

THE LINKAGE OF ORGANIZATIONAL CULTURE WITH ORGANIZATIONAL COMMITMENT: PROSPECTS FOR EMBEDDING A SUSTAINABLE DEVELOPMENT STRATEGY AT THE CORPORATE LEVEL

Ivana Jolović¹, Nevena Jolović²

Abstract

In the modern corporate landscape, organizations are becoming increasingly cognizant of the importance of creating a harmonious fusion of organizational culture, commitment, and sustainability. The multifaceted organizational strategy needs to ensure cultivating effective corporate culture, and essential employee commitment improvement, while concurrently facilitating the integration of environmental and social responsibility principles into the organizational overarching strategic agenda and daily operational practices. Generating this synergic interplay between organizational culture, organizational commitment, and sustainable development strategy is indispensable for organizations that aspire to effectuate a constructive influence on the environment, society, and their own enduring economic prosperity. The aim of this research is to examine how organizational culture, as a leading conductor of corporate changes, relates to employee commitment and concurrently to sustainable development strategy embeddence. The research combined the theoretical approach - literature content analysis and thematic analysis method, with the empirical approach of knowledge acquisition - the survey method. Primary statistical data on 127 employed workers in the Serbian economy were collected during the initial months of 2023 using an electronic survey questionnaire as a data collection tool. The collected data were meticulously processed using cutting-edge econometric systems, including SmartPLS 4.0 and IBM SPSS Statistics 26.0, along with suitable software procedures (PLS-SEM) to ensure the utmost calculation accuracy. Starting with the premise that every organization is a complex, interconnected system, the research gave enough

¹ Faculty of Technical Sciences, University of Novi Sad, ivanajolovic@uns.ac.rs

² Institute of Economic Sciences in Belgrade, nevena.jolovic@ien.bg.ac.rs

evidence for the main postulate adoption - the relationship between organizational culture and employee commitment is positive, direct, and pivotal in the context of a sustainable development strategy embeddence at the corporate level ($\beta=0.572$, $t=10.179$, $p=0.000$; $p<0.05$ and $p<0.01$).

Key words: *organizational culture, organizational commitment, sustainable development strategy, PLS-SEM, disjoint two-stage approach.*

Introduction

In essence, the interconnection between organizational culture, commitment, and sustainability is perceived as a complex and intricate one. As Baumgartner (2009) posits, the 21st century organizations have to prioritize development toward sustainability. This assertion highlights the need for organizations to adopt a holistic approach to sustainable development, recognizing the interplay of its environmental, social, and economic factors. By prioritizing sustainability, organizations can make a meaningful contribution towards a more environmentally responsible future while also enhancing their corporate reputation, attracting customers and investors, and augmenting financial and innovational performances (Arendt & Brettel, 2010; Balthazard et al., 2006; Nikpour, 2017; Rashid et al., 2003). Organizational culture presents the potential bearer of this process since through culture's collective values, norms, and behaviors, sustainability goals can be promoted. This "corporate ethos" also exerts a significant influence on employees, particularly in terms of their perception of the work environment, their sense of affiliation with the organization, and their emotional investment in it. While a negative or discordant culture can erode commitment and lead to a high turnover rate, a positive and nurturing organizational culture is more likely to foster a deep-seated feeling of loyalty and commitment among employees. This correlation has been extensively researched (Aranki et al., 2019; Choi, 2011; Lincoln & Kalleberg, 1990; Nikpour, 2017; Rashid et al., 2003; Sheridan, 1992) and is of paramount importance in comprehending and managing employee's engagement, retention, and overall behavior within organizations.

The main premise of this research is that organizations should stress the importance of aligning organizational culture and personnel's commitment in order to ensure that sustainability becomes an integral part of the organization's identity, strategic blueprint, and operational framework; ultimately contributing to the organization's enduring prosperity and capacity to tackle exigent global challenges. The motivation for conducting research entails the desire to gather valuable data with the aim of comprehending the interdependent connection between, primarily, organizational culture and employee commitment, and subsequently, the current organizational "vogue" - corporate sustainability. Hence, the subject of the research pertains to an extensive analysis of relations between organizational culture, organizational commitment, and sustainable

development strategy. The main objective of the research is to determine the impact organizational culture has in the process of forming a strong commitment (of an average employee) to the company and its goals, along with inquiring whether this relationship hides the possibility or potential of promoting sustainability, previously labeled as an integral component of the corporate culture goals. Precisely, the aim of this research is to examine, analyze, and document how organizational culture, as a conductor of corporate changes, relates to employee commitment, and concurrently to sustainable development strategy embeddence. Research's starting point is an empirical exploration of the direct links between the variables of organizational culture and commitment, with more than ample space left for theoretical examination of the sustainable development strategy embeddence possibilities at the corporate level.

Theoretical background of the research

To ensure their longevity, prosperity, and sustainability, modern organizations must prioritize their ability to adapt and evolve. Crucial in driving corporate transformations and ensuring stated targets is the cultivation of a dynamic and resilient organizational culture. However, practice showed that many such efforts, even with an appropriate culture, fail due to a lack of employee engagement and commitment, as observed by Olafsen and coauthors (2021), Mathew & Ogbonna (2009), O'Reilly (1989), and others. Therefore, these three phenomena effects must be impeccably synchronized in order to achieve prescribed goals.

Sustainability integration is a fundamental concept that emphasizes the need for sustainability to be incorporated into the structure and operations of an organization. This integration should be more than a surface-level addition - it should be a fundamental component of the organization's strategic plan, decision-making process, and day-to-day operations. This integration aims to ensure sustainability becomes an integral part of the organization's operations, not only in terms of its products and services but also in terms of its relationships with stakeholders and its environmental and social impact. Potential pathways for sustainability integration at the corporate level are through basic organizational variables such as organizational culture, organizational structure and/or formal management tools (Banerjee, 2011; Baumgartner & Rauter, 2017; Dessein et al., 2015; Linnenluecke & Griffiths, 2010).

The organizational culture of a company is the embodiment of its collective values, norms, and behaviors, which imbue it with a distinctive character and working environment. Culture is the very essence that shapes the interactions between employees, influences the decision-making process, and reflects the company's core values and mission (Balthazard et al., 2006; Chatman & O'Reilly, 2016).

The organizational commitment emphasizes the need for a dedicated and passionate workforce that nurtures long-term loyalty to the organization and its corporate culture

(especially when it comes to sustainability pursuit). Employees who are committed to the culture that promotes the sustainability goals of the organization are more likely to actively participate in sustainability initiatives, proactively seek innovative solutions to sustainability challenges, and provide support for long-term sustainability efforts (Choi, 2011; El-Sayed, 2021; Aranki et al., 2019; Collier & Esteban, 2007; Leonavičienė et al., 2022; Lincoln & Kalleberg, 1990; Lok & Crawford, 1999). Their emotional attachment to these goals can serve as the ultimate catalyst for positive corporate changes (Herscovitch & Meyer, 2002).

The main research relation - an interplay between organizational culture and organizational commitment, is elucidated by two prominent theories. The first is the Person-Organization fit theory, which posits that individuals are more likely to be committed to an organization when there is a harmonious alignment between their personal values and the values that are embedded in the organizational culture, leading to a greater sense of trust and obligation. Employees who feel that their personal values are in sync with the culture are more likely to remain with the organization and exhibit higher levels of commitment. The second theory (Social exchange theory), on the other hand, suggests that individuals develop a deep-seated commitment to their organizations when they perceive a sense of reciprocity. Precisely, when employees feel that their values are valued and supported by the organization, they are more inclined to reciprocate with commitment. Conclusion - a positive and supportive culture can foster trust and a sense of obligation among employees, leading to higher levels of commitment (O'Reilly et al., 1991; Vakola, 2014; Ortega-Parra & Sastre-Castillo, 2013; Rashid et al., 2003). In essence, the relationship between organizational culture and organizational commitment is a delicate dance, one that requires a careful balance of values, trust, and reciprocity.

A comprehensive review of these theories and literature led to the development of the first hypothesis in the research (H_{01}): A statistically significant positive correlation exists between organizational culture and organizational commitment.

The second aspect of the research topic pertains to organizational culture and sustainability integration. The assertion is that organizations ought to establish and foster a culture that aligns with the principles of sustainability. This underscores the significance of upholding environmental and social responsibility as fundamental values within the organization. It is imperative that the culture promotes sustainable practices and ethical considerations, and that environmental stewardship is not relegated to peripheral initiatives, but rather, becomes an integral part of the organizational mindset (Campbell, 2007; Soini & Dessein, 2016; Burford et al., 2013; Collier & Esteban, 2007; Dessein et al., 2015). Such cultural alignment should result in increased consistency in sustainability efforts across the organization, and it could not be possible without a satisfactory employee commitment level.

A comprehensive review of these intricately interwoven relations led to the development of the H_{02} hypothesis: Organizational culture with secured employee

commitment provides positive prospects for embedding a sustainable development strategy at the corporate level.

These two research hypotheses have also been supported and developed on the foundation of prior studies conducted by respected reference authors (Baumgartner & Rauter, 2017; Chatman & O’Reilly, 2016; Choi, 2011; Jo & Joo, 2011) and will be utilized to guide this examination. The concept of a dual emphasis on organizational culture and commitment as the foundation of a corporate sustainable development ethos serves to underscore the idea that sustainability is not merely a collection of initiatives, but rather a fundamental guiding principle with the tendency of reforming the actions of the organization.

Research methodology

3.1 The questionnaire

With the intention of primary statistical data collection, an online questionnaire utilizing the Google Forms platform was employed and disseminated in the Republic of Serbia in the initial months of 2023 (post-COVID research). The questionnaire comprised 51 questions, of which 9 were related to the demographic characteristics of the participants (including gender, age cohort affiliation, educational background, and residential region information), and current employment status (including form of contractual agreement, form and duration of employment, monthly revenue, etc.). The remaining 42 questions were formulated to address the primary research issue and were derived from validated survey questionnaires developed by Cameron & Quinn (1999; 2006), and Meyer and coauthors (1993). Table 1 displays the questionnaire structure’s specific information.

Table 1: The questionnaire structure

Construct	Number of questions	Type of variable	Source
Organizational culture	24	Independent variable	Cameron & Quinn (1999; 2006) - Organizational Culture Assessment Instrument (OCAI)
Organizational commitment	18	Dependent variable	Meyer et al. (1993) - Organizational Commitment Questionnaire (OCQ)

Source: Authors.

The research participants were provided with a psychometric five-point Likert scale to indicate their perceptions and current working attitudes in the context of employment.

The scale ranged from grade 1, indicating complete disagreement, to grade 5, indicating complete agreement with the given statements.

3.2 The sample

The survey's qualifying requirements were met by 127 respondents who were Republic of Serbia nationals and had verified employment status at the time they answered the questionnaire. The respondents' age distribution was found to be uneven - employees aged between 18-35 and 36-50, accounting respectively for 45.7% and 34.6% of the sample, make up by far the majority of respondents. The share of respondents under the age of 18 was found to be the lowest, with only one respondent (0.8%). This is comparable to the group of respondents aged over 65, which contributed to the research with five individuals (3.9%).

In terms of frequency, it is noteworthy to mention that female respondents constituted a larger proportion of the sample than male respondents (77 female respondents comprising 60.6% of the sample, compared to 50 male respondents comprising 39.4% of the sample). The collected data also revealed an uneven distribution of respondents across regions, with 48 respondents hailing from the Southern and Eastern Serbia region (37.8%), 45 from the Šumadija and Western Serbia region (35.4%), 23 from the Belgrade region (18.1%), 10 from the Vojvodina region (7.9%), and a mere one respondent whose residential region was Kosovo and Metohija region (0.8%). Finally, the average respondent was found to be highly educated, with a remarkable 49 respondents holding a Bachelor's, and 46 holding a Master's degree (accounting for a noteworthy 38.6% and 36.2% of the sample, respectively). Only one respondent, representing a mere 0.8% of the sample, had a primary education level.

Table 2: Research sample overview: General information about the survey respondents

Survey parameter		Periodicity	Percentage
Gender	Male	50	39.4
	Female	77	60.6
	Overall sample	127	100.0
Age cohort	Younger than 18	1	0.8
	18-35	58	45.7
	36-50	44	34.6
	51-65	19	15.0
	Older than 65	5	3.9
	Overall sample	127	100.0
Educational background	Primary education	1	0.8
	Secondary education	22	17.3
	Upper level of education	2	1.6
	Bachelor' s level of education	49	38.6

	Master' s level of education	46	36.2
	Doctoral level of education	7	5.5
	Overall sample	127	100.0
Residential region	Vojvodina	10	7.9
	Belgrade	23	18.1
	Southern and Eastern Serbia	48	37.8
	Šumadija and Western Serbia	45	35.4
	Kosovo and Metohija	1	0.8
	Overall sample	127	100.0

Source: Calculation by authors using IBM SPSS Statistics 26.0.

As previously indicated, the study exclusively involved employed individuals (127 respondents, constituting 100% of the sample). Among them, it was observed that 14 respondents (11.1% of the sample) were working without a contract in their current organization, thus earning the title of “illegal” workers. The sample also revealed that 55 employees who completed the survey had permanent contracts, while 45 respondents were hired with contracts for a fixed period of time (43.3% and 35.4%, respectively). Additionally, 13 respondents (10.2% of the sample) were found to be engaged in work outside the traditional employment relationship (temporary/sporadic professional arrangements/training contracts/additional work). The majority of the surveyed workers were engaged in full-time employment arrangements (95 respondents, i.e., 74.8% of the sample), while part-time employment arrangements were reported by 32 respondents (25.2% of the sample).

In terms of tenure, the proportion of employees who have served for 16 to 20 years and over 20 years within the organization is relatively low, with only 3 and 8 respondents (2.4% and 6.3% of the sample), respectively. Conversely, the number of employees who have been with their organization for less than 1 year is significantly higher (30 respondents, i.e., 23.6% of the sample). Additionally, the data indicates that 56 respondents have worked for their employer for 1 to 5 years (44.1%), 21 for 6 to 10 years (16.5%), and 9 respondents for 11 to 15 years (7.1% of the sample).

Regarding the observed sample’s monthly remuneration, it is worth mentioning that all 127 respondents have provided information on their income. This data reveals a diverse range of monthly earnings, with 22 respondents reporting a monthly income below EUR 250, and 9 respondents income over EUR 1,000. The majority of respondents, comprising 56 individuals, fell within the range of EUR 251-500. Additionally, 27 respondents reported a monthly income between EUR 501-750, and 13 respondents reported earnings between EUR 751-1,000.

Table 3: Research sample overview: Information about the survey respondents' status/position in the organization

Survey parameter		Periodicity	Percentage
Employment status	Employed	127	100.0
	Unemployed	0	0.0
	Overall sample	127	100.0
Form of contractual agreement	Permanent contract	55	43.3
	Non-permanent contract	45	35.4
	Out-of-employment work	13	10.2
	Without-a-contract work	14	11.1
	Overall sample	127	100.0
Form of employment	Full-time	95	74.8
	Part-time	32	25.2
	Overall sample	127	100.0
Duration of employment	Shorter than 1 year	30	23.6
	1-5	56	44.1
	6-10	21	16.5
	11-15	9	7.1
	16-20	3	2.4
	Longer than 20 years	8	6.3
	Overall sample	127	100.0
Monthly revenue	Up to EUR 250	22	17.3
	EUR 251-500	56	44.1
	EUR 501-750	27	21.3
	EUR 751-1,000	13	10.2
	Over EUR 1,000	9	7.1
	Overall sample	127	100.0

Source: Calculation by authors using IBM SPSS Statistics 26.0.

3.3 Data analysis

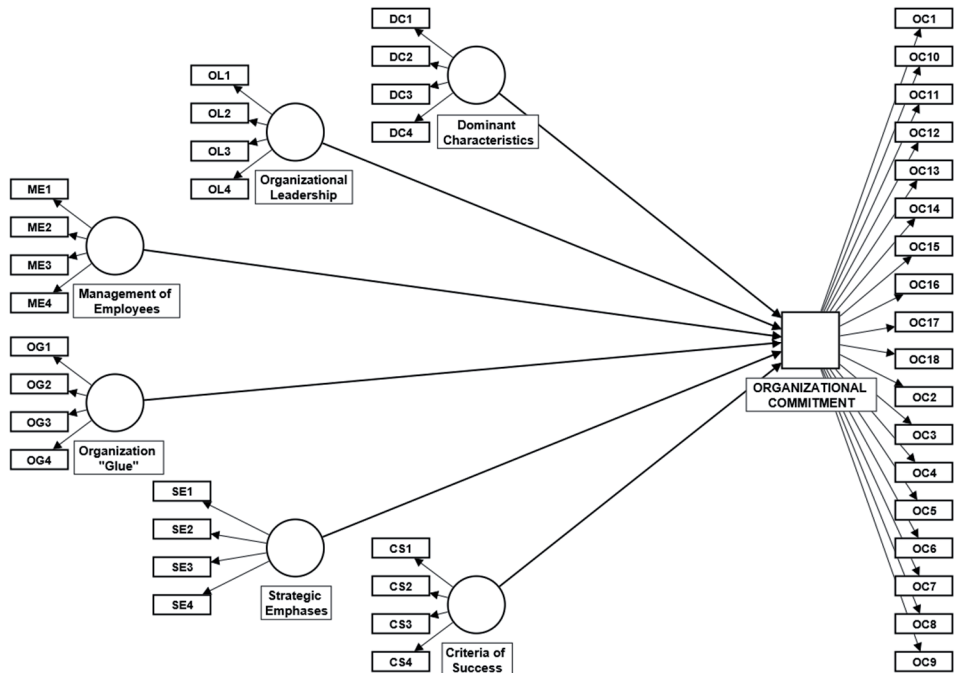
The methodology employed for this research was a fusion of content analysis and thematic analysis techniques (both of which were utilized to identify the research nexus), and analysis and synthesis techniques that were employed as the quintessential reasoning tools, elevating the research to a level of studiousness. Prior to conducting the empirical data analysis, the renowned statistical software IBM SPSS Statistics 26.0 was utilized to ascertain the quintessential respondent profile through frequency calculations (IBM Corporation, 2019). The validation of the proposed research model is done through the utilization of Partial Least Squares Structural Equation Modeling (PLS-SEM) with the aid of the most recent SmartPLS 4.0 software (Ringle et al., 2022).

Presentation and discussion of research findings

An increasing number of structural equation models are being estimated through the use of PLS-SEM, as evidenced by studies conducted by Hair and coauthors (2014; 2021), Wong (2013), and Jolović & Berber (2021). In recent years, composite-based methods have gained significant traction in the social sciences for modeling complex interrelationships between observed latent variables, as highlighted by Sarstedt and coauthors (2019). The use of higher-order constructs has become particularly prominent due to their ability to provide researchers with a framework for modeling constructs on a more abstract dimension (higher-order constituent) and their more concrete subdimensions (lower-order constituent). This extends the standard construct conceptualizations, which typically rely on a solitary level of abstraction. Higher-order constructs offer diverse advantages, including (1) contributing to model parsimony by reducing the number of path model connections, (2) providing a means of rearranging indicators and/or constructs across various concrete subdimensions of more abstract construct, (3) reducing collinearity among formative indicators, and (4) assisting in overcoming the trade-off between the amount of information available and the rigor of testing to achieve more accurate information (Sarstedt et al., 2019).

In practical terms, researchers are presented with a range of options when it comes to identifying higher-order constructs. Notable approaches include the repeated indicators approach and the two-stage approach, as outlined by Hair and coauthors (2019; 2021). In a literature review conducted by Sarstedt and colleagues (2019), it was found that the majority of observed social sciences studies (81.3%) utilized the two-stage approach compared to the repeated indicators approach (18.7%). Guided by this reason, the research will also adopt a two-stage approach.

Graph 1 depicts the reflective-reflective measurement model developed by the authors for this study, utilizing the disjoint two-stage approach. This first stage model comprises 42 indicators, six lower-order constructs (Organizational culture subdimensions: dominant characteristics, organizational leadership, management of employees, organization “glue”, strategic emphases, criteria of success), and one higher-order construct (Organizational commitment), along with their corresponding structural linkages (Cameron & Quinn, 1999; Cameron & Quinn, 2006). The disjoint two-stage approach involves solely considering the lower-order components of the higher-order construct in the path model, excluding the higher-order component from the calculation in the first stage. This approach enables direct linkage to all other constructs that the higher-order construct is theoretically associated with (Sarstedt et al., 2019; Hair et al., 2021). In the second stage, lower-order components’ scores will be utilized for the purpose of measuring the respective higher-order construct’s score and revealing its connection with the previously included, dependent higher-order construct. Detailed research model’s first stage overview follows.



Graph 1: Reflective-reflective research model overview (First stage)

Source: Illustration by authors via SmartPLS 4.0.

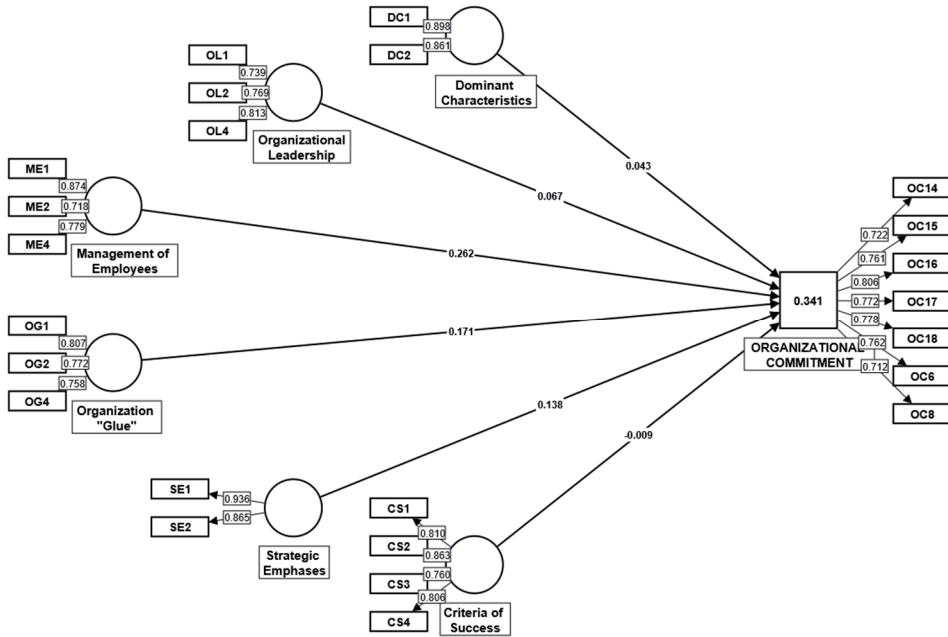
In order to gauge the reliability of reflecting indicators, Outer Loadings results are displayed at the start of the overview. Each indicator value is held to a standard of 0.708 or higher, signifying that if the indicator attains a predetermined value, a specific study construct elucidates over 50% of the indicator's variance (Hair et al., 2019).

The ensuing results of the mentioned evaluation, pertaining to the reliability assessment of research indicators, have been meticulously scrutinized. Regrettably, certain indicators, namely DC4 (0.465), ME3 (0.610), OC10 (0.070), OC11 (0.051), OC12 (-0.038), OC13 (0.552), OC2 (0.617), OC3 (0.483), OC4 (0.606), OC5 (0.605), OC7 (0.521), OC9 (0.600), OG3 (0.585), OL3 (0.200), SE3 (0.575), DC3 (0.668), OC1 (0.654), and SE4 (0.697), failed to meet the predetermined reliability criterion and were consequently disregarded in the ensuing calculation. The ones that did fit the criteria are listed in Table 4 and visually depicted in Graph 2.

Table 4: Indicator reliability check

Indicators	Constructs						
	Criteria of Success	Dominant Characteristics	Management of Employees	ORGANIZATIONAL COMMITMENT	Organization "Glue"	Organizational Leadership	Strategic Emphases
CS1	0.810						
CS2	0.863						
CS3	0.760						
CS4	0.806						
DC1		0.898					
DC2		0.861					
ME1			0.874				
ME2			0.718				
ME4			0.779				
OC14				0.722			
OC15				0.761			
OC16				0.806			
OC17				0.772			
OC18				0.778			
OC6				0.762			
OC8				0.712			
OG1					0.807		
OG2					0.772		
OG4					0.758		
OL1						0.739	
OL2						0.769	
OL4						0.813	
SE1							0.936
SE2							0.865

Source: Calculation by authors using SmartPLS 4.0.



Graph 2: Indicator reliability check

Source: Illustration by authors via SmartPLS 4.0.

To assess the collinearity of reflecting indicators, the VIF values are presented as the second point of overview (Table 5). It is important to note that a criterion of 5 or lower is set for each indicator value, as values above this range may indicate potential collinearity issues among the included indicators. Ideally, the VIF values should be in close proximity to 3 or even lower, as suggested by Hair and coauthors (2019; 2021). The predetermined VIF criterion was met by all remaining research indicators, indicating no collinearity issues among them.

Table 5: Indicator collinearity check

	VIF
CS1	1.492
CS2	2.590
CS3	2.020
CS4	1.809
DC1	1.433
DC2	1.433
ME1	1.687
ME2	1.372
ME4	1.351
OC14	1.967
OC15	2.462

OC16	1.970
OC17	2.405
OC18	2.206
OC6	1.963
OC8	1.755
OG1	1.363
OG2	1.409
OG4	1.240
OL1	1.378
OL2	1.349
OL4	1.244
SE1	1.671
SE2	1.671

Source: Calculation by authors using SmartPLS 4.0.

Measurement model assessment continues with the constructs' internal consistency reliability and convergent validity check. A discriminant validity check (through the Fornell-Larcker criterion) follows it.

The assessment of the internal consistency reliability of each construct measure is conducted with the utmost precision, utilizing the esteemed Cronbach's Alpha, Composite Reliability (Rho_A), and Composite Reliability (Rho_C) criteria. As per the esteemed scholar Hair and coauthors (2019), it is imperative that each of the three aforementioned construct reliability values exceed a minimum threshold of 0.70, if not higher (until 0.95), in order to be deemed suitable for the study. In some instances, this criterion may be brought down - as Hair and coauthors (2021) state in a recent study, reliability values between 0.60 and 0.70 can also be considered "acceptable in exploratory research".

The convergent validity of each construct measure is assessed through the utilization of the Average Variance Extracted (AVE) metric. As per the esteemed scholar Hair and coauthors (2019; 2021), the benchmark is established at 0.50 or above, signifying that once this threshold is met, constructs are able to explain a minimum of 50% of the variance of their respective items.

The tabulated findings of the four elucidated metrics evince that their required benchmarks have been reached, signifying that all first stage constructs are eligible for inclusion in subsequent computations (Table 6).

Table 6: First stage constructs' internal consistency reliability and convergent validity check

Constructs	Cronbach's Alpha	Composite Reliability (Rho_A)	Composite Reliability (Rho_C)	Average Variance Extracted (AVE)
Criteria of Success	0.831	0.864	0.884	0.657
Dominant Characteristics	0.710	0.720	0.873	0.774
Management of Employees	0.703	0.725	0.835	0.629
ORGANIZATIONAL COMMITMENT	0.879	0.895	0.905	0.577
Organization "Glue"	0.678	0.682	0.822	0.607
Organizational Leadership	0.674	0.694	0.818	0.600
Strategic Emphases	0.776	0.844	0.896	0.813

Source: Calculation by authors using SmartPLS 4.0.

A discriminant validity check of each construct measure is conducted through the Fornell-Larcker criterion. As per Hair and coauthors (2019), this criterion determines the distinctiveness of a particular construct from all other constructs in the research model. Specifically, the AVE number of each construct was juxtaposed with the squared inter-construct correlation of that construct and all other reflectively measured constructs in the research model. It is necessary to ensure that the common variance for all constructs of the model does not exceed their respective AVE values (Hair et al., 2019).

The results of the constructs' discriminant validity test are presented in the following table (Table 7). Each construct surpasses the pre-defined criteria, confirming its own uniqueness and distinctiveness (meaning that all constructs may be considered distinct entities within the research's purview).

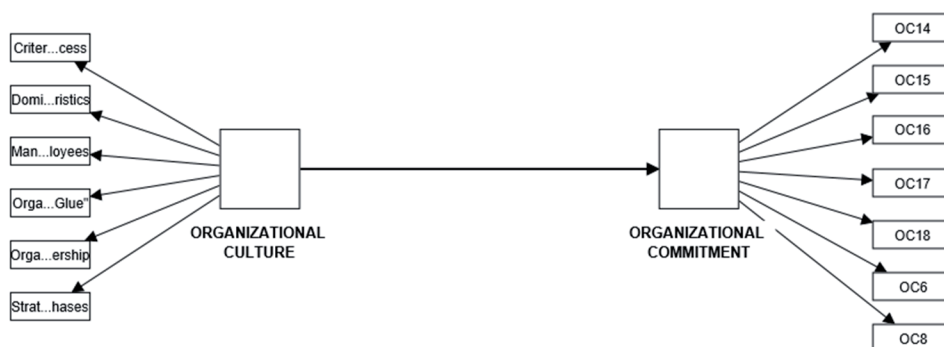
Table 7: First stage constructs' discriminant validity check (Fornell-Larcker criterion)

Fornell-Larcker criterion							
Constructs	Criteria of Success	Dominant Characteristics	Management of Employees	ORGANIZATIONAL COMMITMENT	Organization "Glue"	Organizational Leadership	Strategic Emphases
Criteria of Success	0.811						
Dominant Characteristics	0.575	0.880					
Management of Employees	0.713	0.505	0.793				

ORGANIZATIONAL COMMITMENT	0.457	0.385	0.536	0.760			
Organization “Glue”	0.716	0.528	0.698	0.510	0.779		
Organizational Leadership	0.645	0.542	0.630	0.457	0.648	0.774	
Strategic Emphases	0.645	0.638	0.699	0.509	0.702	0.695	0.901

Source: Calculation by authors using SmartPLS 4.0.

After conducting an assessment of the constructs presented in the initial stage of the disjoint two-stage approach, attention is now directed towards evaluating the higher-order construct introduced during the second research phase. Graph 3 provides an overview of the reflective-reflective measurement model, precisely its second stage.



Graph 3: Reflective-reflective research model overview (Second stage)

Source: Illustration by authors via SmartPLS 4.0.

Based on the consistent criteria outlined in the preceding section of the text, and taking into account the data presented in Table 8 and Table 9, it can be inferred that the higher-order construct Organizational culture also meets the necessary standards of internal consistency reliability (0.914, 0.921, and 0.933 > 0.70), convergent validity (0.700 > 0.50), as well as discriminant validity (0.760 > 0.572).

Table 8: Higher-order construct’s internal consistency reliability and convergent validity check

Constructs	Cronbach’s Alpha	Composite Reliability (Rho_A)	Composite Reliability (Rho_C)	Average Variance Extracted (AVE)
ORGANIZATIONAL CULTURE	0.914	0.921	0.933	0.700

Source: Calculation by authors using SmartPLS 4.0.

Table 9: Higher-order construct’s discriminant validity check (Fornell-Larcker criterion)

Fornell-Larcker criterion		
Constructs	ORGANIZATIONAL COMMITMENT	ORGANIZATIONAL CULTURE
ORGANIZATIONAL COMMITMENT	0.760	
ORGANIZATIONAL CULTURE	0.572	0.837

Source: Calculation by authors using SmartPLS 4.0.

Upon completion of all the mandatory constitutive calculations, the evaluation of the explanatory capacity of the structural research model can finally commence. The model’s explanatory strength is exemplified by the coefficient of determination R^2 , which illuminates the variance explicated in each of the endogenous constructs. This metric showcases the extent to which one or more independent variables may elucidate a shift in the dependent variable (the R^2 analysis findings are displayed in Table 10). For the evaluation of R^2 values for endogenous latent variables, as per Hair and coauthors (2019), acceptable levels range from 0.67 (substantial) to 0.19 (weak), with 0.33 (moderate) falling in between. Nevertheless, acceptable R^2 levels hinge on the field of study and the research’s setting and are subject to variation.

The R^2 outcomes for the Organizational commitment construct amount to 0.327, signifying that the employed research model possesses moderate predictive power for the crucial variable.

Table 10: Research model’s explanatory power check

	R-square	R-square adjusted
ORGANIZATIONAL COMMITMENT	0.327	0.321

Source: Calculation by authors using SmartPLS 4.0.

Following the demonstration of the model’s capacity to explain data, the subsequent step is to conduct a significance check on the research’s main structural path. The Path Coefficients results, obtained through the Bootstrapping technique and t-tests at the 5% and 1% significance levels (95% and 99% confidence intervals, respectively), are presented in Table 11. The Bootstrapping procedure noted 5,000 iterations.

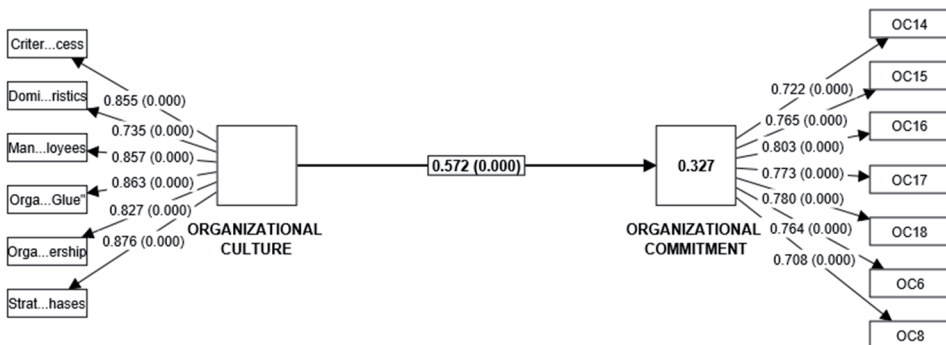
The final computation supported the presence of a direct and statistically significant relationship between Organizational culture and Organizational commitment - positive effect ($\beta=0.572$, $t=10.179$, $p=0.000$; $p<0.05$ and $p<0.01$), which afterward offers sufficient proof for the H_{01} hypothesis adoption (A statistically significant positive correlation exists between organizational culture and organizational commitment).

Table 11: Structural Path Significance (direct effects) check via Bootstrapping procedure for 95% and 99% confidence intervals

	Original sample = Standardized Beta	Sample mean	Standard deviation = Standardized Error	T statistics	P values
ORGANIZATIONAL CULTURE -> ORGANIZATIONAL COMMITMENT	0.572	0.583	0.056	10.179	0.000

Source: Calculation by authors using SmartPLS 4.0.

The opulent measuring methodology, which was employed in the study, is graphically displayed in its entirety in Graph 4, accompanied by the principal research discoveries.



Graph 4: Reflective-reflective research model results

Source: Illustration by authors via SmartPLS 4.0.

In order to ensure an organizational successful sustainable development impact review, it is important to recognize and once again highlight the significant role that organizational culture plays in facilitating internal capability for change. Both theoretical and empirical research have demonstrated that organizational culture can either promote or hinder individuals' readiness and commitment to change (Olafsen et al., 2021; Choi & Ruona, 2011; Vakola, 2014; Herscovitch & Meyer, 2002; Jolović, 2020; Tsalits & Kismono, 2019). However, in order to be able to influence these attitudes, organizational culture must be strong and deeply rooted in the mindset of each personnel member. If this is the case, the organization can impose and effectively "manipulate" the preferences of its members, as well as their behavior.

Most enlightened organizations have understood that the ability to adapt and evolve in a sustainable manner is of paramount importance (particularly in light of the COVID-19 pandemic). These organizations are acutely cognizant of the importance of cultivating a culture that seamlessly integrates sustainability principles and fosters strong, unquestionable employee commitment. With a steadfast commitment from employees, the integration of environmental and social responsibility into the organization's strategic agenda and daily operations becomes an attainable reality.

The seamless interplay of organizational culture, commitment, and sustainability is an essential prerequisite for organizations that aspire to make a positive impact on the environment, society, and primarily, their own long-term economic prosperity. As substantiated in the literature (El-Sayed, 2021; Aranki et al., 2019; Arendt & Brettel, 2010; Banerjee, 2011; Baumgartner & Rauter, 2017; Choi, 2011; Collier & Esteban, 2007), the assimilation of ambitious corporate sustainability initiatives and policies into the organizational culture, coupled with organizational commitment, is pivotal for achieving success. These findings lend credence to the adoption of the H_{02} research hypothesis, which posits that an organizational culture that fosters employee commitment offers favorable prospects for embedding a sustainable development strategy at the corporate level.

Conclusion

The dynamic interplay between organizational culture, organizational commitment, and the attainment of sustainable development objectives is a crucial aspect of modern organizational strategy. By cultivating a culture that is grounded in employee commitment, organizations can effectively navigate the complexities of sustainability and position themselves as responsible and forward-thinking entities, dedicated to addressing global environmental and social challenges. An organizational culture that succeeds in elevating the commitment of its employees can guarantee that employees who pledge their allegiance to it and concur with its viewpoint are more inclined to embrace and participate in sustainable development initiatives that the organization validated as important. This symbiotic relationship allows corporations to effectively implement and embed sustainable development practices, resulting in positive environmental, social, and economic results. In addition, this harmonization encourages employee engagement, creativity, and a long-term commitment to sustainability objectives, which ultimately contributes to the organization's success in tackling economic issues.

In summation, it is unequivocally evident that the bedrock of a "sustainable corporation" is none other than its organizational culture. The meticulous empirical research has unequivocally validated the supposition that organizational culture serves as a catalyst, propelling and augmenting employees' unwavering commitment to the organization (as claimed by the H_{01} hypothesis). Organizational culture positively affects

employees' organizational commitment ($\beta=0.572$, $t=10.179$, $p=0.000$; $p<0.05$ and $p<0.01$, results available in Table 11). Furthermore, the meticulous theoretical research (El-Sayed, 2021; Banerjee, 2011; Choi, 2011; Aranki et al., 2019; Collier & Esteban, 2007; Leonavičienė et al., 2022; Lincoln & Kalleberg, 1990; Lok & Crawford, 1999; Lok & Crawford, 2004; Baumgartner & Rauter, 2017; Dessein et al., 2015; Linnenluecke & Griffiths, 2010; Campbell, 2007; Soini & Dessein, 2016; Burford et al., 2013; Chatman & O'Reilly, 2016; Jo & Joo, 2011) has unequivocally validated the supposition that organizational culture with ensured employee commitment paves the way and creates a plethora of opportunities for the seamless integration of a sustainable development strategy at the corporate level (as claimed by the H_{02} hypothesis).

The present study is, however, subject to certain limitations that warrant consideration. The study's scope was limited by the relatively diminutive sample size and the exclusive focus on laborers hailing from the Republic of Serbia. Additionally, in order to maintain conciseness, the paper has simplified intricate concepts pertaining to organizational culture, commitment, and sustainability. It is important to note that these topics are multifaceted and that a more comprehensive analysis could yield a more nuanced understanding. Lastly, the paper has not taken into account external factors such as regulatory changes, market conditions, or economic factors, which can greatly influence an employee's behavior and the organization's capacity to execute a sustainable development strategy. While these limitations may be perceived as a constraint, it is important to note that the paper findings nevertheless remain a good base for future research. The study's attention to detail and rigorous methodology ensure that the results are both reliable and valid, even though they are based on a small and limited sample.

It is recommended that future research explore alternative pathways for implementing sustainable development strategies at the corporate level (for example, through other basic organizational variables such as the organizational structure and/or formal management tools). Such research would be of immense worth in propelling the implementation of sustainable development practices within the global corporate sector. Also, in order to enhance comprehension of the complex interplay between organizational culture, organizational commitment, and the effective implementation of sustainable development strategy, it is imperative that future research endeavors prioritize the execution of empirical longitudinal studies, cross-cultural analyses, and causal investigations. Finally, it is advisable to conduct an exploration that takes into account sector-specific dynamics, practical barriers, and the influence of external factors and technology. Such efforts will serve to substantiate and augment general knowledge of this research niche.

Acknowledgments

The realization of the research was supported by the funds of the Ministry of Education and the Ministry of Science, Technological Development and Innovation of the Republic of Serbia through the Project of the Faculty of Technical Sciences, University of Novi Sad, entitled “Innovative Scientific and Artistic Research in the Field of Activity of the Faculty of Technical Sciences” (project number: 451-03-68/2020-14/200156); and through the Scientific Research Program 2019-2023 of the Institute of Economic Sciences in Belgrade (contract number: 451-03-47/2023-01/200005).

REFERENCES

- [1] Aranki, D. H., Suifan, T. S., & Sweis, R. J. (2019). The Relationship between Organizational Culture and Organizational Commitment. *Modern Applied Science*, 13(4), 137-154.
- [2] Arendt, S., & Brettel, M. (2010). Understanding the Influence of Corporate Social Responsibility on Corporate Identity, Image, and Firm Performance. *Management Decision*, 48(10), 1469-1492.
- [3] Balthazard, P. A., Cooke, R. A., & Potter, R. E. (2006). Dysfunctional Culture, Dysfunctional Organization: Capturing the Behavioral Norms that Form Organizational Culture and Drive Performance. *Journal of Managerial Psychology*, 21(8), 709-732.
- [4] Banerjee, S. B. (2011). Embedding Sustainability Across the Organization: A Critical Perspective. *Academy of Management Learning & Education*, 10(4), 719-731.
- [5] Baumgartner, R. J. (2009). Organizational Culture and Leadership: Preconditions for the Development of a Sustainable Corporation. *Sustainable Development*, 17(2), 102-113.
- [6] Baumgartner, R. J., & Rauter, R. (2017). Strategic Perspectives of Corporate Sustainability Management to Develop a Sustainable Organization. *Journal of Cleaner Production*, 140, 81-92.
- [7] Burford, G., Hoover, E., Velasco, I., Janoušková, S., Jimenez, A., Piggot, G., Podger, D., & Harder, M. K. (2013). Bringing the “Missing Pillar” into Sustainable Development Goals: Towards Intersubjective Values-based Indicators. *Sustainability*, 5(7), 3035-3059.
- [8] Cameron, K. S., & Quinn, R. E. (1999). *Diagnosing and Changing Organizational Culture*. Reading: Addison-Wesley Publishing Company, Inc.
- [9] Cameron, K. S., & Quinn, R. E. (2006). *Diagnosing and Changing Organizational Culture Based on the Competing Values Framework*. San Francisco: The Jossey-Bass Business & Management Series.

- [10] Campbell, J. L. (2007). Why Would Corporations Behave in Socially Responsible Ways? An Institutional Theory of Corporate Social Responsibility. *The Academy of Management Review*, 32(3), 946-967.
- [11] Chatman, J. A., & O'Reilly, C. A. (2016). Paradigm Lost: Reinvigorating the Study of Organizational Culture. *Research in Organizational Behavior*, 36, 199-224.
- [12] Choi, M. (2011). Employees' Attitudes toward Organizational Change: A Literature Review. *Human Resource Management*, 50(4), 479-500.
- [13] Choi, M., & Ruona, W. E. (2011). Individual Readiness for Organizational Change and its Implications for Human Resource and Organization Development. *Human Resource Development Review*, 10(1), 46-73.
- [14] Collier, J., & Esteban, R. (2007). Corporate Social Responsibility and Employee Commitment. *Business Ethics: A European Review*, 16(1), 19-33.
- [15] Dessein, J., Soini, K., Fairclough, G., & Horlings, L. (2015). Culture in, for and as Sustainable Development. In: Dessein, J., Soini, K., Fairclough, G., Horlings, L., (Eds.). *Conclusions from the COST Action IS1007 "Investigating Cultural Sustainability"* (pp. 1-73). Jyväskylä: University of Jyväskylä.
- [16] El-Sayed, M. (2021). The Impact of Job Commitment on the Relationship between Organizational Culture and Sustainable Development. *Open Access Library Journal*, 8(2), 1-28.
- [17] Hair, J. F. Jr., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Cham: Springer Nature.
- [18] Hair, J. F. Jr., Risher, J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report the Results of PLS-SEM. *European Business Review*, 31(1), 2-24.
- [19] Hair, J. F. Jr., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. *European Business Review*, 26(2), 106-121.
- [20] Herscovitch, L., & Meyer, J. P. (2002). Commitment to Organizational Change: Extension of a Three-component Model. *Journal of Applied Psychology*, 87(3), 474-487.
- [21] IBM Corporation. (2019). *IBM SPSS Statistics for Windows: Version 26.0*. New York: IBM Corporation.
- [22] Jo, S. J., & Joo, B. K. (2011). Knowledge Sharing: The Influences of Learning Organization Culture, Organizational Commitment, and Organizational Citizenship Behaviors. *Journal of Leadership & Organizational Studies*, 18(3), 353-364.
- [23] Jolović, I. (2020). Organisational Change Management in the Sustainability Implementation Process in Higher Education. In: Lošonc, A., Ivanišević, A., (Eds.). *Proceedings of the 6th International Scientific Conference "Education and Sustainable Development"* (pp. 93-109). Novi Sad: Faculty of Technical Sciences, University of Novi Sad.

- [24] Jolović, I., & Berber, N. (2021). Uticaj praksi menadžmenta ljudskih resursa na nameru odlaska iz organizacije: Medijatorska uloga organizacione posvećenosti. *Ekonomski izazovi*, 10(20), 96-114.
- [25] Leonavičienė, E., Burinskienė, A., & Peleckis, K. (2022). Commitment to Sustainable Development and the Role of National Culture. *Business and Management*, 12, 213-223.
- [26] Lincoln, J. R., & Kalleberg, A. L. (1990). *Culture, Control and Commitment: A Study of Work Organization and Work Attitudes in the United States and Japan*. Avon: Cambridge University Press.
- [27] Linnenluecke, M. K., & Griffiths, A. (2010). Corporate Sustainability and Organizational Culture. *Journal of World Business*, 45(4), 357-366.
- [28] Lok, P., & Crawford, J. (1999). The Relationship Between Commitment and Organizational Culture, Subculture, Leadership Style and Job Satisfaction in Organizational Change and Development. *Leadership & Organizational Development Journal*, 20(7), 365-376.
- [29] Lok, P., & Crawford, J. (2004). The Effect of Organisational Culture and Leadership Style on Job Satisfaction and Organisational Commitment: A Cross-national Comparison. *Journal of Management Development*, 23(4), 321-338.
- [30] Mathew, J., & Ogbonna, E. (2009). Organisational Culture and Commitment: A Study of an Indian Software Organisation. *The International Journal of Human Resource Management*, 20(3), 654-675.
- [31] Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to Organizations and Occupations: Extension and Test of a Three-component Conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.
- [32] Nikpour, A. (2017). The Impact of Organizational Culture on Organizational Performance: The Mediating Role of Employee's Organizational Commitment. *International Journal of Organizational Leadership*, 6, 65-72.
- [33] O'Reilly, C. A. (1989). Corporations, Culture, and Commitment: Motivation and Social Control in Organizations. *California Management Review*, 31(4), 9-25.
- [34] O'Reilly, C. A., Chatman, J. A., & Caldwell, D. F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-organization Fit. *The Academy of Management Journal*, 34(3), 487-516.
- [35] Olafsen, A. H., Nilsen, E. R., Smedsrud, S., & Kamaric, D. (2021). Sustainable Development through Commitment to Organizational Change: The Implications of Organizational Culture and Individual Readiness for Change. *Journal of Workplace Learning*, 33(3), 180-196.
- [36] Ortega-Parra, A., & Sastre-Castillo, M. A. (2013). Impact of Perceived Corporate Culture on Organizational Commitment. *Management Decision*, 51(5), 1071-1083.

- [37] Rashid, M. Z. A., Sambasivan, M., & Johari, J. (2003). The Influence of Corporate Culture and Organisational Commitment on Performance. *Journal of Management Development*, 22(8), 708-728.
- [38] Ringle, C. M., Wende, S., & Becker, J. M. (2022). *SmartPLS 4*. Oststeinbek: SmartPLS.
- [39] Sarstedt, M., Hair Jr, J. F., Cheah, J. H., Becker, J. M., & Ringle, C. M. (2019). How to Specify, Estimate, and Validate Higher-order Constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197-211.
- [40] Sheridan, J. E. (1992). Organizational Culture and Employee Retention. *Academy of Management Journal*, 35(5), 1036-1056.
- [41] Soini, K., & Dessein, J. (2016). Culture-sustainability Relation: Towards a Conceptual Framework. *Sustainability*, 8(2), 167-179.
- [42] Tsalits, A. H., & Kismono, G. (2019). Organizational Culture Types and Individual Readiness for Change: Evidence from Indonesia. *Diponegoro International Journal of Business*, 2(2), 86-95.
- [43] Vakola, M. (2014). What's in There for Me? Individual Readiness to Change and the Perceived Impact of Organizational Change. *Leadership & Organization Development Journal*, 35(3), 195-209.
- [44] Wong, K. K. K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.