The Relationship between the Rational Management of Resources and Performance: Examining the Case of the Government Sector in the Al-Jouf Region

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Abstract: - The study aimed to identify the relationship between rational resource management and the performance of the government sector in the Al-Jouf region. It is divided into 5 dimensions: strategy, discipline, justice, transparency and accountability. The second dimension (the dependent variable) represents performance, which consists of three dimensions: the financial dimension, the customer dimension, and the learning and growth dimension. A questionnaire was distributed to a sample of 245 public sector employees of the Al-Jouf region. The study sample was comprehensive, non-probabilistic and intentional. It was analyzed using the Smart PLS program. The results showed a positive relationship between the dimensions of the rational management of resources) and performance in the government sector institutions in the Al-Jouf region.

Key-Words: - rational management of resources, performance, Al-Jouf region.

1 Introduction

Since its inception, governance and the concept of rational management of resources have attracted the attention of researchers and scholars, leading to various discussions regarding its implications, and consolidating the concept, [1]. Many theories had led to governance and its repercussions. These include the Agency Theory, which discussed the conflict between owners and executives of joint stock companies and its implications, [2], the Supervisory Management Theory, which discussed the performance of executives in maximizing the wealth of shareholders and its impact on them, [3], and the Stakeholder Theory, which is based on the assumption that institutions seek to reach a balance of interests between all relevant parties involved in its activity so that each of them achieves the desired satisfaction, [4].

Saudi Arabia's public sector will remain the primary force of various sectors. It can be a financial provider of enhanced non-oil revenues and a hub for activities associated with those sectors.

To succeed, these national institutions and sectors must apply the standards of rational resource management, starting with legal entity, administrative organization, filling positions with competencies, applying transparency, disclosure, participation, accountability, enhancing integrity and other principles of governance and rational management of resources, [5]. Indeed, many studies demonstrated the importance of enhancing the role of these sectors at the level of providing services and lucrative returns, [6].

Public sector governance can be defined as all the regulations, legislation, policies, organizational structures, manuals, procedures and controls that govern work in public institutions, [7]. They help achieve its goals through professional and ethical work mechanisms, based on integrity and transparency, and are subject to follow-up, control and evaluation mechanisms. They provide accountability tools to ensure efficient and effective performance and provide fair government services, [8].

The Kingdom of Saudi Arabia is going through a period of economic and administrative transformation, aimed at achieving sustainable development goals and creating a diversified knowledge-based economy in accordance with the Kingdom's Vision 2030, [9]. The Vision aims to

enhance the application of accounting principles and accountability in an effort to optimize the use of resources and achieve advanced levels of economic diversification. Accordingly, governance and rational resource management are one of the foundations of this transformation, and the most important tools that contribute to reaching the goals of the State's strategic plans, [10], [11].

The objectives of the Kingdom's Vision 2030 and the Transformation Program 2020 represent an important step towards the transition to a knowledge-based economy and the transformation of the public sector into efficient and effective institutional work. Despite the efforts, the level of application of the Kingdom's principles, concepts and elements of governance remains less than expected.

Al-Jouf is one of the Kingdom's regions characterized by a diversity of economic resources, distinguished infrastructure and geographical location. This confirms what this region can achieve from its economic launch in line with the objectives set out in the Kingdom's Vision 2030. Through this article, we seek to identify the relationship between the rational management of resources and performance in the public sector in the Al-Jouf region. We also seek to provide a mechanism for assessing the performance of government institutions and determine the extent to which these institutions meet the rational resources management requirements.

The purpose of this study is to explore the relationship between performance in government sectors and rational management of resources. Therefore, information related to educational institutes in the Al-Jouf region is presented. The rational resource management approach by the institution's authorities is highlighted in the existing studies. This research will address the relationship between the factors that are associated with the rational management of resources and their effect on the performance of government institutions in the Al-Jouf region. This research addresses the literature gap of this research and will explore the relationship between rational resource management and the performance of public sectors.

2 Literature Review

Rational management provides a strategic management of resources and improves the functional assessment of the public sector. It enhances the management of financial resources and the growth of public sector institutions. According to El-Tahan et al. (2021) [12], rational management

is essential to improve the service techniques and the performance of education sector in the Al-Jouf region. Strategic management and staff training in educational organizations enhance the growth of public sectors. Moreover, human resource management in public administration operations improves the financial growth of public institutions. According to Pribadi (2021) [13], rational management and bureaucratic reforms at the public institution improve citizen satisfaction and public service. Therefore, human resources in the Al-Jouf public sectors are aimed at strengthening resource management because it helps the institutions to improve practical actions, such as providing justice and accountability. Growing social and financial pressures lead to pressure on public sector organizations to manage the resource efficiently, [14]. Hence, strategic management of discipline and accountability improve the resource management of Al-Jouf's public institution.

Rational planning is necessary to improve the financial position and growth of the institutions. Studies conducted by different researchers highlighted that there exists a positive relationship between a rational management approach and performance in the public sector, [15]. It ensures strategic discipline at government institutions because managers facilitate planning and improve decision-making factors. The political approach associated with rational management ensures justice and accountability in the public sector. According to Mujalli (2020) [16], internal audit management and accountability in government departments improve the educational system's performance in Saudi Arabia. Therefore, the role of rational resource management is essential to improve the performance of Al-Jouf's government sector. Moreover, the governance role in Saudi Arabia's secondary schools helps to improve the rational management of resources and raise the quality of education, [17]. It also includes assessing the intellectual abilities of people to improve the strategic disciple.

This study aimed to explore the relationship between the rational management of resources and its association with the performance of government sectors. The study's conceptual framework is based on the selection of dependent and independent variables. The dependent variable includes the rational management dimension such as discipline, justice, strategy, transparency, and accountability, whereas the independent variable is the performance of Al-Jouf's government institutions. The performance of educational institutes, financial dimension, and growth is associated with the independent variable of the study. This study differs

from previous studies in that it focuses on government-sector institutions in the Al-Jouf region, and the proposed framework includes a set of principles for rational resource management and its relationship to performance. This is in line with Saudi Arabia's plans and visions of strategic confrontation.

3 Research Methodology

The present study relied on the descriptive analytical approach to achieve the desired goals and answer the research problem. This design aided in describing the sample characteristics and study variables, which are the rational management of resources as an independent variable and performance as a dependent variable. The analytical approach was used to determine the relationship between the dimensions of rational management of resources to the performance of public sector institutions in the Al-Jouf region.

3.1 Study Population and Sample

The study population consists of public institutions in the Al-Jouf region. For the study sample, a number of these institutions were selected. The unit analysis included 245 employees from these institutions who have administrative assignments.

3.2 Unit of Analysis

The unit of analysis included employees who have administrative assignments in public sector institutions at various administrative levels in the Al-Jouf region in the Kingdom of Saudi Arabia. The unit numbered 245 individuals, who were selected because they were the most suitable to answer the questions set in the study tool.

3.3 Data Collection Tool

This study mainly relied on designing an electronic questionnaire as a central tool for the study. The first page introduced the sample members and the objectives of the study. The first part was also devoted to filling out the respondents' demographic data, which are as follows:
Gender, in two nominal categories.
Age, in three quantitative categories.
Academic qualification, in four ordinal categories.
Number of employees, in four ordinal categories.
Experience gained, in four quantitative categories.
Part Two: Statements related to the subject of the rational management of resources. This part includes a set of questions to identify the variables of rational management in public sector institutions

in the Al-Jouf region, which are placed in four dimensions (strategic, discipline, justice and transparency). They are measured through statements for each dimension on a scale from 1 to 5.
Part Three: Statements related to performance indicators. This axis includes a set of questions to identify the performance of public sector institutions in Al-Jouf, which are placed in three dimensions (financial, customer and learning and growth) measured through phrases for each dimension on a scale from 1 to 5.

3.4 Data Analysis

The data was processed and analyzed using the SMART PLS program, and several statistical methods were used in this research, including:
Descriptive statistical methods, which include, the calculation of arithmetic means, the standard deviations of the study variables, and the coefficients of the bilinear correlation between the study variables, to give preliminary results about them.
To measure the relationship between each variable and the indicators used to measure it, a set of Confirmatory Factor Analysis (CFA) equations was used.
The Structural Model method, based on the Maximum Likelihood Estimation, was used in the research relying on the Analysis of Moment Structures tool. Then, the two-step structural equation method (SEM) was used, where the measurement model was estimated, followed by the structural model. Finally, the research hypotheses were tested, [18].

3.5 Study Model and Hypotheses

To reach the main objective of this research, the following theoretical and applied framework, shown in Figure 1 and Table 2, will be followed. Figure (1) shows the study model, illustrating the set of variables that make up the present study. It gives a preliminary perception of the effect among variables, which will be expressed in quantitative form. Based on previous studies, and the opinions of researchers about the relationship between the rational management of resources with performance in the government sector, the study adopted the model that shows the following variables in Table (1).

The researchers also developed a set of hypotheses based on the research problem and its various components in order to know the effect of rational resources management on the performance

of public sector institutions in the Al-Jouf region in Saudi Arabia. These are as follows:

Main hypothesis: There is a positive statistically significant impact at the significance level ($\alpha \leq 0.05$) of the resource governance variable on the performance of government sector institutions in the Al-Jouf region.

To verify the role of each dimension of rational resources management on the performance of government sector institutions in the Al-Jouf region, the main hypothesis was divided into five sub-hypotheses as follows:

Table 1. Study variables

Main variables	Hypothesis	Measurement method
Independent variable: rational resources management (strategic dimension, discipline dimension, justice dimension, transparency dimension and accountability dimension).	There is a positive role for rational resources management in its dimensions in achieving good performance for public sector institutions with its three dimensions (the financial dimension, the customer dimension, and the learning dimension) in the Al-Jouf region.	Measuring the rational resources management variable based on the principles of governance in the public sector, in five dimensions that were measured through 5 statements for each dimension on a scale from 1 to 5.
Dependent variable: performance (financial dimension, customer dimension, learning and growth dimension).		Performance in the public sector is measured based on the dimensions of the balanced scorecard, through a set of questions for each dimension, which are placed in three dimensions (the financial dimension, the customer dimension, and the learning and growth dimension). It was measured through 4 statements for each dimension on a scale of 1 to 5.

There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the strategic dimension on the performance of government sector institutions in the Al-Jouf region.

The researchers also developed a set of hypotheses based on the research problem and its various components in order to know the effect of rational resources management on the performance of public sector institutions in the Al-Jouf region in Saudi Arabia. These are as follows:

Main hypothesis: There is a positive statistically significant impact at the significance level ($\alpha \leq 0.05$) of the resource governance variable on the performance of government sector institutions in the Al-Jouf region.

To verify the role of each dimension of rational resources management on the performance of government sector institutions in the Al-Jouf region, the main hypothesis was divided into five sub-hypotheses as follows:

There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the strategic dimension on the performance of government sector institutions in the Al-Jouf region.

There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the discipline dimension on the performance of government sector institutions in the Al-Jouf region. There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the transparency dimension on the performance of government sector institutions in the Al-Jouf region. There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the

dimension of justice on the performance of government sector institutions in the Al-Jouf region. There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the accountability dimension on the performance of government sector institutions in the Al-Jouf region.
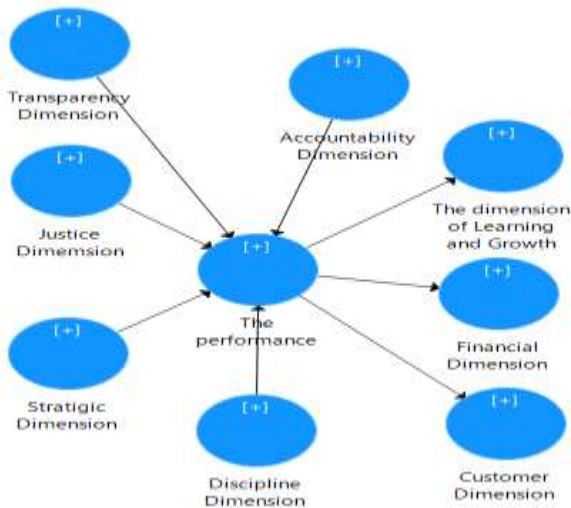

Fig. 1: The study model
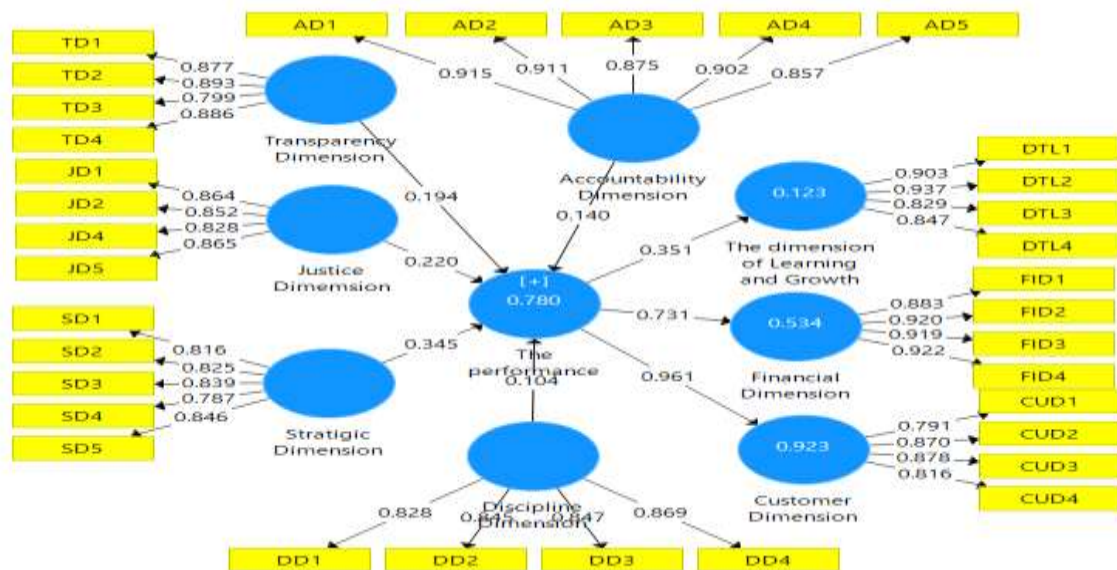*Source: Prepared by the researcher based on the outputs of the Smart PLS program.*

Fig. 2: Tracks of the Standard Model.
Source: Prepared by the researcher based on the outputs of the Smart PLS program

4 Results of the Study

4.1 The Reliability and Validity of the Study Tool

To reach a more valuable model that is more suitable for a research environment, the model must have high validity and reliability. Hence, the relationship between the constructs was analyzed using Smart PLS by calculating track modelling algorithms (PLS Algorithm). These algorithms estimate the trajectory of models using latent variables. The Measurement Model and Structural Model of the data were also estimated, [19].

Reliability was assessed by examining the ramifications of factors with their underlying constructs. More than one stability index was calculated, namely "Cronbach's alpha", "Composite reliability" and "Average Variance Extracted".

Table 2. Composite reliability indicators for the rational management of resources dimensions

Variables	Statements	Items	Loadings	CA	CR	AVE
Strategic dimension	Your organization has a strategic resource management plan.	SD1	0.816			
	Your organization has operational and tactical plans based on the strategic vision.	SD2	0.825			
	Your organization invests material resources optimally in order to achieve strategic goals.	SD3	0.839	0.881	0.913	**0.677**
	Your organization analyzes the strengths and weaknesses of its internal environment and identifies potential opportunities and risks.	SD4	0.787			
	Your organization has sufficient criteria to verify the achievement of objectives.	SD5	0.846			
Discipline dimension	Your organization's personnel adhere to the rules and ethics of professional conduct.	DD1	0.828			
	Your organization is keen to follow ethical behavior in all its activities, operations and decisions.	DD2	0.845	0.869	0.911	**0.718**
	Your organization's personnel are committed to respecting working hours.	DD3	0.847			
	Your organization's personnel are committed to preserving the organization's funds and property as much as possible.	DD4	0.869			
Justice dimension	Instructions and regulations apply to employees without discrimination.	JD1	0.864			
	The instructions and regulations are applied to the related parties without discrimination.	JD2	0.852	0.875	0.913	**0.677**
	There is justice in your organization in the distribution of salaries and wages.	JD4	0.828			
	Your organization considers the rights of its employees regardless of job level.	JD5	0.865			
Transparency dimension	Your organization discloses periodic reports to its users in a timely manner.	TD1	0.877	0.887	0.922	**0.748**
	The information provided by the	TD2	0.893			

	organization is transparent.					
	Beneficiaries have the right to see all transactions and decisions related to them.	TD3	0.799			
	Problems in the organization are resolved transparently.	TD4	0.886			
Accountability dimension	Your organization applies a system of accountability at the individual and collective levels.	AD1	0.915			
	The organization sets clear standards for performance appraisal for employees.	AD2	0.911			
	There is a body within the organization for workers' accountability.	AD3	0.875			
	Space is provided in your organization for the competent bodies to conduct regulatory investigations and prepare reports.	AD4	0.902	0.936	0.951	**0.796**
	Supervisory agencies hold regular meetings with your organization to hear complaints and hold violators accountable according to law.	AD5	0.857			

Source: Prepared by the researcher based on the outputs of the Smart PLS program

Based on Figure 2 and Table 2, we find that the composite reliability indicators of the rational resources management dimensions (strategic, discipline, justice, transparency, accountability) achieved high values for the measures and variables used. The factor loadings coefficients ranged between 0.799 and 0.911, which are excellent reliability coefficients, [20]. The Cronbach's alpha coefficient (CA) and composite reliability (CR) values ranged between 0.881 and 0.951, and the mean variance (AVE) values ranged between 0.679 and 0.796.

Table 3. Convergent validity indicators for the performance dimensions

Variables	Statements	Items	Loadings	CA	CR	AVE
Financial dimension	Your organization is constantly improving the services provided to reduce costs.	FID1	0.883			
	Your organization is constantly improving the services provided to increase the return on investment.	FID2	0.920			
	Your organization is constantly improving the services provided to increase the added economic value.	FID3	0.919	0.932	0.951	**0.830**
	Your organization adopts new development policies to increase future cash flows in line with the established investment policy.	FID4	0.922			
Customer dimension	The organization is keen to develop its services to customers in line with its social responsibility.	CUD1	0.791			
	Your organization adopts policies to increase customer satisfaction.	CUD2	0.870			
	Your organization has the ability to respond to customer complaints and ensure their satisfaction.	CUD3	0.878	0.860	0.905	**0.705**
	The services provided to customers are of high quality and at a lower cost.	CUD4	0.816			
Learning and growth dimension	Your organization provides the necessary training for staff to raise the capacity and quality of productive efficiency.	DTL1	0.903			
	Your organization undertakes initiatives that seek to develop work.	DTL2	0.937			
	Your organization's incentives and rewards system for employees is of high quality.	DTL3	0.829	0.902	0.932	**0.775**
	The system of incentives and rewards for employees in place in your organization is of high quality.	DTL4	0.847			

Source: Prepared by the researcher based on the outputs of the Smart PLS program

Similarly, based on Table 3, we find that the validity indicators of the performance variable in public sector institutions achieved high values for the standards and variables used. The saturation coefficients (factor loadings) ranged between 0.791 and 0.922, which are excellent coefficients of stability. The values of Cronbach's alpha coefficient (CA) and composite reliability (CR) were also estimated between 0.860 and 0.932, and the mean values of variance (AVE) ranged between 0.705 and 0.830.

Convergent validity refers to the degree of agreement between two or more measures in the same construct or model. The convergent validity was calculated by reviewing the extracted variance for each factor, and according to Fornell & Larcker (1981), [21], convergent validity is achieved if the extracted variance values are not less than 0.5.

It is clear from the above tables that all mean variances (AVE) are greater than 0.5, and all complex reliability coefficients (CR) are significant and statistically acceptable because they are greater than 0.7. In addition, all Cronbach's alpha coefficients (CA) are statistically acceptable because they are greater than 0.7 and within the recommended rates according to Dijkstra et al.(2015), [22].

4.2 Discriminant Validity

Discriminant validity indicates that the factors of a variable are logically differentiated and not repeated and overlapped with other variables. This is confirmed by testing the discriminant validity matrix between the study variables and dimensions. Indeed, by comparing the pair of associations between the factors obtained and the estimates of the variance extracted for construction, discriminant validity is determined when it is confirmed by observing diagonal elements (the root square of the average value of the common variance AVE for each construct). The following table clearly demonstrates the discriminant validity indicators, which must be greater than the associated values in the rows and columns.

Table 4 shows that all the diagonal values are higher than the associated values in the rows and columns and range between 0.823 and 0.911. This indicates the availability of the discriminant validity of the study tool's statements.

Table 4. The results of the discriminant validity of the standards

	AD	CUD	DD	FID	JD	SD	DTL	TD
AD	0.892							
CUD	0.758	0.840						
DD	0.769	0.774	0.847					
FID	0.832	0.729	0.763	0.911				
JD	0.662	0.813	0.677	0.598	0.852			
SD	0.768	0.817	0.803	0.755	0.674	0.823		
DTL	0.128	0.078	0.098	0.136	0.088	0.113	0.880	
TD	0.644	0.790	0.620	0.561	0.8475	0.611	0.049	0.865

Source: Prepared by the researcher based on the outputs of the Smart PLS program

Table 5. HTMT Test for discriminant validity

	AD	CUD	DD	FID	JD	SD	DTL	TD
AD								
CUD	0.891							
DD	0.847	0.892						
FID	0.845	0.745	0.843					
JD	0.725	0.775	0.769	0.656				
SD	0.845	0.817	0.745	0.838	0.757			
DTL	0.140	0.090	0.112	0.149	0.096	0.126		
TD	0.692	0.801	0.704	0.679	0.721	0.741	0.751	

Source: Prepared by the researcher based on the outputs of the Smart PLS program

Table 6. Quality standards for the study model

Variable	The coefficient of determination R2	The explanatory power F2	The predictive power Q²
Performance	0.780	/	0.643
Customer Dimension	/	11.979	/
Financial Dimension	/	1.147	/
The dimension of Learning and Growth	/	0.140	/

Source: Prepared by the researcher based on the outputs of the Smart PLS program

HTMT values close to 1 indicate a lack of discriminant validity. The HTMT is used as a criterion by comparing it to a predefined threshold. If the HTMT value exceeds this threshold, one can conclude that discriminant validity is lacking. Some authors propose a 0.90 threshold.

Table 5 shows that the measures are reliable and valid, as all values are below 0.90. Thus, the discriminant validity (HTMT) of the model can be trusted, as the HTMT result achieved the minimum level and it was confirmed that there were no multiple linear relationships.

4.3 Model Fit Quality

The structural model of the study is assessed by the set of statistical standards and methods described in table 6.

We note from Table 6 that the value of the coefficient of determination of the rational resources governance variable towards the performance of government sector institutions in the Al-Jouf region in the model is (R2 = 0.780). This indicates that 78% of the discrepancy in the performance of the government sector in the Al-Jouf region is explained by the rational resources management dimensions. We also used the blindfolding test to clarify the ability of the rational resources management variables to predict changes in the performance of government sector institutions. Table 6 indicates that the (Q²) value was 0.643, which is considered good.

All of the above confirms that the dimensions of rational resources management have the ability to predict and explain the discrepancy in the performance of government sector institutions in the Al-Jouf region. Thus, the study hypotheses can be tested.

4.4 Testing the Study Hypotheses

Based on the above results, after ensuring that there is no overlap between the variables and checking the quality of the model, it is now possible to test the hypotheses of the study. The least squares analysis (PLS) based on the bootstrapping test was used to analyze the direct and indirect effects between the study variables.

The main hypothesis: There is a positive, statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the rational resources management variable on the performance of government sector institutions in the Al-Jouf region.

Figure 3 and Table 7 show that from the path coefficient and the value of t, there is a
statistically significant effect of the rational management of resources on the performance of public sector institutions in the Al-Jouf region. The path coefficient was (0.900) at a significant level (α≤0.01). The calculated t-value amounted to (62.754), and this confirms the acceptance of the main hypothesis which states: There is a relationship and a positive statistically significant effect at the level of significance (α≤0.05) for the rational management of resources variable on the performance of government sector institutions in the Al-Jouf region.
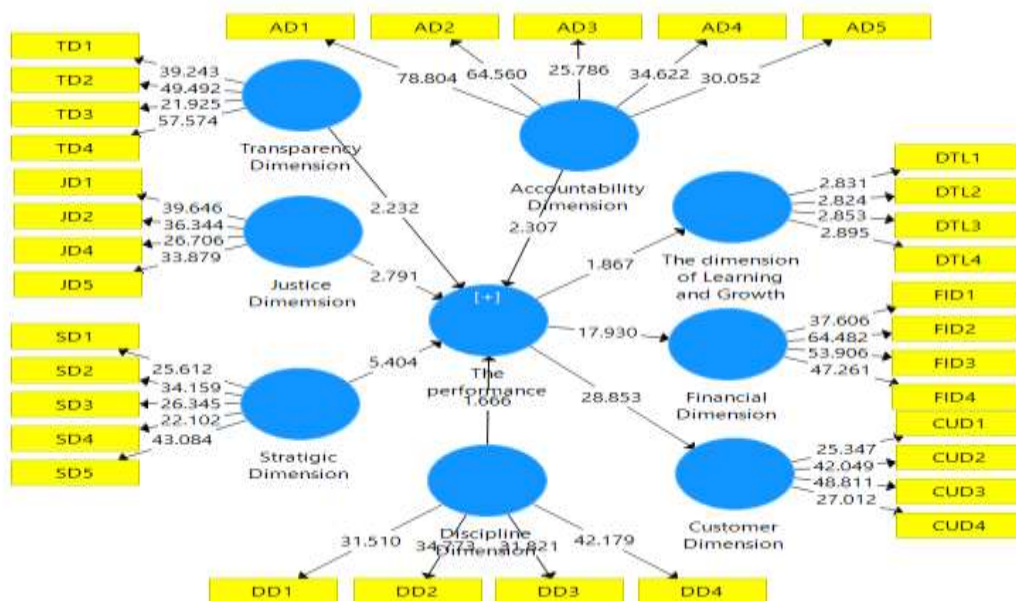
Fig. 3: The structural model to test the impact of the rational resources management variable on the performance of government sector institutions in the Al-Jouf region.
Source: Prepared by the researcher based on the outputs of the Smart PLS program

Table .7 Path Coefficient of the research hypotheses

Hypo	Relationship	Std.Beta	Std. Error	T Values	P Values	Decision
HP1	Rational management of resources -> The performance	0.900	0.014	62.754	**0.000**	**Supported****

*Significant at P** =< 0.01, p*<0.05*
Source: Prepared by the researcher based on the outputs of the Smart PLS program

To verify the role of each dimension, the first main hypothesis was divided into five sub-hypotheses as follows:

- There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the strategic dimension on the performance of government sector institutions in the Al-Jouf region.
- There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the discipline dimension on the
- performance of government sector institutions in the Al-Jouf region.
- There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the transparency dimension on the performance of government sector institutions in the Al-Jouf region.
- There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the dimension of justice on the performance of government sector institutions in the Al-Jouf region.
- There is a positive and statistically significant effect at the level of significance ($\alpha \leq 0.05$) for the accountability dimension on the performance of government sector institutions in the Al-Jouf region.

Table 8. Results of the (bootstrapping) test for the impact of the rational management of resources axes on the performance of government sector institutions in the Al-Jouf region.

Hypo	Relationship	Std.Beta	Std. Error	T Values	P Values	Decision
HP1	Strategic Dimension -> The performance	0.345	0.069	5.000	0.000	**Supported****
HP2	Discipline Dimension -> The performance	0.104	0.069	1.513	0.131	**Unsupported**
HP3	Transparency Dimension -> The performance	0.194	0.092	2.115	0.035	**Supported***
HP4	Justice Dimension -> The performance	0.220	0.081	2.704	0.007	**Supported****
HP5	Accountability Dimension -> The performance	0.140	0.062	2.248	0.025	**Supported***

*Significant at $P** =< 0.01, p*<0.05$*
Source: Prepared by the researcher based on the outputs of the Smart PLS program

Table 8 displays the (t) values, the coefficients of the paths and the level of significance that show the direct impact of the influence of the rational management dimensions of resources on the performance of public sector institutions in the Al-Jouf region. The results of the sub-hypotheses test can be summarized as follows:

- It is clear from the statistical results and follow-up of (t) values that the axis (strategic dimension) has a statistically significant effect on the performance of government sector institutions in the Al-Jouf region. The value of (t) for this dimension was (5) at the level of significance ($α≤0.01$). Thus, we accept the hypothesis that states: Strategic dimension has an impact on the performance of government sector institutions in the Al-Jouf region.

- The test results also indicated that the second sub-hypothesis was rejected (effect coefficient = 0.104, t = 1.513, P = 0.131). Thus, it can be said that discipline did not have any statistically significant effect on the performance of government sector institutions in the Al-Jouf region.

- It is also clear from the statistical results and follow-up of (t) values that the (transparency) dimension has a statistically significant effect on the performance of government sector institutions in the Al-Jouf region, as the (t) value for this dimension reached (2.704) at the level of significance ($α≤0.01$). Thus, we accept the hypothesis that states: Transparency dimension has an impact on the performance of government sector institutions in the Al-Jouf region.

- Further, from the statistical results and follow-up of (t) values, we find that the (justice) dimension has a statistically significant effect on the performance of government sector institutions in the Al-Jouf region, as the (t) value for this dimension reached (2.115) at the level of significance ($α≤0.05$). Thus, we accept the hypothesis that states: Justice dimension has an impact on the performance of government sector institutions in the Al-Jouf region.

- It is also clear from the statistical results and follow-up of (t) values that the (accountability) dimension has a statistically significant effect on the performance of government sector institutions in the Al-

Jouf region, as the (t) value of this dimension reached (2.248) at the level of significance ($α≤0.05$). Thus, we accept the hypothesis that states: Accountability dimension has an impact on the performance of government sector institutions in the Al-Jouf region.

5 Discussion

A review of the research hypotheses analysis revealed that there are a number of important conclusions related to the main objective that the research sought to achieve, which is to determine the relationship between the rational management of resources and performance of the government sector in the Al-Jouf region. The most important of these conclusions are stated hereunder.

It was clear from testing the main hypothesis that "there is a statistically significant positive effect of the variable of rational resource management at the level of significance ($α≤0.05$) on the performance of government sector institutions in the Al-Jouf region" tIndeed, the value of the impact and the interpretation of the elements of good resources management for performance came at a value of around 0.9. This means that the rational management of resources contributes by 90% to increase the performance of government sector institutions in the Al-Jouf region. This result is consistent with the results of the study by Mujalli (2020) [16]. Rational management of resources is an effective system for improving the performance of individuals and institutions that has an impact on improving the social and economic dimensions of government institutions (Pribadi, 2021) [13]. It sets sound frameworks for increasing institutional performance [14].

Additionally, the results of the first sub-hypotheses test found that the strategic dimension has a positive, statistically significant effect at the level of significance ($α≤0.05$) on the performance of government sector institutions in Al-Jouf. This result is consistent with El-Tahan et al. (2021) [12], which showed that the strategic dimension plays an important role in improving the performance of the public sector in general and university institutions in particular.

It was also clear from the examination of sub-hypotheses 3, 4 and 5 that dimensions of transparency, justice and accountability have a

statistically significant positive effect at the level of significance ($\alpha \leq 0.05$) on the performance of government sector institutions in the Al-Jouf region. The value of the impact was 0.19 for transparency, 0.220 for justice, and 0.14 for accountability. This implies that these dimensions have a positive impact on performance in the government sector. These results are consistent with the study by Dobija et al. (2019) [15]. Good governance increases the effectiveness of the performance of public sector institutions. It establishes transparency and decentralization controls and sets systems of accountability and responsibility. Moreover, it develops sound administrative structures that determine decision-making and the distribution of powers, [17]. It prevents a single group from monopolizing all decisions in the organization and guarantees a balance of performance (Mujalli, 2020) [16].

6 Conclusion

The adoption and application of the principles of rational management of resources in public sector institutions are governed by the legislative, regulatory, economic and social structure. Therefore, it contributes to a mechanism for measuring the performance of government agencies, and the adoption of foundations for measuring performance in the public sector, enhances competition between government institutions and ensures coordination between government agencies in achieving the objectives of government institutions added to the Vision 2030. Promoting the optimal use of available resources and enhancing the efficiency of government performance is one of the outcomes of applying the principles of good resource management.

The study, which aimed to find out the relationship between good governance and performance of government sector institutions in Al-Jouf region, found a positive impact between the two. A positive impact of transparency, justice and accountability on the performance of Al-Jouf's government sector institutions was also found.

The study recommends that government institutions in the Al-Jouf region be urged to strengthen their capacity to implement the principles of rational resources management and establish an organizational culture and an authentic approach so that the administration attains its goals and strategic vision. In addition, government institutions should seek to enhance the management principles

(discipline, fairness, transparency, accountability) through the development of a guideline for applying the principles of rational management of resources in these institutions. This takes into account the nature of government work and is consistent with promoting the principles of good governance in accordance with international standards and principles. Moreover, government institutions should create an annual award for rational management of resources and governance under the Al-Jouf Award for Excellence and Creativity, organized by the Emirate of Al-Jouf region. It should be granted to the institution and the employee who best applies the principles of rational resource management to create healthy competition between government institutions and employees in order to achieve the government's goals of raising companies' performance level.

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The authors equally contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

Conflict of Interest
The authors have no conflicts of interest to declare that are relevant to the content of this article.