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Testing The Model of Interactive Relationships among Internal Marketing, Organizational Intelligence, and Organizational Innovation

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ABSTRACT

The purpose of this research is to test the model of interactive relationships among internal marketing, organizational intelligence, and organizational innovation. This is an applied research with a quantitative (comparative) approach conducted through a descriptive survey using standard questionnaires. The statistical population used consists of 20,000 employees of the Tax Affairs Organization. According to the Krejcie and Morgan table, with a precision level of 0.05, the sample size is 377 individuals, selected using the convenience sampling method. For measurement of the variables, we made use of the standard questionnaire. Validity of the questionnaire was assessed and confirmed by the academic experts. Its reliability, as measured in terms of Cronbach's alpha (= 0.841), was high and thus, confirmed. The obtained survey data for the test of the research hypotheses were analyzed using SEM-PLS technique. The results indicate the interactive model of relationships among internal marketing, organizational intelligence, and organizational innovation in the tax administration of the country can contribute to a better understanding of how these components influence one another and ultimately improve the organization's performance. Internal marketing refers to enhancing interactions and communications among organizational members and creating a positive and creative environment for employees. Internal marketing systems include programs designed to improve job satisfaction, employee training and development, and fostering effective intra-organizational relationships.

KEYWORDS: Internal Marketing, Organizational Intelligence, Organizational Innovation

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1. Introduction

Today, marketing has become a fundamental and mandatory principle for the success of any organization, whether in for-profit or non-profit organizations. The success of an organization depends on its effectiveness and ability to meet the implicit and explicit needs and desires of its customers. Organizations face more than one market (employees as the internal market and customers as the external market), and success is a function of the organization's ability to effectively manage the relationships between them.

Internal marketing is one of the topics in marketing that was introduced about 30 years ago by Berry as a method to address issues related to employees and provide them with quality services. The prevailing view among internal marketing scholars is that employee satisfaction is essential for delivering quality services, and as a result, employees are the focus of internal marketing activities (Bran et al., 2024). Innovation in today's active sectors of society is one of the most important strategies studied in organizational management. Some scholars believe that organizational innovation, applied through creativity, is a critical factor in the success and achievement of competitive outcomes in organizations. Fulfilling such a mission, in a way that turns managers' visions into reality, requires individuals who are remarkably creative. Creativity and innovation are fundamental elements in sustaining the life and progress of any society within the organizational environment. In this regard, social scientists attribute low economic growth and development to the lack of creativity and innovation in societies and their organizations (Betaineh et al., 2024). From this perspective, what drives transformation and the formation of a new structure in the social system is innovation and the changes it brings. Innovation requires changes in the thinking and behavior of individuals. Innovation and change are considered necessary processes for organizations because they lead to growth, survival, and excellence (Bailey, 2016).

Given the continuously changing environment and the increasing number of uncontrollable environmental factors and threats in the market, gradual progress for continuous improvement is no longer sufficient. All organizations and companies need to move toward creativity and innovation to ensure their survival and active presence in the market (Adhikandra et al., 2024). For this reason, the Tax Administration, as the largest organization providing financial resources in the country, aims to achieve its goals on one hand and create satisfaction among taxpayers and employees on the other. Despite existing shortcomings, it requires their support in all areas.

Intelligence is part of the business strategy and has been introduced to enhance the competitive advantage of companies and the effectiveness of strategic processes. Organizational intelligence is defined as the talent and capacity of an organization to mobilize its mental abilities and focus them on achieving its mission. A distinctive feature of organizations with high intelligence is that they connect individuals who know how to meet market needs through an integrated process of market data analysis, gathering essential information, and analyzing trends. This process ultimately transforms data and information into knowledge about the business environment, which is used

intelligently in decision-making to add value to organizational activities. Therefore, it can be said that the goal of organizational intelligence is to accelerate the decoding and transfer of organizational knowledge, identify opportunities, and solve business problems faster than before.

For this purpose, the Tax Administration, as one of the largest organizations providing financial resources in the country, aims to achieve its goals on one hand and increase employee satisfaction, efficiency, and performance improvement on the other. Despite existing shortcomings, it requires the adoption of the latest intelligent and creative methods. Therefore, the present study seeks to test the model of interactive relationships between internal marketing, organizational intelligence, and organizational innovation.

2. Theoretical Framework

Organizational Innovation

Organizational innovation refers to the creation and implementation of new ideas, processes, products, or services within an organization with the aim of improving performance, increasing efficiency, and responding to the changing needs of markets and customers. It not only leads to the enhancement of existing products and services but also helps in identifying new opportunities for growth and advancement (Aripin et al., 2023).

Internal Marketing

Internal marketing refers to processes and activities designed to enhance employee satisfaction and motivation within an organization. The primary goal of this concept is to create a positive and supportive work environment where employees are regarded as internal customers. Internal marketing is based on the principle that employee satisfaction and motivation directly affect the quality of services and products delivered to external customers (Kokarja, 2017).

Organizational Intelligence

Organizational intelligence refers to an organization's capability to collect, analyze, and effectively utilize information and data for optimal decision-making and overall performance improvement. This concept involves processes that help organizations become aware of their environment, identify existing patterns, and respond efficiently to environmental changes and challenges (Kulkarin et al., 2024).

Sarangal et al. (2024): This study explored the relationship between internal marketing, faculty engagement, and innovative behavior in higher education. The research highlighted the importance of internal marketing in fostering innovative behavior among faculty members in higher education institutions. The study revealed that the dimensions of internal marketing positively and

significantly influence faculty members' innovative behavior. Faculty engagement acts as a significant mediator in the relationship between internal marketing dimensions and innovative behavior in the education sector.

Aziz & Nayel (2024): This systematic review examined the operationalization of internal marketing strategies. The findings indicate that addressing employee needs and feedback during internal marketing processes can help identify and improve internal processes, ultimately enhancing efficiency and effectiveness in implementing innovations. Additionally, internal marketing can equip employees with knowledge about customer needs and behaviors, enabling them to propose innovative ideas for products and services, thereby improving customer experiences and fostering loyalty.

Agrawal et al. (2024): This research studied organizational innovation as a business strategy. The findings identified key drivers of organizational innovation, including organizational learning, culture, human capital, technology, senior management, and industry dynamics. Shared themes such as culture, management, learning, market orientation, and human resources consistently foster innovation across sectors such as education, software, construction, healthcare, and customer-centric industries.

Nguyen et al. (2024): This study examined the interactive effects of online knowledge sharing and organizational innovation on leadership styles and employee creativity. The findings revealed that organizational innovation often requires new experiences and learning processes. This fosters a culture of continuous learning, enabling organizations to collect, analyze, and share information and knowledge effectively.

Elsaeed et al. (2024): This research investigated the role of organizational learning and innovation in achieving ambidextrous innovation. The results showed that both organizational learning and an innovative organizational culture play a significant role in enabling project-based public sector companies in Saudi Arabia to enhance their ambidextrous innovation capabilities.

These studies collectively highlight the interconnected roles of internal marketing, organizational intelligence, and innovation in driving organizational performance and competitiveness.

3. Methodology

This is an applied research with a quantitative (comparative) approach conducted through a descriptive survey using standard questionnaires. The statistical population used consists of 20,000 employees of the Tax Affairs Organization. According to the Krejcie and Morgan table, with a precision level of 0.05, the sample size is 377 individuals, selected using the convenience sampling method. For measurement of the variables, we made use of the standard questionnaire. The

questionnaire was adapted and validated consulting the supervisor and other professors with expertise and knowledge of the field.

A preliminary test of reliability was performed by distributing the questionnaire among 30 respondents, according to which the obtained Cronbach's alpha for all variables of information sharing level and the whole questionnaire was more than 0.7. Its reliability, as measured in terms of Cronbach's alpha (= 0.841), was high and thus, confirmed. Next, the obtained data from the whole sample was analyzed in SPSS and the SmartPLS4 software, using structural equation modeling (SEM) technique for PLS.

4. Findings

In this section, the results of confirmatory factor analysis of each research variable by SmartPLS 4 are presented. The strength of the relationship between the latent and observable variable is given by the factor loading. Factor loading is a value between zero and one. If the factor loading is less than 0.4, the relationship is considered weak and is ignored. A factor loading between 0.4 and 0.6 is acceptable, and if it is greater than 0.6, it is very desirable (Klein, 2010). The factor loadings of the research variables were calculated separately as shown in figure 2.

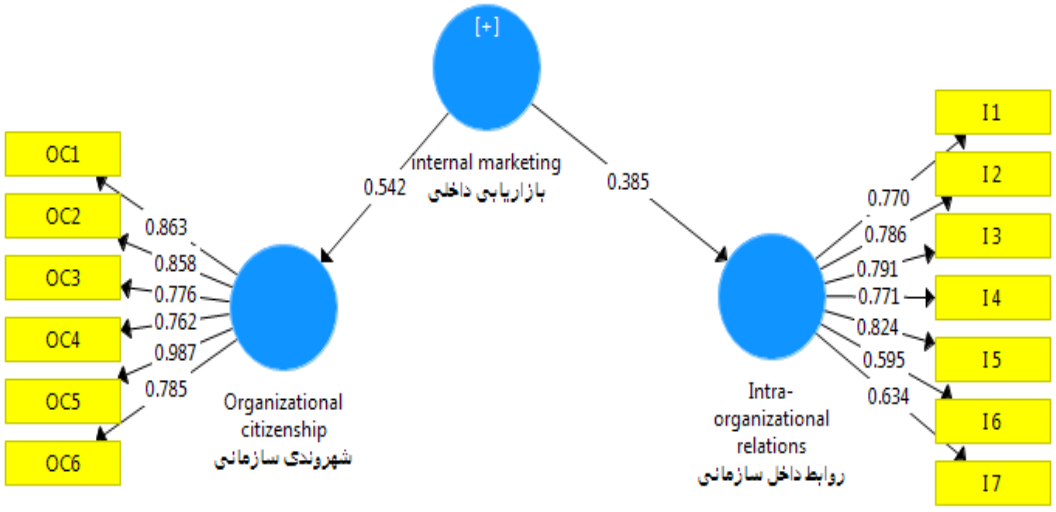

Figure1. Measurement Model of the Internal Marketing Dimension (Standard Estimate)

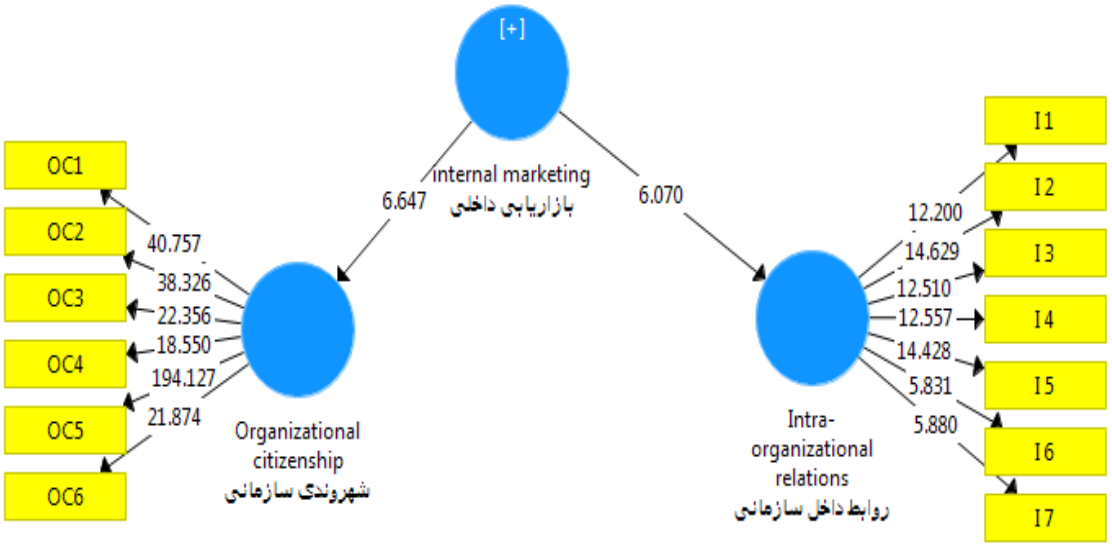

Figure 2. Measurement Model of Internal Marketing Dimension (t-value)

As can be seen in the figure above and table 2, in all the model's constructs, factor loadings have values greater than 0.4. Hence, the reliability of measurement models is acceptable. Having measured the factor loadings of the questions, Cronbach's alphas and composite reliability (Dillon–Goldstein's ρ) were computed, the results of which are reported in the table below.

Table 2. The results of Cronbach's alpha, composite reliability (CR), and convergent validity

Dimension	Component	Indicator	Factor Loadings	t-statistic	AVE	CR	Cronbach's Alpha
Internal Marketing	**Organizational Citizenship**	OC1	0.863	40.757	0.709	0.936	0.916
		OC2	0.858	38.326			
		OC3	0.776	22.356			
		OC4	0.762	18.550			
		OC5	0.987	194.12			
		OC6	0.785	21.874			
	Inter-organizational Relationships	I1	0.770	12.200	0.552	0.895	0.862
		I2	0.786	14.629			
		I3	0.791	12.510			
		I4	0.771	12.557			

Dimension	Component	Indicator	Factor Loadings	t-statistic	AVE	CR	Cronbach's Alpha
		I5	0.824	14.428			
		I6	0.595	5.831			
		I7	0.634	5.880			

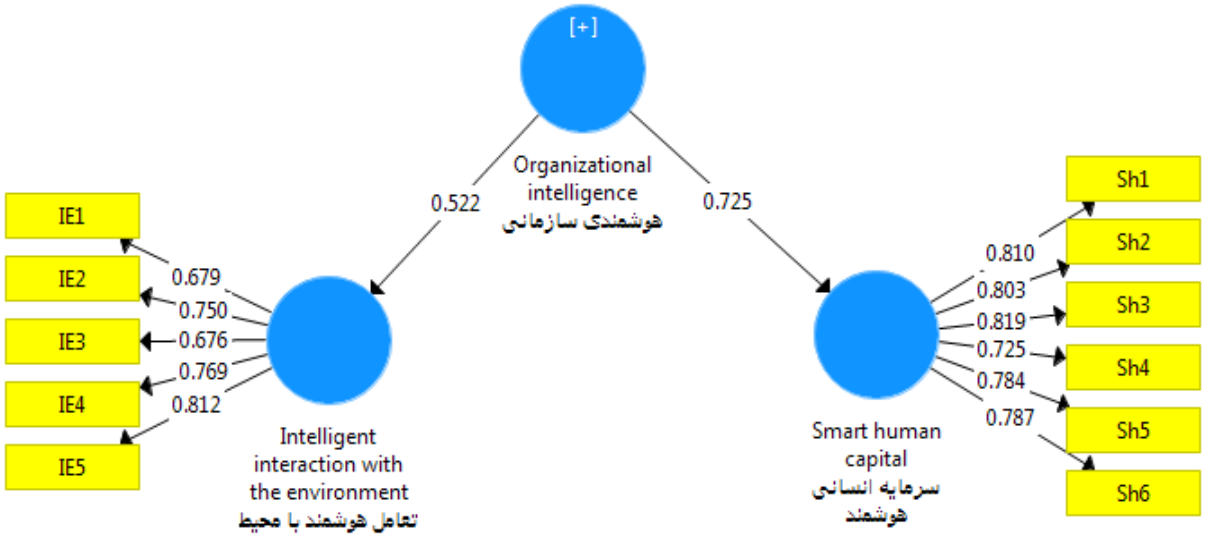

Figure 3. Measurement Model of Organizational Intelligence (Standard Estimate)

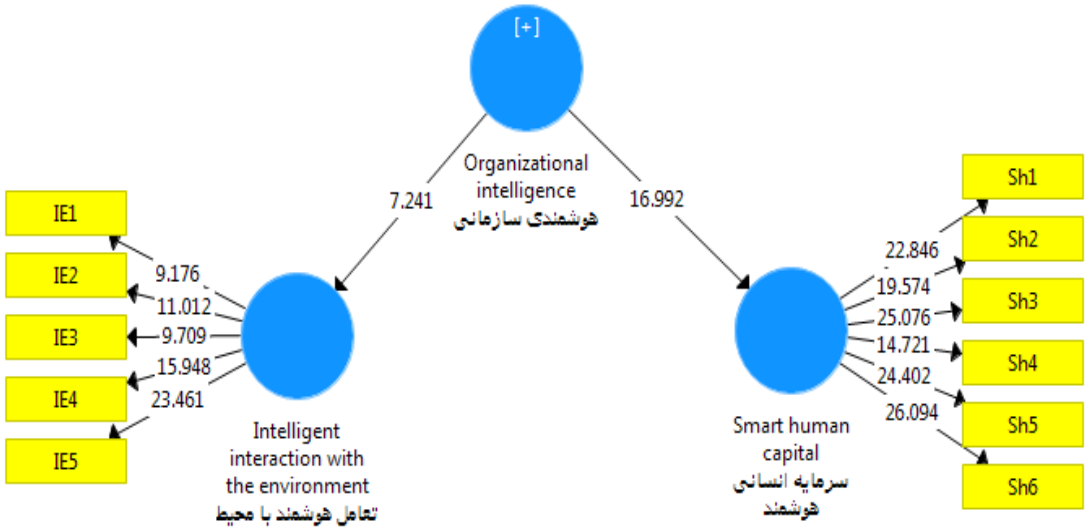

Figure 4. Measurement Model of Organizational Intelligence (t-value)

Table 2. Results of the Measurement Model of Organizational Intelligence

Dimension	Component	Indicator	Factor Loadings	t-Statistic	AVE	CR	Cronbach's Alpha
Organizational Intelligence	Intelligent Interaction with Environment	IE1	0.679	9.176	0.547	0.857	0.793
		IE2	0.750	11.012			
		IE3	0.676	9.709			
		IE4	0.769	15.984			
		IE5	0.812	23.461			
	Intelligent Human Capital	Sh1	0.810	22.846	0.622	0.908	0.879
		Sh2	0.803	19.574			
		Sh3	0.819	25.076			
		Sh4	0.725	14.721			
		Sh5	0.784	24.402			
		Sh6	0.787	26.094			

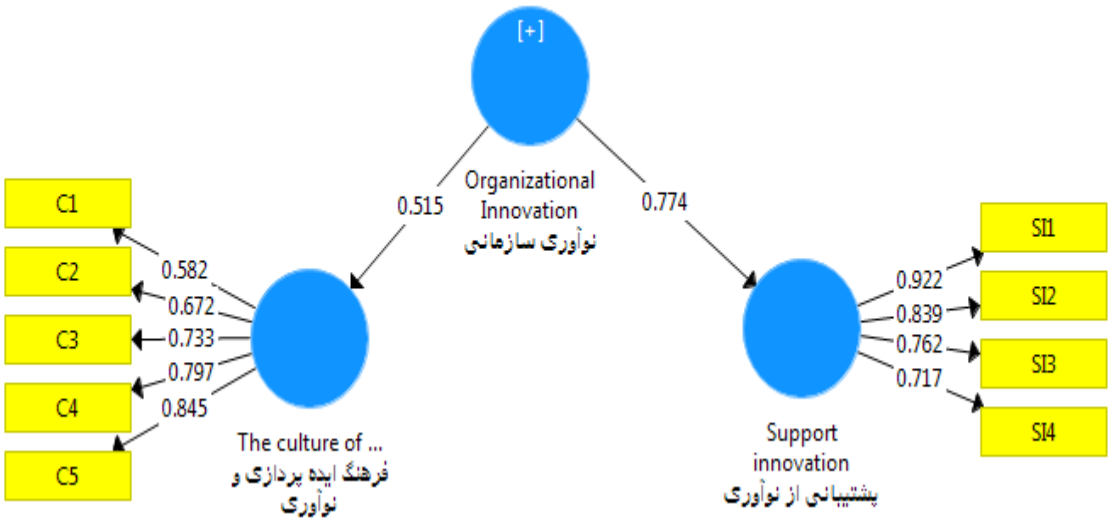

Figure 5. Measurement Model of Organizational Innovation (Standard Estimate)

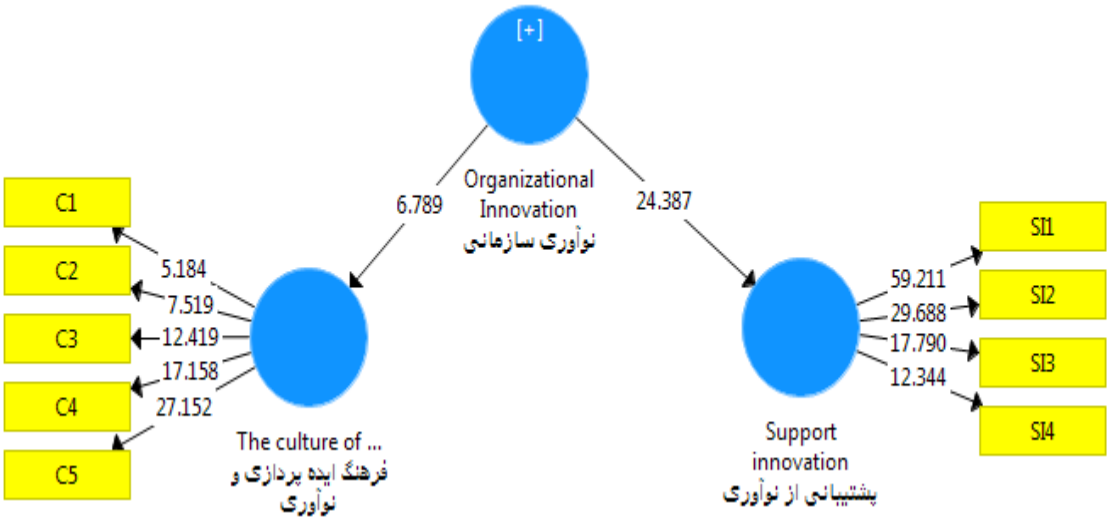

Figure 6. Measurement Model of Organizational Innovation (t-value)

Table 3. Results of the Measurement Model of Organizational Innovation

Dimension	Component	Indicator	Factor Loadings	t-Statistic	AVE	CR	Cronbach's Alpha
Organizational Innovation	The Culture of Ideation and Innovation in Organizations	C1	0.582	5.184	0.535	0.850	0.793
		C2	0.672	7.519			
		C3	0.733	12.419			
		C4	0.797	17.158			
		C5	0.845	27.152			
	Support for Innovation	SI1	0.922	59.211	0.662	0.886	0.829
		SI2	0.839	29.688			
		SI3	0.762	17.790			
		SI4	0.717	12.344			

As is seen in the above table the obtained Cronbach's alpha for all dimensions is greater than the threshold of 0.7, hence the research reliability is confirmed.

To test the composite reliability (CR) of each construct, the Dillon-Goldstein coefficient (ρ) is used. The composite reliability reported in table 1 for each construct is greater than the threshold 0.7, hence composite reliability of the constructs are confirmed.

Another criterion in examining the measurement model fit in terms of internal consistency of the constructs is convergent validity which is measured by average variance extracted (AVE). In the table above, the obtained AVE for all constructs is greater than the minimum acceptable value 0.5, whereby the convergent validity of the model is confirmed.

Chen (1998) proposed three values of 0.19, 0.33 and 0.67 as criterion values for weak, moderate and strong R^2 values, respectively, as the indicators of the structural model overall fit.

Table 4. R^2 values

Q^2	R^2 value	Variable
0.102	0.599	Internal Marketing
0.158	0.265	Organizational Intelligence
0.162	0.312	Organizational Innovation

The second structural model fit index is the Q^2 index. This measure indicates the predictive power of the model regarding an endogenous construct. As a rule, Q^2 values of 0.02, 0.15 and 0.35 indicate weak, moderate and strong predictive power corresponding to an exogenous construct, respectively. Given the R^2 and Q^2 values, as reported in table 4, the structural model overall fit and predicting power is confirmed.

According to Henseler et al (2014), a standardized root mean squared residual (SRMR) value of below 0.1, and in a conservative case, of 0.08, indicates the model adequate overall fit.

Table 5. The results on the overall model fit using standardized root mean squared residual (SRMR) and NFI index

Estimated model	Saturated model	Latent variables
0.082	0.086	**SRMR**
0.462	0.462	**NFI**
2.017	2.017	**d_ULS**
1.104	1.104	**d_G**

The NFI index, which is called the Bentler-Bonnet index, is a comparative fit index. This index assesses the model by comparing the chi-square values of the independent model and the chi-square of the saturated model. An NFI value above 0.9 is acceptable, indicating the model suitability. Bootstrap provides confidence intervals for the two values discrepancy. Values greater than 0.05 for d_ULS measure (i.e. the Euclidean least square discrepancy) and d_G (i.e. the

geodesic discrepancy) indicate good model fit. The obtained d_ULS and d_G values in the above table which are more than 0.05 indicate the model good fit.

By default, PLS4 software tests relationships at the 95% confidence level, and since the t-value at this interval is equal to 1.96, any relationship with a t-value outside the range of -1.96 to +1.96 is considered statistically significant at the 95% confidence interval.

The t-statistic shows the significance of the relationship between the variables. A t-value greater than 1.96 indicates a positive and significant effect; a t-value between -1.96 and +1.96 indicates the lack a significant effect; and a t-value smaller than -1.96 indicates a negative and significant effect. Also, if the path coefficients are above 0.6, it means that there is a strong relationship between the two variables; If it is between 0.3 and 0.6, there is a moderate relationship, and if it is below 0.4, there is a weak relationship. As shown in the model, all the hypotheses of the model are confirmed as their t-value falls outside the specified range, indicating the significance of all hypotheses and relationships between variables at the 95% confidence interval.

5. Discussion and conclusion

Explaining the interactive model of relationships among internal marketing, organizational intelligence, and organizational innovation in the tax administration of the country can contribute to a better understanding of how these components influence one another and ultimately improve the organization's performance. Internal marketing refers to enhancing interactions and communications among organizational members and creating a positive and creative environment for employees. Internal marketing systems include programs designed to improve job satisfaction, employee training and development, and fostering effective intra-organizational relationships. Given that the tax administration interacts with various public and governmental sectors, improving internal relationships can facilitate processes and enhance service delivery efficiency.

Nasif et al. (2022), as well as Pavlidou and Stathis (2020), aligned with the present study, found that employee performance is a function of ability, motivation, and opportunities for engagement. Furthermore, it may create a favorable social environment that encourages employees to work toward organizational goals. A conducive social environment for innovation, internal marketing, and organizational learning appears to be a desirable construct for fostering innovation at both individual and organizational levels. This can generate creative ideas from employees, ultimately leading to enhanced employee performance. Similarly, Aziz and Nail (2024), consistent with the current research, concluded that addressing employees' needs and feedback in internal marketing processes can help identify and improve internal procedures, thus increasing the efficiency and effectiveness of innovations. Additionally, internal marketing can educate employees about customer needs and behaviors, helping them to propose innovative ideas for products and services, which can improve customer experience and foster loyalty. Organizational intelligence refers to an

organization's ability to collect, analyze, and effectively utilize information and data to make optimal strategic decisions. This includes identifying market trends, customer opinions, and client needs. In the tax administration, intelligence can lead to better identification of taxpayers' needs, predicting legal and economic changes, and improving existing services.

Organizational innovation is defined as the development and implementation of new ideas in processes, products, and services. In the tax administration, innovation can enhance processes such as registration, data processing, electronic communication, and other services. These innovations ultimately increase taxpayer satisfaction and improve tax management.

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ETHICAL CONSIDERATION

Authenticity of the texts, honesty and fidelity has been observed.

CONFLICT OF INTEREST

Author/s confirmed no conflict of interest.