, and adaptation of actors to new digital economic circumstances (Bondar et al., 2017), and use of new digital technologies (Fitzgerald et al., 2014). Therefore, utilising all organisational resources and appropriate information technology, digital transformation can be described as a process of enhancing organisational performance. Digital transformation also allows workers to shift their work schedules and locations. Flexible workspaces provide larger organisations with both increased utility and agility (Garrett et al., 2017).

According to Erola and Kilpi-Jakonen (2017), members of organisations are expected to share more knowledge and adopt more collaborative practices, which can improve performance and innovation. Thus, knowledge exchange to enhance performance is made possible by the digitalisation process, which is facilitated by flexible work arrangements. As Indonesian Customs embraces digitalisation and remote work, it is crucial to prioritise the right values to enhance performance.

2.6. Measurement of organisational performance with stakeholder satisfaction

Measuring and evaluating an organisation's performance or achievements is critical, but it should be noted that performance limits are difficult to define because there is currently no standard definition of performance (Lebas & Euske, 2006). Performance is a multifaceted construct (Hubbard, 2009), and each party interested in performance defines it based on their understanding and interests. Organisational performance is the achievement or output of an organisation's processes or measurable actions over a given time. Performance measurement not only establishes performance criteria, but it also considers organisational goals, facilitates monitoring and evaluation, and reporting, making it both a learning experience and a means of identifying performance achievements. Kombo (2015) argues that stakeholder satisfaction can be measured by faster and efficient service.

2.7. Hypothesis development

Studies of the food production industry in the United Kingdom and Greece show that instilling specific values is a component of organisational culture (Osei et al., 2023). Researchers have found that the strength of a culture or a specific type of culture is linked to economic performance (Sorensen, 2002). In another perspective, culture for an organisation is a collection of special characteristics or traits in the form of beliefs, values, and work styles, thereby distinguishing one organisation from another (El Leithy, 2017). Denison and others (2006) and Constanza and others (2016) state that adaptive culture affects performance. Mahmud and others (2022) and Taylor (2014) conclude that cultural harmony at all levels of an organisation influences performance achievement. This study highlights adaptive culture as a latent construct with values indicators such as integrity, stakeholder focus, collaboration, innovation, and self-development (Cropanzano & Mitchell, 2005; Racela, 2014). Kane and others (2015) find that culture can either facilitate or impede digital transformation. This suggests that adaptive culture has an impact on organisational performance, both directly and indirectly. Thus, the study's first two hypotheses are:

- H1: Adaptive culture has a positive effect on digital transformation

- H2: Adaptive culture has a positive direct effect on organisational performance.

External and internal stakeholders influence organisational performance (Hsieh, 2009). Stakeholder engagement in this study refers to the role of agencies other than Indonesian Customs and stakeholder communities in responding to services and communicating aspirations or initiatives for service improvement. Robu and Lazar's (2021) research findings indicate that increasing stakeholder participation in digital transformation initiatives is critical as a foundation for cooperation and sustainability. Involving stakeholders can lead to better digital change. Similarly, Muluka and others (2020) state that the success of digital literacy programs is positively influenced by stakeholder management (participation); additionally, stakeholders can use their digital literacy to submit input and complaints for necessary digital changes. Communication with stakeholders can provide appropriate ideas for digital transformation projects (Da Costa Filho et al., 2021). This suggests that stakeholder participation has a positive effect on organisational performance, both directly and indirectly. Thus, the study's next hypotheses are:

- H3: Stakeholder engagement has a positive effect on digital transformation
- H4: Stakeholder engagement has a positive direct effect on organisational performance.

Sain and Wilde (2014) find that knowledge management, acquisition, and dissemination are positively related to organisational performance. Other empirical evidence from Al Hakim and Hassan (2013) shows that knowledge transfer strategies have both a direct and indirect effect on organisational performance via innovation as a mediating variable. Erceg and Zoranović (2022) and Lazarenko (2018) find that knowledge transfer, leading to cultural change, is crucial for digital transformation and should be the first step in information management and transformation processes. Based on this research, it is suspected that knowledge transfer influences organisational performance both directly and indirectly, so further hypotheses are:

- H5: Transfer of knowledge has a positive effect on digital transformation
- H6: Transfer of knowledge has a positive direct effect on organisational performance.

Mungania and others (2016) conclude that adaptive work patterns have a significant impact on the performance of Kenyan banking organisations. Austin-Egole and others (2020) conclude that developing adaptive work patterns can improve employee wellbeing and organisational performance. Work pattern indicators in this study focus on employee skill development and productivity. According to Davidescu and others (2020), in Romania, flexible workspaces (adaptive work patterns) and information technology development drive employee and organisational satisfaction and performance, while also moderating the relationship between the two variables. Based on this research, it is suspected that adaptive work patterns, in addition to influencing performance, can moderate digital transformation to strengthen performance, so hypotheses in this area of research are:

- H7: Work from anywhere (WFA) has a positive effect on organisational performance
- H8: Work from anywhere can moderate digital transformation on performance.

Previous research on digital transformation was conducted by Guo and Xu (2021) who investigated China's manufacturing industry sector and conclude that digital transformation has improved process-based efficiency and can mediate the role of policy and innovation on performance. Zhang and others (2021) find that digital transformation improves organisational performance and there is a tendency to use information technology capabilities in strengthening performance. Digital transformation is positively related to organisational performance (Chouaibi et al., 2022). Digital transformation has the potential to moderate organisational learning towards innovation and performance (AlMujaini et al., 2021), mediating business models on organisational performance (Y. Zhang et al., 2023). Based on this research, it is suspected that apart from digital transformation influencing performance, it can also mediate the three independent variables to strengthen performance, so the following hypotheses were developed:

- H9: Digital transformation can mediate an adaptive culture on performance
- H10: Digital transformation can mediate the stakeholder's engagement on performance
- H11: Digital transformation can mediate the transfer of knowledge on performance.

[Figure 2](#) outlines the framework of the research.

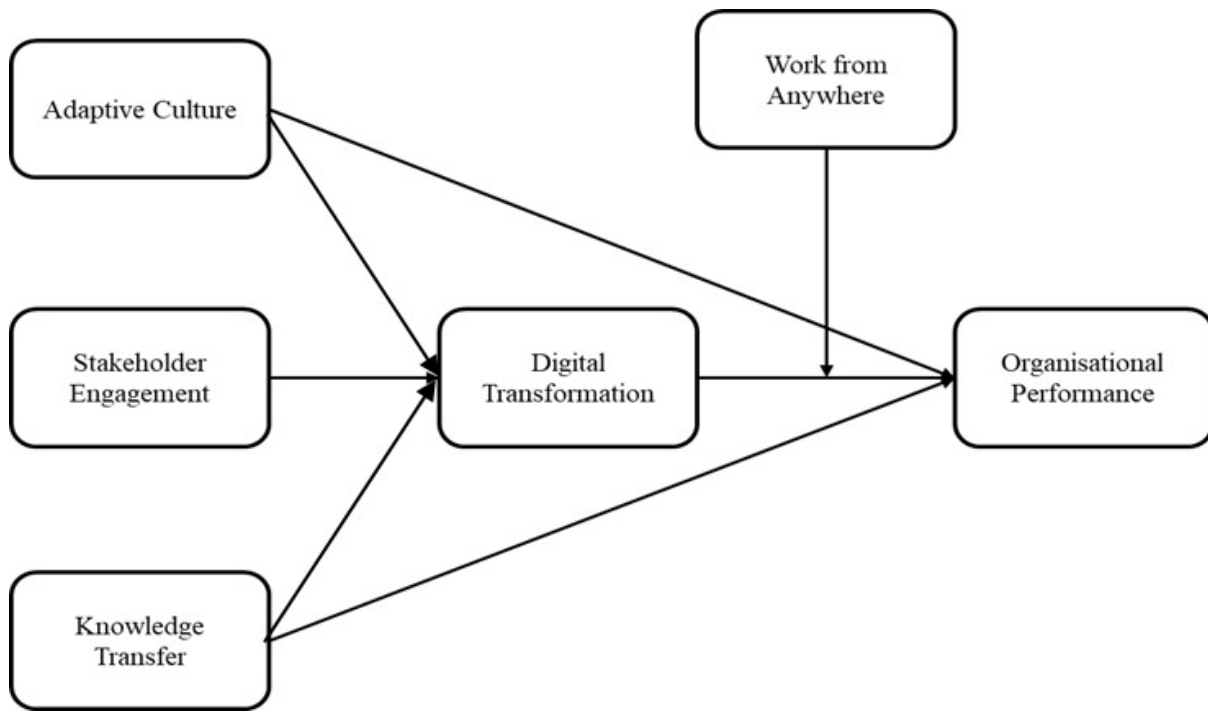


Figure 2. Research framework.

Source: Authors.

3. Methodology

3.1. Research approach, variables, subjects and samples

This study uses a combination of methods (mixed-methods), quantitative and qualitative. Mixed or combined research merges quantitative and qualitative methods in a research activity, to obtain more comprehensive, valid, reliable and objective data (Johnson & Christensen, 2004). Based on the literature review above, [Table 1](#) presents the latent and manifest variables (indicators) and their scale. The initial step, data analysis, was performed using the SEM method and processed with [SmartPLS](#) software. The SEM method is used in research primarily to complement multilevel models simultaneously. Several indicators from SEM analysis are evaluated and compared to standard values, such as variable loadings and construct relationships, factor validity and reliability, model fit indices, and p-values or t-statistics indicate the significance or acceptance of a hypothesis, including mediation and moderation. Each variable indicator was measured using a Likert scale and the latent variable was operationalised by translation into a measurable (manifest) indicator, as outlined in [Table 1](#).

This study was conducted within the DGCE, which represents all Indonesia, with the focus on officials and employees from 20 Regional Offices and three Main Service Offices. Customs and Excise inspectors working in the service sector were chosen as respondents. A minimum sample of 210 respondents was obtained using the Krejcie and Morgan table (Krejcie & Morgan, 1970; Shela et al., 2023), assuming a 5 per cent level of confidence. The respondents in the study were from 20 Regional Offices

Table 1. Summary of operational research variables.

Latent variable	Reference	Variable concept	Manifest variable (indicator)	Scale
Adaptive Culture (AC)	McShane & Von Glinow (2008); Constanza et al. (2016)	AC	1. Integrity 2. Stakeholder focus 3. Staff engagement 4. Collaborative 5. Innovative 6. Self-development 7. Vision understanding	Likert
Stakeholder Engagement (SE)	Hsieh (2009); Sun & Henderson (2016)	SE	1. Initiative 2. Implementation 3. Controlling	Likert
Knowledge Transfer (KT)	Shiryan et al. (2012); Cavusgil et al. (2003); Gupta & Govindarajan (2000)	KT	1. Training 2. Cooperation 3. Communication intensity	Likert
Digital Transformation (DT)	Chebotareva (2021); Okazaki (2017); Holzner & Peci (2012)	DT	1. Agility 2. Adaptability 3. Efficient 4. Economic benefit	Likert
Work from Anywhere (WFA)	Kelliher & Anderson (2009); Garrett et al. (2017); Cho (2020)	WFA (Adaptive Work Pattern)	1. Work-life balance 2. Productivity 3. Skill development	Likert
Organisational Performance (OP)	Daft (2010); Blocher et al. (2005); Lumanaj (2015)	OP	1. Target realisation of Key Performance Indicators 2. Stakeholder satisfaction 3. Efficiency	Likert

Source: Authors, based on literature review.

and three Echelon II Main Service Offices. The representative sample size for use in the SEM analysis approach should be at least five times the number of indicators or parameters (Ferdinand, 2014; Hair et al., 2014). In this study, the number of indicators consisted of 23 variables, so the minimum sample size required is: $23 \times 5 = 115$. Gay and Diehl (1992) state that the sample size for a descriptive study should be at least 10 per cent of the population; however, the larger the sample, the better. Yount (2006) and Gay and others (2009) recommend a minimum sample size of 10 per cent for a population of 101 to 1,000.

3.2. Focus group discussion and quantitative strategic planning matrix analysis

This qualitative method begins with a Focus Group Discussion (FGD), which is a popular method for gathering and presenting data in research. The information gathered is the result of informant exploration of social interactions during the discussion process (Lehoux et al., 2006). In general, this activity is performed following the completion of the multivariate analysis to confirm and reconcile quantitative analysis data (SEM) with secondary evidence and facts gathered by employees during the discussion process. This is followed by identifying external and internal organisational factors (EFE and IFE, respectively) based on the study's six latent variables, developing a Threats, Opportunities, Weaknesses, and Strengths (TOWS) strategy matrix, and finally compiling or formulating a plan. The

Quantitative Strategic Planning Matrix (QSPM) analysis is used to assess the relative attractiveness of strategic options (David, 2000) and prioritise policy alternative courses of action. In-depth interviews, observations, and FGDs help to corroborate and deepen the hypothesis testing results. The confirmation includes all latent factors and measurable indicators. Based on confirmation, reconciliation, and in-depth interviews, recommendations were developed to execute performance accomplishment methods using the priority scale values of the five latent variables. The FGD was conducted three times: the first and second with internal parties of the organisation consisting of echelon officials and officials related to services to stakeholders, and the third with external parties and academics. The study was approved under ethics protocol number 5119230014.

4. Results and discussion

4.1. SEM analysis

This study contains six latent variables and 23 manifest variables (indicators). The number of respondents (251) represents the number of questionnaire responses that were received from the 448 questionnaires distributed. This number exceeds the minimum sample size. The results of SEM with the partial least squares (PLS) approach were tested by comparing the results of the measurement model (or outer model, which describes the relationship between the latent constructs and their observable indicators) and the structural model (or inner model, which shows the hypothesised relationships among the latent variables) of the model under study. The loading factor shows the magnitude of the correlation between the indicator and the (latent) construct, so that a valid indicator can justify the construct. The results for each indicator in the adaptive culture (AC) variable show a loading factor value between 0.69 and 0.80, for stakeholder engagement (SE) between 0.73 and 0.88, for knowledge transfer (KT) between 0.77 and 0.84, and for adaptive work pattern (WFA) between 0.71 and 0.89. The moderating variable, digital transformation, has a value between 0.74 and 0.77, and the independent variable, 0.81 to 0.83. Thus, all the variables studied are valid. Composite (or construct) Reliability (CR) can be used in PLS reliability testing. The CR value is greater than 0.7 and the Cronbach's alpha value (another measure of reliability) is greater than 0.6, indicating that the data is reliable and that all indicators are consistent in measuring each variable.

Furthermore, reliability testing produced a CR of exogenous (independent) and endogenous (dependent) variables greater than 0.9, except for SE (0.884), indicating that this research instrument is trustworthy. This structural model was evaluated by examining how each latent variable affects the other latent variables. Testing is performed by looking at the value of the paths between each manifest and latent variable to determine their significance, as measured by the t-value of the path (obtained using the bootstrapping technique). The numbers in the outer and inner models

Table 2. Model fit results

Criteria	Saturated model	Estimated model
SRMR	0.058	0.059
d_ULS	4.399	4.651
d_G	3.133	3.221
Chi-Square	3670.390	3688.826
NFI	0.713	0.712

Source: Authors, data processed by SmartPLS.

represent each manifest and latent variable's level of significance (t-value). Stakeholder engagement is most significant (9.2), followed by adaptive culture (6.7) and digital transformation (4.7). Only one latent variable, the direct impact of knowledge transfer on organisational performance, has a value less than 1.96, so is not statistically significant.

The direct influence of the three independent variables on DT (moderating variable) ranges from 0.07 to 0.526, with SE having the greatest influence at 0.526, AC at 0.387 and KT at 0.07. The direct influence of the three independent variables on OP spans from 0.005 to 0.19, with SE having the greatest influence at 0.19, AC at 0.135 and KT at 0.005. The mediating effect of DT on the three independent variables on OP is 0.403. The moderating effect of WFA on the effects of DT and OP is 0.10.

Each variable, including the primary indicators, met the appropriateness criteria as determined by confirmatory factor analysis (CFA) and the goodness-of-fit test. Standardised root mean square residual (SRMR), the squared Euclidean distance (d_ULS), the geodesic distance (d_G), Chi-Square, and Normed Fit Index (NFI) were computed for each variable; the NFI is used to assess how well the proposed statistical model fits the empirical data. [Table 2](#) shows that the model is satisfactory and meets the goodness-of-fit criteria. When the SRMR is less than 0.08, particularly 0.059, the Geodesic Distance surpasses 0.9, and the NFI exceeds 0.7, the model goodness-of-fit test yields acceptable results. The notion of convergent validity asserts that a construct's manifest variables must be strongly connected.

Convergent validity with PLS software can be determined by the loading factor for each construct indicator; however, to assess convergent validity, both the loading factor value and the average variable extracted (AVE) must be greater than 0.5. All latent variables have AVE values greater than the specified value, with AC, SE, KT, DT, WFA, and OP at 0.57, 0.60, 0.65, 0.56, 0.73, and 0.68, respectively. The manifest variables met the criteria for convergent validity. The coefficient of determination (R^2) for exogenous variables versus endogenous variables was 0.842. Thus, the exogenous variables can reliably explain the factors that drive performance.

Table 3. Hypothesis test results

Hypothesis	Variable	t statistic	p value	Influence
H1	AC -> DT	6.705	0.001	+/significant
H2	AC -> OP	2.259	0.003	+/significant
H3	SE -> DT	9.205	0.017	+/significant
H4	SE -> OP	3.451	0.000	+/significant
H5	KT -> DT	2.049	0.000	+/significant
H6	KT -> OP	0.171	0.166	No effect
H7	WFA -> OP	5.103	0.000	+/significant
H8	WFA -> OP (moderation)	2.017	0.072	+/significant
H9	AC -> DT -> OP	3.845	0.000	+/significant
H10	SE -> DT -> OP	4.105	0.000	+/significant
H11	KT -> DT -> OP	2.033	0.043	+/significant

Source: Authors, data processed by SmartPLS.

4.2. Hypothesis test results

The hypothesis test results ([Table 3](#)) show that all the independent variables studied have a positive effect on the dependent variable, except for the KT variable (H6), which directly affects performance. Similarly, the digital transformation variable can fully mediate the independent variable's impact on performance (H9, H10, and H11). The WFA variable can help to moderate digital transformation and improve performance.

4.3. Confirmation of FGD results and strategy formulation

The hypothesis test results include presentation materials for FGD activities with customs echelon officials. The TOWS matrix ([Figure 3](#)) describes the FGD results and includes a map of strategic choices that are policy priorities. According to the IFE-EFE analysis, Customs' performance is in quadrant 1 (first), which includes both opportunities (O) and strengths (S).

The TOWS analysis results, which take the form of value-based strategies for improving organisational performance, can be used to develop cultural programs, productive collaboration, adaptive work patterns, and compatible digitalisation steps. [Table 4](#) shows the results of the QSPM matrix calculation using key factors from the IFE-EFE matrix, with the Total Attractiveness Score (TAS) for strategies *, **, and *** of 3.47, 3.60, and 3.12, respectively. Based on the results of the three strategies, Strategy ** is the most appropriate option given the organisation's current state. According to the QSPM analysis, the priority strategy is to create social capital for public service market expansion and to develop flexible, agile, efficient, cooperative, and inclusive service systems and organisations. The TOWS strategy formulation results show that alternative strategies fall into quadrant 1 (OS). This is consistent with the results of the quantitative analysis, which show that stakeholders have the greatest direct and indirect impact on performance.

	Internal	Strength (S)	Weaknesses (W)
	External	1. HR Competence 2. Number of HR 3. Cultural program 4. Infrastructure 5. Adaptive work patterns	1. Reward pattern 2. Conflict of interest 3. Risk Management 4. Legal awareness 5. HR exclusivity
	Opportunity (O) 1. Adaptive digital transformation 2. Dynamics of adaptive culture 3. Social capital (collaborative) 4. Talent pool and HR career development 5. Contribution to increasing competitiveness in the Indonesia making 4.0 strategy	OS 1. Strengthening adaptive culture and forming superior human resources, developing sustainable adaptive service applications, smart work patterns and infrastructure (S1, S2, S3 and O2)* 2. Development of adaptive, agile, efficient, collaborative and inclusive service systems and organisations, as well as opening up opportunities for the formation of social capital for access to public services for market expansion (O1, O2, O3 and S2)**	OW 1. Development of an adaptive digital-based service system by prioritising user-friendly applications and stakeholder focus (O1, W2 and W3) 2. Building sustainable productivity by developing fair and consistent reward patterns (W1, W2, and O2)
	Threat (T) 1. Decreased stakeholder satisfaction 2. Inefficiency 3. Performance targets are not achieved 4. Public trust 5. Decreasing Indonesia's competitiveness	TS 1. Increasing efficiency with service transparency, as well as consistency in law enforcement (T1, T2, S1, S2 and S2)*** 2. Increasing internal and external collaboration, as well as developing effective, adaptive and sustainable educational patterns (S2, S3, T1 and T3)	TW 1. Developing a fair and consistent reward pattern as well as fair, transparent and consistent law enforcement (W1, W2, T2 and T3) 2. De-bureaucracy, organisational delaying, intensity of communication patterns and transformation of compatible service systems for stakeholders (T1, T2, W2 and W3)

Figure 3. The Threats, Opportunities, Weaknesses, and Strengths (TOWS) matrix

Source: Authors, data processed and adapted from the FGD.

Table 4. Quantitative Strategic Planning Matrix analysis (QSPM) (results of the TOWS Matrix Strategy Formulation, IFE-EFE and FGD).

Key factor				Weight	Alternative strategy					
					Strategy *		Strategy **		Strategy ***	
					AS	TAS	AS	TAS	AS	TAS
Strength	1	HR competency		0.13	4	0.52	4	0.52	4	0.52
	2	Culture program		0.10	4	0.40	4	0.40	3	0.30
	3	Infrastructure		0.08	3	0.24	3	0.24	4	0.32
Weakness	1	Reward scheme		0.07	3	0.21	4	0.28	4	0.28
	2	Conflict of interest		0.07	3	0.21	3	0.21	3	0.21
	3	Risk management		0.09	3	0.27	3	0.27	3	0.27
Opportunity	1	Adaptive digital transformation		0.07	3	0.21	4	0.28	3	0.21
	2	Dynamics of adaptive culture		0.07	3	0.21	4	0.28	3	0.21
	3	Collaborative		0.08	3	0.24	4	0.32	3	0.24
Threat	1	Stakeholder satisfaction		0.08	4	0.32	3	0.24	3	0.24
	2	Inefficiency		0.08	4	0.32	4	0.32	2	0.16
	3	Reduction of target achievement		0.08	4	0.32	3	0.24	2	0.16
TAS score						3.47		3.60		3.12

Notes: AS = Attractiveness Score; TAS = Total Attractiveness Score (= weight x AS).

Source: Authors.

This research was concluded by reconciling or finding common threads between the results of quantitative and qualitative research, after it was discovered that the results of quantitative data processing met the criteria of validity and reliability, hypothesis testing, the correlation coefficient of each

indicator, and the coefficient of determination of the independent variables on the dependent variable. In this way, qualitative research results confirm and strengthen each indicator, allowing for the formulation of a strategy based on this approach.

5. Discussion

The quantitative data processed in the initial stage serves as the foundation for addressing the research problem formulation questions. Each hypothesis can be systematically elucidated as follows: the examination of the role of adaptive culture in influencing the digital transformation process, as evidenced by hypothesis testing, establishes that adaptive culture significantly fosters the enhancement of customs' digital transformation. This finding aligns with prior research by Kane and others (2015), affirming that culture can either propel or impede digital transformation. Establishing a culture adaptable to change lays the groundwork for smoother adoption of new technologies and business processes. Tuukkanen and others (2022) further underscore the pivotal role of cultural values in supporting or hindering an organisation's digital transformation journey, emphasising culture's influence on technology adoption. Dash and others (2021) concluded that a company's organisational culture significantly impacts digital innovation.

Stakeholder engagement emerges as a pivotal factor directly influencing digital transformation, displaying a stronger correlation with other variables. Simultaneous stakeholder involvement in the digital transformation process accelerates and ensures the suitability of required transformations in public services. This finding aligns with research by Robu and Lazar (2021), emphasising the urgency of increasing stakeholder participation in digital transformation initiatives for collaborative and sustainable foundations. Muluka and others (2020) further substantiate the positive impact of involving stakeholders in driving digital change. The positive correlation between knowledge transfer and digital transformation, while statistically smaller, suggests that effective knowledge transfer reinforces organisational digital change. This aligns with Erceg and Zoranović's (2022) research, highlighting knowledge transfer as a crucial component initiating the digital transformation process. Adaptive culture directly and positively influences organisational performance, validating the hypothesis testing results. This affirms that adaptive culture significantly enhances Customs' performance, consistent with research by Okwata and others (2022), Tuukkanen and others (2022), Taylor (2014), and Testa and Sipe (2013), highlighting the direct or indirect impact of an adaptive organisational culture on performance. Stakeholder engagement also directly affects organisational performance with a stronger correlation among variables, emphasising that stakeholder involvement contributes to organisational performance. This result echoes Kenyoru's (2015) research, emphasising the significant contribution of stakeholder strategies to organisational performance. The positive correlation between knowledge transfer and organisational

performance suggests that effective knowledge transfer influences organisational performance. Rhodes and others (2008) and Zamfir (2020) confirm that knowledge transfer positively affects organisational performance.

In addition to influencing organisational performance, digital transformation mediates the three independent variables: adaptive culture, stakeholder participation, and knowledge transfer. The positive correlation found between digital transformation and organisational performance demonstrates that digital transformation has a positive impact on performance. This is consistent with previous research by Guo and Xu (2021), Zhang and others (2021), and Teng and others (2022), who examined how digital transformation can improve process-based performance, organisational performance, and business performance. Adaptive work patterns serve as a moderator, positively impacting organisational performance. This variable improves organisational performance, as demonstrated by Mungania and others (2016), who emphasise the importance of adaptive work patterns on the performance of Kenyan banking organisations. According to Austin-Egole and others (2020), developing adaptive work patterns improves employee wellbeing and organisational performance. [Table 4](#) demonstrates the growing importance of adaptive culture, stakeholder participation, and knowledge transfer in driving performance through digital transformation. Adaptive work patterns facilitate digital transformation and improve performance. In essence, incorporating cultural values, stakeholder participation, and knowledge transfer into the digital transformation process is critical, recognising the importance of digital transformation while adapting to technological advancements and meeting stakeholder demands. The results of quantitative research are supported by qualitative research findings, specifically the similarity in the placement of cultural values, stakeholders, knowledge transfer, digital transformation, and work patterns in achieving goals or performance. Values-based strategies that include digital transformation, stakeholder participation, and cultural components can help organisations improve performance. The Strategic Plan Document at the DGCE and lower vertical offices, such as Soekarno Hatta Customs and Excise, and Bogor Customs, confirmed the research findings. Furthermore, because of and in response to these conclusions, recommendations are made, which institutional leaders can implement and consider when determining the organisation's operational policies. The stages of this research are alternatives for developing a strategy to improve performance based on adaptive cultural values, stakeholder involvement, and knowledge transfer, which will be implemented through digital transformation and flexible work alternatives.

This study confirms the common thread between the quantitative and qualitative results and can serve as a reference for policymakers (in this case, the Minister of Finance) to require all employees at various levels to incorporate cultural values into their key performance indicators for

accountability at the end of the assessment period, specifically the values of integrity, professionalism, collaboration, inclusiveness, stakeholder focus, caring, and creativity. Stakeholders should be encouraged to use the Indonesian National Logistic Ecosystem as an integrated platform to make the supply chain mechanism faster and more efficient; develop social capital as a means of disseminating information among the crowd; and aid in the expansion of export-oriented services while strengthening organisational and employee capacity. Learning from previous experience, when Samsung's Android technology, a product innovation, was debuted, it outperformed competitors such as Nokia and BlackBerry by offering features targeted to public needs. Fiscal authorities, on the other hand, face new issues in terms of taxing rules for digital items, which might lead to problems if not managed and anticipated promptly. As a result, digitalisation and adaptive organisational changes must continue to be adopted to fulfil public needs, especially the public service in the customs environment.

6. Conclusion and recommendation

An adaptive organisational culture can influence and strengthen the digital transformation process within Indonesian Customs, which will improve organisational performance and help achieve its vision. This means that if Indonesian Customs can lay a strong foundation by building a culture that is more adaptive to change, then the adoption of new technologies and business processes can run more smoothly. As the statistical correlation between DT and AC is 0.387, the role of AC is moderate. To create national benefits, such as forming social capital as part of an efficient supply chain network, stakeholders are the right parties to collaborate more productively and establish a situation of mutual trust. They do this by taking proactive measures, controlling the service process (feedback), and being critical of the implementation of statutory provisions. Stakeholders are the measure of a service's or organisation's success. This role is extremely important, as evidenced by the statistical correlation of 0.526 between SE and DT, and the findings of Robu and Lazar (2021), which highlight the importance of stakeholder initiation and collaboration. Knowledge transfer has a weak positive effect on digital transformation (with a statistical correlation of 0.07), but not as much as culture and stakeholders. The DGCE has maintained a tradition of knowledge sharing and adapting to technological advancements, such as the implementation of the Ministry of Finance Learning Centre, which employs an application system for digital training and knowledge sharing. These values must be developed in conjunction with an adaptive culture, that is, a culture that prioritises the needs of stakeholders, particularly through indicators such as stakeholder focus, employee engagement, collaboration, innovation, and self-development. This collaboration demonstrates concern for stakeholders and promotes innovation and self-development. In other words, internal and external collaboration can be directed towards productive, transparent outcomes that increase stakeholder satisfaction. Digital transformation and

remote work have proven to be effective at mediating and moderating cultural values and stakeholder roles, so they should be developed in accordance with current needs to improve performance.

The most effective customs strategy is ultimately the development of adaptive, agile, efficient, collaborative and inclusive service systems and organisations, as well as the creation of opportunities for beneficial cooperation between Indonesian Customs, the business environment, and the larger community to expand access to public services, including facilitating global trade. Organisational change is unavoidable, and digital transformation accompanies it. Implementing the findings of this study in daily public services, as elaborated in the final paragraph of the introduction and discussion, will encourage organisations to develop adaptability and authentic engagement, resulting in more resilient, agile, and high-performing institutions with an impact on employees, communities, and the larger market. Organisations can orchestrate change, stimulate innovation, and preserve resilience in the face of a continually shifting environment by putting adaptive cultural principles into practice. This ultimately supports sustained success. At the same time, proactive stakeholder engagement promotes trust, cooperation, and a long-term dedication to common objectives in addition to bringing organisational aims into line with stakeholder expectations.

Acknowledgments

Special thanks are extended to Prof Dr Eko Sri Margianti, Rector of Gunadarma University, and to Dr Zulkifli, Prof Dr Bambang Purwoko, and Prof Dr Arissetyanto Nugroho, Pancasila University, for helpful discussions.

Submitted: July 31, 2023 AEDT. Accepted: January 31, 2024 AEDT. Published: September 25, 2025 AEDT.



This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CCBY-4.0). View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.

References

- Al Hakim, L., & Hassan, S. (2013). Knowledge management strategies, innovation, and organisational performance: An empirical study of the Iraqi MTS. *Journal of Advances in Management Research*, 10(1), 58–71. <https://doi.org/10.1108/09727981311327767>
- AlMujaini, H., Hilmi, M., Abudaqa, A., & Alzahmi, R. (2021). Corporate foresight organizational learning and performance: The moderating role of digital transformation and mediating role of innovativeness in SMEs. *International Journal of Data and Network Science*, 5(4), 703–712. <https://doi.org/10.5267/j.ijdns.2021.7.011>
- Alvesson, M. (2002). *Understanding organizational culture*. SAGE Publications Ltd. <https://doi.org/10.4135/9781446280072>
- Argote, L., & Ingram, P. (2000). Knowledge transfer: A basis for competitive advantage in firms. *Organizational Behavior and Human Decision Processes*, 82(1), 150–169. <https://doi.org/10.1006/obhd.2000.2893>
- Austin-Egole, I. S., Iheriohanma, E. B., & Nwokorie, C. (2020). Flexible working arrangements and organizational performance: An overview. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(5), 50–59. <https://www.iosrjournals.org/iosr-jhss/papers/Vol.%2025%20Issue5/Series-6/D2505065059.pdf>
- Blocher, E. J., Stout, D. E., & Cokins, G. (2005). *Cost management: A strategic emphasis* (5th ed.). McGraw-Hill Companies, Inc.
- Bondar, S., Hsu, J. C., Pfouga, A., & Stjepandić, J. (2017). Agile digital transformation of System-of-Systems architecture models using Zachman framework. *Journal of Industrial Information Integration*, 7(2017), 33–43. <https://doi.org/10.1016/j.jii.2017.03.001>
- Cameron, K. S., & Quinn, R. E. (2006). *Diagnosing and changing organizational culture: Based on the competing values framework* (3rd ed.). Jossey-Bass. https://books.google.co.id/books/about/Diagnosing_and_Changing_Organizational_C.html?id=D6gWTf02RloC&redir_esc=y
- Cavusgil, S. T., Calantone, R. J., & Zhao, Y. (2003). Tacit knowledge transfer and firm innovation capability. *Journal of Business & Industrial Marketing*, 18(1), 6–21. <https://doi.org/10.1108/08858620310458615>
- Chebotareva, G. (2021). Digital transformation of the energy sector: A case of Russia. *E3S Web of Conferences*, 250, 01001. <https://doi.org/10.1051/e3sconf/202125001001>
- Cho, E. (2020). Examining boundaries to understand the impact of COVID-19 on vocational behaviors. *Journal of Vocational Behavior*, 119(103437). <https://doi.org/10.1016/j.jvb.2020.103437>
- Chouaibi, S., Festa, G., Quaglia, R., & Rossi, M. (2022). The risky impact of digital transformation on organizational performance – evidence from Tunisia. *Technological Forecasting and Social Change*, 178(121571). <https://doi.org/10.1016/j.techfore.2022.121571>
- Constanza, D. P., Blacksmith, N., Coats, M. R., Severt, J. B., & DeCostanza, A. H. (2016). The effect of adaptive organizational culture on long-term survival. *Journal of Business and Psychology*, 31(3), 361–381. <https://doi.org/10.1007/s10869-015-9420-y>
- Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874–900. <https://doi.org/10.1177/0149206305279602>
- Da Costa Filho, J. R., Penha, R., & da Silva, L. F. (2021). Stakeholders and the Impact that Exercise on Digital Transformation Projects. *RISUS-Revista de Inovação e Sustentabilidade*, 12(03), 98–108. <https://doi.org/10.23925/2179-3565.2021v12i3p98-108>

- Daft, R. L. (2010). *Organization Theory and Design* (10th ed.). South-Western Cengage Learning. <https://nibmehub.com/opac-service/pdf/read/Organization%20Theory%20and%20Design-%20Daft-%20R.L.-%2010ed.pdf>
- Dash, G., Kiefer, K., & Paul, J. (2021). Marketing-to-millennials: Marketing 4.0, customer satisfaction and purchase intention. *Journal of Business Research*, 122, 608–620. <https://doi.org/10.1016/j.jbusres.2020.10.016>
- David, F. R. (2000). *Strategic management: concepts and cases* (12th ed.). Prentice-Hall of India Pvt. Ltd. https://www.academia.edu/40024921/MANAGEMENT_STRATEGIC_BY_FRED_R_DAVID
- Davidescu, A. A., Apostu, S. A., Paul, A., & Casuneanu, I. (2020). Work flexibility, job satisfaction, and job performance among Romanian employees—Implications for sustainable human resource management. *Sustainability*, 12(15), 6086. <https://doi.org/10.3390/su12156086>
- De Wulf, L., & Sokol, J. B. (2005). Customs Modernization Handbook. In *Trade and Development*. World Bank. <https://doi.org/10.1596/0-8213-5751-4>
- Denison, D. R., Janovics, J., Young, J., & Cho, H. J. (2006). *Diagnosing organizational cultures: Validating a model and method* [Documento de trabajo]. Denison Consulting Group. https://denisonconsulting.com/wp-content/uploads/2019/05/diagnosing_organizational_cultures_validating_a_mo.pdf
- Duan, Y., Nie, W., & Coakes, E. (2010). Identifying key factors affecting transnational knowledge transfer. *Information & Management*, 47(7–8), 356–363. <https://doi.org/10.1016/j.im.2010.08.003>
- El Leithy, W. E. (2017). Organizational culture and organizational performance. *International Journal of Economic and Management Science*, 6, 442. <https://doi.org/10.4172/2162-6359.1000442>
- Erceg, V., & Zoranović, T. (2022). Knowledge Management and Digital Business Transformation. *Strategic Management*, 27(2), 57–63. <https://doi.org/10.5937/StraMan2200007E>
- Erola, J., & Kilpi-Jakonen, E. (2017). Compensation and other forms of accumulation in intergenerational social inequality. *Social Inequality across the Generations*, 3–24. <https://doi.org/10.4337/9781786432568.00006>
- Ferdinand, A. (2014). *Metode penelitian manajemen: Pedoman penelitian untuk penulisan skripsi tesis dan disertasi ilmu manajemen [Management research methods: Research guidelines for writing management science theses and dissertations]* (2nd ed.). Badan Penerbit Universitas Diponegoro Press.
- Fitzgerald, M., Kruschwitz, N., Bonnet, D., & Welch, M. (2014). Embracing digital technology: A new strategic imperative. *MIT Sloan Management Review*, 55(2), 1. <https://emergenceweb.com/blog/wp-content/uploads/2013/10/embracing-digital-technology.pdf>
- Garrett, L., Spreitzer, G. M., & Bacevice, P. A. (2017). Co-constructing a Sense of Community at Work: The Emergence of Community in Coworking Spaces. *Academy of Management Annual Meeting Proceedings*, 2014(1), 14004. <https://doi.org/10.1177/0170840616685354>
- Gay, L. R., & Diehl, P. L. (1992). *Research Methods for Business and Management*. MacMillan Publishing Company.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2009). *Educational research: Competencies for analysis and applications*. Merrill/Pearson. <http://61.2.46.60:8088/jspui/bitstream/123456789/275/1/E%20Book%20Educational%20Research%20L%20R%20Gay%20Pearson%202012.pdf>
- Grainger, A. (2016). Customs management in multinational companies. *World Customs Journal*, 10(2), 18. <https://doi.org/10.55596/001c.115414>

- Guo, L., & Xu, L. (2021). The effects of digital transformation on firm performance: evidence from China's manufacturing sector. *Sustainability*, 13(22), 12844. <https://doi.org/10.3390/su132212844>
- Gupanova, Y. E. (2018). The Analysis of customs services practice in the conditions of the Eurasian Economic Union: Problems and directions of improvement. *Journal of Advanced Research in Law and Economics*, 9(4), 1259. [https://doi.org/10.14505/jarle.v9.4\(34\).11](https://doi.org/10.14505/jarle.v9.4(34).11)
- Gupta, A. K., & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4), 473–496. [https://doi.org/10.1002/\(SICI\)1097-0266\(200004\)21:4%3C473::AID-SMJ84%3E3.0.CO;2-I](https://doi.org/10.1002/(SICI)1097-0266(200004)21:4%3C473::AID-SMJ84%3E3.0.CO;2-I)
- Gwardzińska, E. (2012). The Standardisation of Customs Services in the European Union. *World Customs Journal*, 6(1), 93–100. <https://doi.org/10.55596/001c.92829>
- Hair, J., Sarstedt, M., Hopkins, L., & Kuppelwieser, G. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization*, 28(1), 52–61. <https://doi.org/10.1016/j.infoandorg.2018.02.004>
- Holzner, M., & Peci, F. (2012). Measuring the effects of trade liberalization in Kosovo. *WIIW Working Paper*. <http://hdl.handle.net/10419/203950>
- Hsieh, J. (2009). Strategic stakeholder orientations and performance consequences—A case of private nonprofit performing arts in the US. *International Journal of Nonprofit and Voluntary Sector Marketing*, 15(1), 13–27. <https://doi.org/10.1002/nvsm.364>
- Hubbard, G. (2009). Measuring Organizational Performance: Beyond the Triple Bottom Line. *Business Strategy and Environment*, 19, 177–191. <https://doi.org/10.1002/bse.564>
- Jiang, X., & Li, Y. (2009). An empirical investigation of knowledge management and innovative performance: The case of alliances. *Research Policy*, 38(2), 358–368. <https://doi.org/10.1016/j.respol.2008.11.002>
- Johnson, B., & Christensen, L. (2004). *Educational Research: Quantitative, Qualitative, and Mixed Approaches* (2nd ed.). Pearson Education Inc. <https://doi.org/10.3102/0013189X033007014>
- Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). *Strategy, not technology, drives digital transformation*. MIT Sloan Management Review and Deloitte University Press. https://www2.deloitte.com/content/dam/insights/us/articles/digital-transformation-strategy-digitally-mature/15-MIT-DD-Strategy_small.pdf
- Kelliher, C., & Anderson, D. (2009). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, 63(1), 83–106. <https://doi.org/10.1177/0018726709349199>
- Kenyoru, N. D. (2015). Stakeholder Engagement and Organizational Performance: A Case of Kenya Power and Lighting Company, Eldoret Branch, Uasin-Gishu County–Kenya. *Archives of Business Research*, 3(2). <https://doi.org/10.14738/abr.32.785>
- Kombo, F. (2015). Factors for customer satisfaction and customer dissatisfaction in commercial banks. *Mediterranean Journal of Social Sciences*, 6(452), 584–589. <https://doi.org/10.5901/mjss.2015.v6n4s2p584>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. <https://doi.org/10.1177/001316447003000308>

- Lazarenko, Y. (2018). Knowledge-sharing organizations in digital change. In *Proceedings of the 4th International Conference Strategic Imperatives of Modern Management*. <https://ir.kneu.edu.ua/server/api/core/bitstreams/c4a03bc8-4370-4fb0-acc4-652b0f5f0ec7/content>
- Lebas, M., & Euske, K. (2006). *Business Performance Measurement: Theory and practice*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511753695.006>
- Lehoux, P., Poland, B., & Daudelin, G. (2006). Focus group research and the patient's view. *Social Science and Medicine*, 63(8), 2091–2104. <https://doi.org/10.1016/j.socscimed.2006.05.016>
- Liao, S. H., Hu, D. C., Chen, C. C., & Lin, Y. L. (2015). Comparison of competing models and multi-group analysis of organizational culture, knowledge transfer, and innovation capability: an empirical study of the Taiwan semiconductor industry. *Knowledge Management Research & Practice*, 13(3), 248–260. <https://doi.org/10.1057/kmrp.2013.46>
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705–717. <https://doi.org/10.1037/0003-066X.57.9.705>
- Locke, E. A., & Latham, G. P. (Eds.). (2013). *New developments in goal setting and task performance*. Routledge/Taylor & Francis Group. <https://doi.org/10.4324/9780203082744>
- Lumanaj, J. (2015). Albanian Customs Service: Quality of Services and Performance of Albanian Customs Administration. *International Journal of Economics, Commerce and Management United Kingdom*, 3(10), 548–558. <https://doi.org/10.14710/jbs.27.2.110-122>
- Mahmud, M. F., Purwoko, B., Zulkifli, & Sutawijaya, A. H. (2022). How to Improve Organizational Performance with Digital Transformation as an Intervening Variable (Case Study in Indonesian Customs). *Hong Kong Journal of Social Science*, 60, 371–381. <https://doi.org/10.55463/hkjs.issn.1021-3619.60.37>
- Mahmud, M. F., & Tesniwati, R. (2023). Peningkatan Kinerja Melalui Transformasi Digital Layanan Publik Kepabeanan yang Diperkuat dengan Budaya dan Pola Kerja Adaptif [Performance Improvement Through Digital Transformation of Customs Public Services Strengthened by Adaptive Work Culture and Patterns]. *Jurnal Ilmiah Ekonomi Bisnis*, 28(2), 161–182. <https://doi.org/10.35760/eb.2023.v28i2.7004>
- Marsick, V. J., & Watkins, K. E. (1999). *Facilitating learning organizations: Making learning count*. Gower Publishing, Ltd. <https://books.google.com.gi/books?id=n2OEXGmEkNMC&printsec=frontcover#v=onepage&q&f=false>
- McLinden, G., & Durrani, A. Z. (2013). Corruption in Customs. *World Customs Journal*, 7(2), 3–10. <https://doi.org/10.55596/001c.92957>
- McShane, S., & Von Glinow, M. A. (2008). *Organizational behavior*. McGraw-Hill.
- Mohasab, R., Mahamad, O., & Ramayah, T. (2010). Service quality, customer satisfaction and loyalty: A test of mediation. *International Journal of Business Research*, 3(4), 72–80. <https://doi.org/10.5539/ibr.v3n4p72>
- Muluka, K. O., Mukanzi, C. M., & Paul, S. N. (2020). Influence of project communication management on success of digital literacy Programme in Western Kenya. *International Journal of Project Management*, 6(2), 1–10. <https://ijsstr.com/wp-content/uploads/2023/07/1.April-2021.pdf>
- Mungania, A. K., Waiganjo, E. W., & Kihoro, J. M. (2016). Influence of wellness programs on organizational performance in the banking industry in Kenya. *International Journal of Academic Research in Business and Social Sciences*, 6(7), 159–172. <https://doi.org/10.6007/IJARBS/v6-i7/2238>

- Nickols, F. (2016). *Change management 101: a primer*. Distance Consulting. <https://www.nickols.us/change.pdf>
- Okazaki, Y. (2017). Implications of big data for customs-How it can support risk management capabilities. *WCO Research Paper*, 39.
- Okwata, P. A., Wasike, S., & Kifleyesus, A. (2022). Effect of Organizational Culture Change on Organizational Performance of Kenya Wildlife Service Nairobi National Park. *Administrative Sciences*, 12, 139. <https://doi.org/10.3390/admsci12040139>
- Osei, M. B., Papadopoulos, T., Acquaye, A., & Stamati, T. (2023). Improving Sustainable Supply Chain Performance through Organisational Culture: A Competing Values Framework approach. *Journal of Purchasing and Supply Management*, 29(2), 100821. <https://doi.org/10.1016/j.pursup.2023.100821>
- Prell, C., Hubacek, K., & Reed, M. (2016). Stakeholder analysis and social network analysis in natural resource management. In *Handbook of applied system science* (Vol. 22, Issue 6, pp. 501–518). Routledge. <https://doi.org/10.1080/08941920802199202>
- Racela, O. C. (2014). Customer Orientation, Innovation Competencies, and Firm Performance: A Proposed Conceptual Model. *Procedia - Social and Behavioral Sciences*, 148(2014), 16–23. <https://doi.org/10.1108/APJML-03-2019-0143>
- Rhodes, J., Hung, R., Lok, P., Lien, B. Y. H., & Wu, C. M. (2008). Factors influencing organizational knowledge transfer: implication for corporate performance. *Journal of Knowledge Management*, 12(3), 84–100. <https://doi.org/10.1108/13673270810875886>
- Robu, D., & Lazar, J. B. (2021). Digital transformation designed to succeed: Fit the change into the business strategy and people. *Electronic Journal of Knowledge Management*, 19(2), 133–149. <https://doi.org/10.34190/ejkm.19.2.2411>
- Rotsios, K. P., Sklavounos, N. S., & Hajidimitriou, Y. A. (2014). Trust, knowledge transfer and control in IJVs: The case of four Greek firms. *Procedia Economics and Finance*, 9(2014), 231–241. [https://doi.org/10.1016/S2212-5671\(14\)00024-0](https://doi.org/10.1016/S2212-5671(14)00024-0)
- Sain, S., & Wilde, S. (2014). *Customer Knowledge Management: Leveraging Soft Skills to Improve Customer Focus*. Springer Cham. <https://doi.org/10.1007/978-3-319-05059-1>
- Shela, V., Ramayah, T., Aravindan, K. L., Ahmad, N. H., & Alzahrani, A. I. (2023). Run! this road has no ending! A systematic review of PLS-SEM application in strategic management research among developing nations. *Heliyon*, 9(12), e22476. <https://doi.org/10.1016/j.heliyon.2023.e22476>
- Shiryan, S., Shee, H., & Stewart, D. (2012). Employee training effectiveness in Saudi Arabian SME performance. *International Journal of Business and Social Science*, 3(14), 46–52. <https://vuir.vu.edu.au/25799/1/Salem%20Shiryan%20N%20Alenaizan.pdf>
- Sorensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly*, 47(1), 70–91. <https://doi.org/10.2307/3094891>
- Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication*, 26(4), 399–441. <https://doi.org/10.1177/1050651912444070>
- Sun, R., & Henderson, A. C. (2016). Transformational Leadership and Organizational Processes: Influencing Public Performance. *Public Administration Review*, 77, 554–565. <https://doi.org/10.1111/puar.12654>
- Taylor, J. (2014). Organizational culture and the paradox of performance management. *Public Performance & Management Review*, 38(1), 7–22. <https://doi.org/10.2753/PMR1530-9576380101>

- Teng, X., Wu, Z., & Yang, F. (2022). Impact of the Digital Transformation of Small- and Medium-Sized Listed Companies on Performance: Based on a Cost-Benefit Analysis Framework. *Journal of Mathematics*, 2022(14). <https://doi.org/10.1155/2022/1504499>
- Testa, M. R., & Sipe, L. J. (2013). The organisational culture audit: Countering cultural ambiguity in the service context. *Open Journal of Leadership*, 2(2), 36–44. <https://doi.org/10.4236/ojl.2013.22005>
- Tuukkanen, V., Wolgsjö, E., & Rusu, L. (2022). Cultural values in digital transformation in a Small Company. *Procedia Computer Science*, 196(2022), 3–12. <https://doi.org/10.1016/j.procs.2021.11.066>
- Wibowo. (2013). *Manajemen Kinerja [Performance Management]* (5th ed.). RajaGrafindo Persada.
- Yilmaz, C., & Ergun, E. (2008). Organizational culture and firm effectiveness: An examination of relative effects of culture traits and the balanced culture. *Journal of World Business*, 43(3), 291–293. <https://doi.org/10.1016/j.jwb.2008.03.019>
- Yount, W. R. (2006). *Research Design and Statistical Analysis* (4th ed.). Southwestern Baptist Theological Seminary.
- Yu, R., Burke, M., & Raad, N. (2019). Exploring impact of future flexible working model evolution on urban environment, economy and planning. *Journal of Urban Management*, 8(3), 447–457. <https://doi.org/10.1016/j.jum.2019>
- Zamfir, F. E. (2020). The impact of knowledge transfer on the organizational performance. *Proceedings of the International Conference on Business Excellence*, 14(1), 577–588. <https://doi.org/10.2478/picbe-2020-0054>
- Zhang, J., Long, J., & von Schaewen, A. M. E. (2021). How does digital transformation improve organizational resilience? *Sustainability*, 13(20), 11487. <https://doi.org/10.3390/su132011487>
- Zhang, Y., Ma, X., Pang, J., Xing, H., & Wang, J. (2023). The Impact of Digital Transformation of Manufacturing on Corporate Performance -- the Mediating Effect of Business Model Innovation and the Moderating Effect of Innovation Capability. *Research in International Business and Finance*, 64, 101890. <https://doi.org/10.1016/j.ribaf.2023.101890>
- Zheng, W., Yang, B., & McLean, G. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business Research*, 63, 763–771. <https://doi.org/10.1016/j.jbusres.2009.06.005>