

A Human Resources Management Perspective on the Complementary Relationship between the Success of the GRC Model, Employee Perception, and the Impact of This Relationship on Performance

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Abstract

The purpose of this study is to determine how the governance, risk, and compliance (GRC) model influences the performance of government-related employees and the effect of employees' perceptions on the efficacy of the model. Descriptive and analytical approaches were used to present the theoretical background and determine the study's contributions. Additionally, an experimental approach was adopted to demonstrate the practical side of the GRC model, and a questionnaire was developed to assess the sample's perception. To measure the impact of the GRC model on the performance of 404 employees of the Ministry of Human Resources in King Saudi Arabia. Several statistical methods, including SPSS and SEM by Amos, were utilised to analyse the data and verify the hypotheses. The results indicated that there is an inverse relationship between the model and the employees' performance, while there is a direct relationship between the model and the employees' perception of the model.

Keywords: GRC model; Governance; Risk; Compliance; Employees' Perception Employees' Performance.

1- Introduction

In the midst of the accelerating momentum of industrial and environmental changes and developments that the world is witnessing, countries cannot achieve their aspirations without formulating a vision for the future ([Shahim, Batenburg, Vermunt, , 2012](#)). taking into account the plans and objectives aimed at achieving it, as visions represent a real beginning to storm the future ([Ramalingam et al., 2018](#)).

The Vision 2030 of the Kingdom of Saudi Arabia was launched in April 2016, with several strategic goals, targets, performance indicators, initiatives, and numerous compliances. The public sector, the private sector, and the non-profit sector all contribute to achieving these objectives.

The Vision 2030's most prominent programme is the National Transformation Program, which aims to improve the productivity of government employees, the quality of services provided to citizens, the transparency of all government sectors, and the responsiveness of government agencies to customer feedback. Among its most prominent dimensions is the achievement of excellence in government performance.

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The programme should be accompanied by a few projects, models, and stringent regulations for implementation, follow-up, development, and impact measurement to maximise the programme's effectiveness in achieving its goals and contributing to the realisation of the Kingdom's 2030 vision.

To attain the utmost efficacy of the program's goals and make progress towards realising the Kingdom's Vision 2030, it is imperative to supplement the program with various initiatives, models, and regulations for execution, monitoring, enhancement, and evaluation of its impact. The application of the GRC framework provides Institutions with a solid foundation, facilitating the establishment of an environment that is highly dedicated to oversight controls. This commitment is subsequently manifested in the performance of individuals and, ultimately, in the overall performance of the organisation ([Kuchma & Kotukh, 2023](#)). This maximises the utilisation of the existing capabilities.

Therefore, the significance of the model becomes evident, as it is crucial not only for attaining the objectives of the vision and its programmes but also for accomplishing the objectives of other organisations in a broader sense. The governance, risk, and compliance model, sometimes referred to as GRC, does not entail the establishment of a major department solely dedicated to its functions, nor does it need the elimination of decentralised approaches within the organisation ([Abdurrahman, Gustomo & Prasetio, 2023](#)). This pertains to the establishment of a methodology that guarantees the provision of accurate and suitable information to pertinent individuals within organisations at the appropriate junctures while effectively establishing objectives and implementing the necessary protocols, policies, and controls to address instances of uncertainty and uphold principled conduct with consistent performance ([OCEG, 2021](#)). This is achieved through the application of a business framework that integrates governance, risk management, and compliance ([Kuchma & Kotukh, 2023](#)).

GRC model is an abbreviation comprised of three letters that stand for "Governance," "Risk," and "Compliance." It is a set of capabilities that enables an organisation to reliably achieve its objectives, deal with uncertainty, and act with integrity. Even though the concepts comprising this term are not particularly novel, the term itself is relatively recent ([Hendra, 2021](#); [McIntosh, Liu, Susnjak, Alavizadeh, Nowrozy & Watters, 2023](#)).

Notably, the concept of the governance, risk, and compliance model does not imply the establishment of a large department for model business and the use of decentralisation methods in the institution ([Pricillia, 2021](#)). Rather, it refers to the development of a methodology that ensures that the concerned individuals in the institution receive the appropriate and accurate information at the appropriate times and with the setting of objectives ([Vicente & Mira Da Silva, 2011](#)). By applying a business concept that integrates governance, risk management, and compliance, the correct procedures, policies ([Dupuis et al., 2011](#)), and controls are implemented to resolve uncertainties and work with integrity and disciplined performance ([OCEG, 2021](#)).

One of the newly established concepts is the governance, risk, and compliance model, which combines concepts inherent to institutions, whether in the private or public sector, and consists of a set of capabilities that must work together to achieve what is known as disciplined performance ([Haugh, 2018](#)).

In light of the foregoing, it is clear that the significance of the present study lies in identifying the nature of the complementary relationship between the dimensions of the model (governance, risk, and compliance) and the reflection of this relationship on the performance of individuals; as well as developing a theoretically developed framework for the GRC model and study variables within an integrated framework that supports their performance ([.5 et al., 201 Mayer](#)

Despite the importance of GRC model, many of institutions are unaware of the benefits of integrating these three pillars, or the so-called three lines of defense, into a single system known as the GRC, or they do not place a high priority on understanding the method of communication between these three departments in an integrated and consistent manner ([Abdurrahman, Gustomo & Prasetyo, 2023](#)). It disregards or disregards the fact that it represents the spinal cord of enterprise management, as it - according to ([OCEG, 2021](#)) - pertains to developing a methodology that ensures that the concerned parties obtain the right information at the right times, set the right goals, and apply the correct procedures and controls.

This can be accomplished by activating the GRC model in its entirety, in terms of coordinating and unifying efforts, activities ([Raman & Pramod, 2017](#)), and information used by units and departments, working with mandatory and optional requirements, knowing the appropriate and correct information, policies, procedures, and business risks, and increasing the level of communication and reporting ([Norimarna, 2021](#)).

In additionally, this study examines the effect of individuals' understanding and conviction of the importance of the GRC model on the development of policies and procedures that are reflected in the effectiveness of organisations. This is one of the most significant points made by this study, which distinguishes it from previous research. It is essential to determine and quantify the familiarity of government sector employees with the model, the extent of its impact on their performance, and whether they are cognizant. As this realisation may directly or indirectly result in the achievement of or impediment to the achievement of the desired results, it poses a challenge; consequently, the study's fundamental question can be stated as follows:

RQ: What effect does the GRC model have on employee performance? The following sub-questions were raised based on the previous primary question:

RQ1: Do government employees comprehend the governance, risk, and compliance model?

RQ2: Are government employees aware of how governance, risk, and compliance influence their performance?

RQ3: Exists a distinct connection between the model's dimensions (governance, risk, and compliance)?

2- Theoretical framework

GRC is an integrated and comprehensive approach to corporate governance, risk, and compliance that ensures an organisation operates ethically and in accordance with its risk appetite, internal policies, and external regulations by aligning strategy, processes, technology, and people, thereby enhancing efficiency and effectiveness ([Racz et al., 2010a; Raman & Pramod, 2017](#)).

Governance, risk management, and compliance are the set of essential capabilities that must operate in concert to achieve disciplined performance ([Mitchell et al., 2012](#)). Although it refers to governance, risk management, and compliance, it encompasses much more than those three concepts combined into a single acronym. Rather, it is the ability that enables an organisation to reliably achieve its goals by addressing suspicion and acting with integrity ([OCEG, 2021](#)).

The term GRC originates from the model of integration between the three lines of defense, whose principles are centred on ([Raman & Pramod, 2017](#); [Spanaki & Papazafeiropoulou, 2016](#); [Faggio et al., 2019](#)) ;

- Acceptance and management of both risk and control (front line operations management)

- Risk and Management Supportive oversight for management (Risk, Control and Compliance functions established by management)
- Provide independent assurances to the Board of Directors and senior management concerning the efficacy of risk management and control. (Internal audit).

It is worth noting that the preceding figure depicts the three lines of defence published in 2013 by the Institute of Internal Auditors ([Pudjianto, 2021](#)). Each of the three lines has a distinct function within the Institution 's governance structure, and when each line performs its function effectively ([Racz et al., 2010b](#)), the organisation is more likely to achieve its overarching objectives ([Raman & Pramod, 2017](#)). Everyone in the organisation bears some responsibility for internal control, but the template outlines specific roles and responsibilities to ensure that essential duties are carried out as intended ([Spanaki & Papazafeiropoulou, 2013](#)). Some functions may be consolidated or divided across defence lines. Some organizations, for instance, may involve portions of the second-line compliance function in the design of first-line controls, while other portions of the second-line compliance function concentrate predominantly on monitoring these controls. (COSO, 2015). The model has acquired widespread recognition and application.

2/1 Governance, Risk and Compliance Model Objectives:

Accountability: The model's integration provides a comprehensive and comprehensive view of the department as a whole, as opposed to focusing on a single issue ([Bui, 2023](#) ; [Raman & Pramod, 2017](#)).

As the institutions were and are required to preserve their resources as much as possible, the model accomplishes this by making the common resources between the three elements available rather than duplicating the work of each department separately, thereby reducing resource waste ([Pudjianto,2021](#));[Raman & Pramod, 2017](#)).

Consistency: It provides coordination between the administration's available resources, allowing the administration to compare and choose among its resources based on the issues and problems it confronts and its priorities at the appropriate time ([Papazafeiropoulou & Spanaki, 2016](#); [Abdurrahman, Gustomo & Prasetio, 2023](#)).

Security: as it is the state of uncertainty facing the decision-maker due to the presence of many changes that require a good understanding of the risks that the organisation may face, and this is best available through the model([Faggio et al., 2019](#)), as the actual application is provided by one system for a more comprehensive and broader view of the risks, and puts the decision-maker in a better position to make informed decisions. The institution is in a secure position in terms of the information it provides and the systems it employs. ([Mitchell et al., 2012](#)).

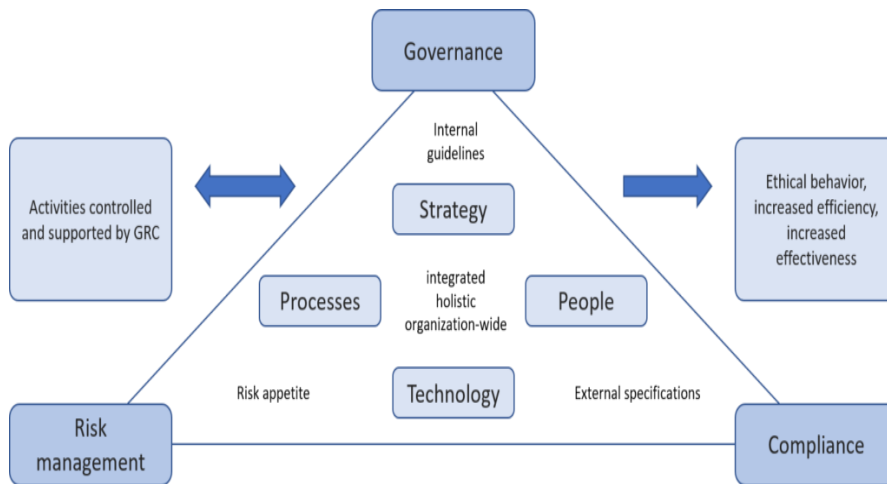


Figure (1): The relationship between the governance, risk, and compliance model's elements (Handoko et al., 2020)

The relationship between the Governance, Risk, and Compliance (GRC) paradigm is depicted in the figure above, as GRC concepts are interdependent (Hendra, 2021). Notable is that internal policies are the primary supporting factors for governance, external regulations are the primary supporting factor for compliance, and the Institution's risk acceptance is the primary supporting factor for risk management (Faggio et al., 2019). Also contained within the triangle are four GRC model components: Strategy, Effective Operations, Technology, and People. The right side of the triangle indicates that organisations require management attention and support, the correction of unethical behaviour, increased organisational efficiency, and enhanced effectiveness to support operations (Handoko et al., 2020).

Additionally, we can describe the relationship between the model and the triangle shown above as follows:

Table (1) the relationship between the model and the triangle relationship between the governance, risk, and compliance model

Model Elements	Governance	Risks	Commitment
Governance	Developing strategic plans, setting policies, and seeing the establishment	Separation of conflicting decisions on risks	Determine who makes the decision and who implements it
Risks	Reducing the occurrence of risks	Determine the strengths and weaknesses of the organization and ways to protect them and achieve the objectives of risk management	Separation of conflicting decisions to manage compliance according to the risks involved
Commitment	Compliance with the rules of governance	Determine the impact of the risks of non-compliance with laws and regulations	Determine the extent to which laws, procedures, standards, and frameworks are required for their compliance

Source: Compiled by the authors

In their study, Faggio et al. (2019) and Andrénache et al. (2018) clarified the relationship between governance, risk, and compliance by comparing compliance management and risk management to the two levers of governance effectiveness in order to ensure responsibility, accountability, and optimal resource utilisation. The relationship between the model and the three elements was therefore explained as follows (Govindji, Peko & Sundaram, 2018; Abdurrahman, Gustomo & Prasetyo, 2023):

The relationship between governance and risks is inverse, the less compliance to governance principles, the greater the risk rate.

The relationship between risk and compliance is inverse; the fewer regulations and rules are followed, the greater the risk.

The relationship between compliance and governance is direct; the greater the compliance to rules and regulations, the more governance principles are applied.

2/2 Governance and the GRC Model:

The governance perspective in the governance, risk, and compliance model is the process of defining the institution's strategies and objectives (Norimarna, 2021), clarifying the role of the board of directors in the institution, ensuring the credibility of the provided information, and clarifying the institution's policies, procedures, frameworks, models, and authorities. (Bui, 2023; Hendra, 2021)

The researchers conclude that the administrative aspects of the governance model, risk management, and compliance with regard to governance aim to provide a clear vision regarding the roles of governance (Hendra, 2021; Norimarna, 2021), develop policies to ensure effective governance function, provide sufficient and effective tools to implement the corporate governance work charter, and raise awareness throughout institutions so that they can achieve their objectives.

The following figure (2) illustrates the preceding:

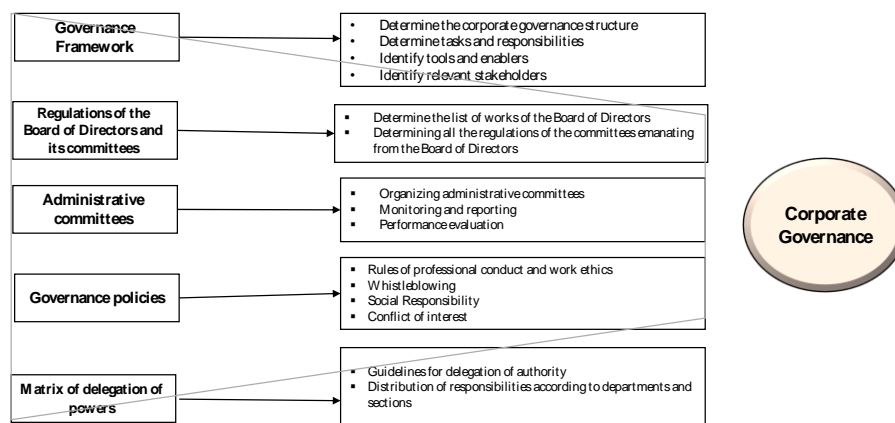


Figure (2): Governance and the GRC model

Source: Compiled by the authors

2/3 Risks and the GRC model:

The risk management system is a risk standard and establishes the individual intellectual property of risks, while the governance, risk management, and compliance system provide a broader and more comprehensive framework and philosophy for communicating about governance and compliance risks, by enhancing the technology of reporting mechanisms, policies, and procedures, and risk assessment procedures (Shahim, Batenburg, & Vermunt, 2012). Consequently, it should be noted that the governance, risk, and compliance system is incomplete without adequate and trustworthy risk information, and that the risk management system cannot be appropriate or effective unless it is rooted in governance, compliance, and performance. (Chikwiri & de la Rosa Murray, 2015)

2/4 Compliance and the GRC model:

Compliance is defined as "the process of complying with internal and external requirements, such as policies, organisational mandates, and standards that govern an

organisation" (Chikwiri & de la Rosa Murray, 2015) Compliance is defined by (Haugh, 2018) as: a system of policies and controls that organisations adopt to deter violations of the law and reassuring outside authorities that they are taking steps to deter violations of the law is a set of processes that organisations use to ensure that employees do not violate applicable rules, regulations, or norms. (Shahim, Batenburg, & Vermunt, 2012); Batenburg et al., 2014)

According to the researchers, compliance refers to adherence to a rule, such as a specification, policy, standard, or law. Compliance reflects the requirements of the regulatory and regulatory authorities, as the objective of an institution's efforts is to ensure that it has sufficient knowledge of the applicable laws and regulations and takes steps to comply with them.

The compliance management system is primarily based on two phases: (preparing the system and operating the system), and it is comprised of seven (main) elements: (the organisation's context, leadership, planning, support, process, performance evaluation, and improvement. Notably, Raman & Pramod (2017) emphasised that all ISO elements must be implemented continuously in order to establish an effective and efficient compliance management system, and that the compliance management system must be based on the principles of good governance and appropriate risk management (Govindji, Peko & Sundaram, 2018).

The authors have attempted to elucidate these stages in Figure (3), which describes the compliance management system as a system founded on the principles of good governance and appropriate risk management:

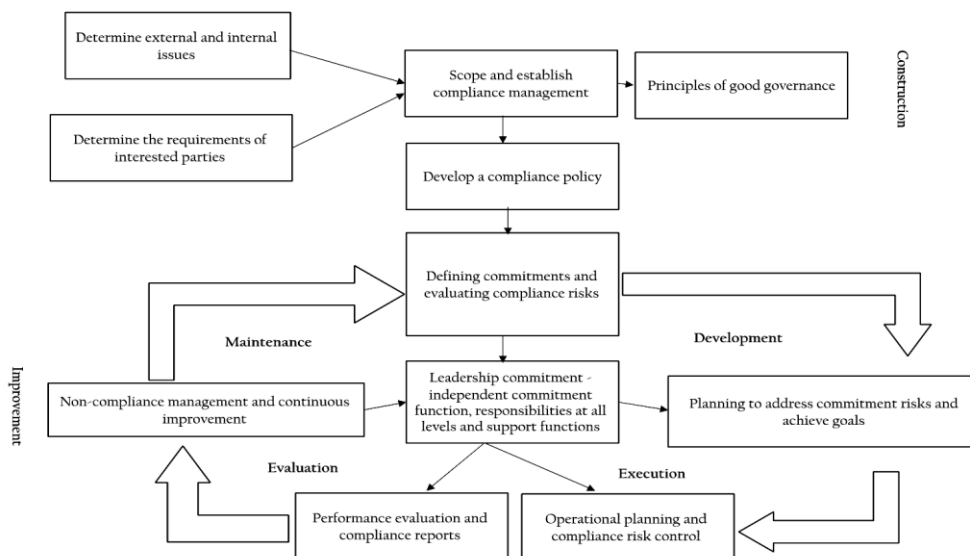


Figure (3): Compliance Management System

Source: Compiled by the authors

2/5 Difficulties with the Governance, Risk, and Compliance Model

The governance, risk, and compliance model face the following challenges:

Strategic difficulties: The strategic challenges for the scope are to comprehend the relationships between the three functions and the value the model can contribute, as well as to view the GRC model as a performance approach that does not add value.

Operational challenges include not establishing a clear timeline for implementing the objectives of the governance, risk, and compliance model or management, working to

expand the organisation's business, considering the cost-benefit principle, and ignoring the GRC model's requirements ([Racz et al.,2010a](#)); [Adisuria & Jayadi, 2023](#))

-Future obstacles: represented by the inability to make good use of technology that would always be beneficial for management, or the model of governance, risk, and compliance ([Batenburg et al., 2014](#)), as well as difficulties in the degree of effective and continuous improvement of data accuracy and decision quality. She also mentioned the challenges that compliance management and risk management may face in determining the optimal application of preventive controls ([Papazafeiropoulou & Spanaki, 2016](#)), supervising the planning of management operations, limiting mandatory procedures, and achieving a balance between the institution's risk profile ([Vicente & Mira Da Silva, 2011](#)).

2/6 Governance, risk, and compliance in relation to job performance:

By examining the relationship between the governance model, risks, and compliance to performance, the ([OCEG, 2020](#); [Bui, 2023](#); [Vicente & Mira Da Silva,2011](#); [Wiesche et al., 2011](#); [Spanaki & Papazafeiropoulou, 2016](#).; [Adisuria & Jayadi, 2023](#)) concluded that the model leads to cooperation, coordination, and concerted efforts between individuals and departments within the organization, thereby enabling the following:

- Achieving business objectives, as it ensures that all organisational work units collaborate to achieve these objectives.
- Ensuring a risk-based approach to strategic planning and goal setting. Risks, rewards, and responsibilities are communicated in a timely, reliable, and useful manner to the governance body, strategic planners, and business managers responsible for implementation at all levels.
- Improving the institutional culture in terms of performance, accountability, integrity, trust, and administrative communication.
- Preparing and protecting the organisation in terms of confronting risks and requirements.
- Enabling the organisation to seize opportunities.
- Increasing stakeholder trust in the organisation by fostering the trust of pertinent stakeholders.
- Preventing, detecting, and limiting the occurrence of adversities and vulnerabilities by establishing procedures and controls to avoid negative outcomes, reduce their impact, detect potential problems, and deal with them as they arise.
- Motivating and promoting the desired behaviour by providing incentives and rewards when the desired behaviour is demonstrated.
- Accessing the necessary information to support rapid changes in the strategic and tactical direction of the organization, while avoiding obstacles and risks.
- Increasing responsiveness and effectiveness through the establishment of capabilities that render the organisation more effective and responsive.
- Obtaining the highest possible economic and value return.

Due to the previously established relationship between the elements of the model and the performance of individuals, and because the primary objective of the current study is to clarify the mutual effect between the effectiveness of the model and the individuals' awareness of its significance and its effects on their performance, the following hypotheses were developed:

H1: That there is a statistically significant correlation between the GRC model and employee performance.

H2: There is a statistically significant relationship between the GRC model and the degree to which employees are cognizant of the model (employees' perception).

H3: There is a statistically significant correlation between the employees' perception of the model and employees' performance.

H4: The employees' perception mediates the relationship between the GRC model and employees' performance.

H5: The relationship between the GRC model and employees' perception is moderated by demographic factors.

H6: Demographic factors mediate the relationship between the culture of the GRC model and employee performance.

The relationship between the research variables and the study hypotheses is depicted in the following Figure 4:

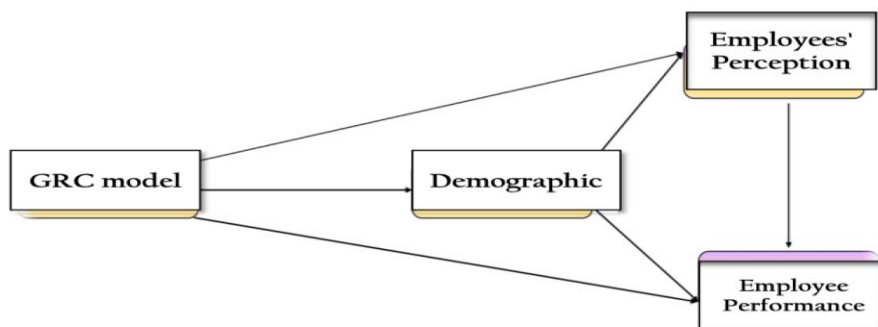


Figure (4): The Proposed Hypothetical Model for the Study

Source: Compiled by the authors

3- Procedures and methods in research

Due to the nature of the research topic and the goals it seeks to achieve, the authors employed the analytical descriptive approach, which is defined as: "the research characteristic that aims at quantitative and qualitative description of a social, humanitarian, or administrative phenomenon or a group of interrelated phenomena together, using various data collection tools, which makes the phenomenon Or the phenomena in question are clear to the extent that it is easy to identify them".

3-2 Population and sampling for research:

The research community comprises all (21922) employees of the Ministry of Human Resources and Social Development. Using the Richard Geiger equation, the authors determined the appropriate study sample size from a population:

$$n = \frac{\left(\frac{z}{d}\right)^2 \times (0.50)^2}{1 + \frac{1}{N} \left[\left(\frac{z}{d}\right)^2 \times (0.50)^2 - 1 \right]}$$

Since: n: represents the size of the study sample; N: represents the size of the study

population; Z: represents the standard score corresponding to the level of significance (0.95) and is equal to (1.96); and d: represents the error percentage; (0.05)

After applying the above formula for determining the sample size of the study, the authors determined that the appropriate sample size from the study population of (21922)

individuals is 378 individuals, which represents approximately 2% of the study population.

And in relation to the distance, the dispersion of the research community, the reduction in cost and effort, and the reduction in time, the authors proceeded to distribute the questionnaire electronically using the Monkey-Survey mechanism to the research community, as it yields (378) responses, which as it resulted in (378) responses, which represents a response rate of (100%), it is a complete sample size, which contributed to answering the study hypotheses, and then using it to achieve the study objectives.

3/1 Description of the research sample:

To identify the most significant characteristics of the study sample, the frequencies and percentages of the study sample characteristics were calculated, and the results are presented in the table (2) below.

Table (2): Gender distribution among members of the research sample

Variable categories	N	%
Gender		
Male	181	47.9%
Female	197	52.1%
Age		
Less than 25 years old	16	4.2%
From 25 to 35 years old	161	42.6%
From 36 to 45 years old	152	40.2%
From 46 years and over	49	13 %
Education		
Secondary or less	47	12.4%
Diploma	16	4.2%
Bachelor's	184	48.8%
Postgraduate	131	34.7%
Experience		
From 5 years and less	119	31.4%
From 6 to 10 years	94	25%
From 11 to 15 years old	55	14.6%
From 16 to 20 years old	36	9.4%
From 21 years and over	74	19.6%
Total	378	100%

Based on the percentages in Table (2), 52.1% of the total research sample is made up of female, while 47.9% is made up of men. This implies that the gender ratio is almost equal, which is likely to have a favourable impact on the research outcomes. However, more analysis is necessary to determine whether the demographic element of gender has any significant influence.

Regarding the age distribution of the research sample, it is evident from the indicators in Table (2), that approximately (48.8%) of the sample is (35) years old or younger, while (53.2%) of the sample is over (35) years old.

As shown in Table (2), 16.6% of the research sample has a diploma or less, 48.8% has a bachelor's degree, and 34.7% has a postgraduate degree.

Considering the distribution of years of experience for the study sample, it is evident from the data in Table (2), that 56.4% have less than ten years of experience, while 44.6% have more than ten years of experience.

3/2 The Research Instrument.

The research instrument consisted of a questionnaire that was developed based on several steps, beginning with a review of theoretical literature from previous research and studies and theoretical frameworks related to the axes of the instrument, as well as reviewing the measures of previous research and studies that were used in the field of applying the Governance, Risk, and Compliance (GRC) model to the performance of individuals in the sectors. This is followed by composing the questionnaire in its initial form and presenting it to a panel of specialised arbitrators to determine the questionnaire's applicability for the intended purpose and the accuracy of the formulation of the phrases.

After completing the preceding steps, the questionnaire consisted of two main parts: the first part represented the primary data of the members of the research community (gender, age groups, educational qualifications, and years of experience), and the second part consisted of 35 statements distributed along the following axes and dimensions. The first axis consists of nine phrases (measuring the GRC model of governance, risk, and compliance in the ministry). The second axis (measuring perception) consists of 11 statements, while the third axis (measuring employee's performance) contains 15 statements.

3/3 Critical means of the research instrument's five-point Likert scale

Since the highest score on the scale is 5 and the lowest score is 1, the range of the scale is $(5-1 = 4)$ and by dividing the range by the highest score on the scale $(4/5 = 0.80)$.

3/3 Symmetrical indicators

The following psychometric indicators were identified for the questionnaire:

- The reliability of the research instrument: It contains the following validation procedures:

3/3/1 The reliability of the questionnaire

It was validated by presenting the research instrument in its initial form to a committee of specialists from the faculty of King Khalid University in order to seek advice from their opinions regarding the phrases addressed to the members of the research sample, its primary data, the degree to which the tool phrases fit their axes, the quality of the wording of each questionnaire phrase, and the appropriateness of the grading. The authors proposed modifying the necessary suggestions and rephrasing them for the questionnaire's fifth form, and based on the opinions of the arbitrators, he created the final version of the research instrument.

3/3/2 Internal Consistency (Pearson Correlation)

To ensure the validity of the internal consistency of the questionnaire's axes, the authors calculated the Pearson correlation indicators between the total score for each axis or dimension and the total score of the questionnaire.

the internal consistency of the axis used to measure the GRC model of governance, risk, and compliance, perception of employees, and performance of employees in the ministry is presented in Table (3).

Table (3): The internal consistency of the axis used to measure the GRC model of governance, risk, and compliance , perception of employees, and performance of employees in the ministry

Sentences		Axis Correlation
GRC model		
1	The Ministry educates personnel adequately on the significance of institutional hazards.	0.76**
2	The Ministry has a mechanism for communicating policies, procedures, systems, and regulations to all Ministry employees.	0.51**
3	The rules of professional conduct and work ethics were explained to me.	0.77**
4	I have signed a conflict-of-interest form for business.	0.86**
5	I was briefed on whistle blower regulations.	0.88**
6	I signed a non-disclosure form	0.86**
7	The upper management is fostering my professional growth and views me as an investment.	0.81**
8	Continuous training provided by the Ministry contributes to the enhancement of my job performance.	0.70**
9	I was introduced to the hazards and controls of my department.	0.85**
Perception of employees		
1	Job functions and responsibilities are executed in accordance with the department's work policies and procedures.	0.79**
2	The authority/delegation matrix is implemented at the administrative and ministerial levels.	0.65**
3	Every employee has adequate knowledge of risk management and its implementation.	0.85**
4	There is a performance evaluation system at work	0.55**
5	The Ministry employs a written appraisal system that is familiar to all employees in the performance evaluation process, and promotions and rewards are tied to it.	0.60**
6	The Ministry has long-term plans and monitoring and follow-up systems to improve employee services.	0.80**
7	The objectives to be attained are based on the ministry's strategic goals.	0.63**
8	The Ministry has precise and adequate guidelines.	0.69**
9	Establishment of communication channels for receiving and disseminating regulatory and supervision updates and establishing responsibility for compliance	0.79** 0.84**
11	The Ministry has identified the compliance personnel, and they have been introduced.	0.85**
Performance of employees		
1	Internal departmental communication, such as the issuance of internal reports, contributes to the enhancement of work performance.	0.73**
2	Work policies and procedures assist me in performing my duties in the most effective manner possible.	0.81**
3	Authority or delegation matrix contributes to my enhanced performance.	0.79**
4	My outputs are continuously evolving.	0.75**
5	Understanding the hazards and their controls enhances my ability to avoid them.	0.80**
6	Risk management enhances the effectiveness of the ministry.	0.80**
7	Management's compliance to laws and regulations is demonstrated by an increase in employee employment.	0.77**
8	I can report noncompliance or violations without fear or reluctance, and they are taken seriously.	0.80**

9	I can voice my opinion and take part in decision-making.	0.78**
10	The effectiveness of risk management in my department has a direct bearing on my performance.	0.87**
11	There are laws and regulations that enable me to avoid potential occupational hazards.	0.69**
12	The influence of dominant values on the calibre of job performance	0.82**
13	In the ministry, my tasks and responsibilities are incessantly and periodically revised.	0.76**
14	There is extensive functional integration between all Ministry divisions.	0.81**
15	My performance is continuously improving because of the lucidity and openness of the work entrusted to me.	0.79**
Correlation with the total score of the questionnaire		
1	Measuring the GRC model of governance, risk, and compliance	0.87**
2	Measurement of employees' perception	0.81**
3	Measurement of employees' performance	0.81**

** Correlation is a significant function at the 0.01 level.

The Pearson correlations between each statement and the total degree of the dimensions of the GRC model are shown in Table 3. The correlation coefficients range from 0.51** to 0.88**, which is an indication of internal consistency. These coefficients are all statistically significant at a significance level of 0.01. This confirms that the statements within the axis accurately reflect what they are intended to measure. In relation to the dimensions of employee perception, it is apparent from the statistical indicators of Pearson's correlations that they vary between 0.55 and 0.85. These correlation coefficients are all statistically significant at a significance level of 0.01, providing confirmation that the statements pertaining to the measurement of the impact axis are accurate for the measurement set. Furthermore, the statistical measures of internal consistency for Pearson correlations pertaining to employee dimensions exhibit a range of (0.69** to 0.87**). These correlation coefficients are all statistically significant at a significance level of (0.01), thereby indicating that the subsequent statements regarding measurement effects are also valid. Coefficients ranging from 0.81 to 0.87 indicate the internal consistency between the scores of each axis and dimension and the total score of the resolution. These coefficients are all statistically significant at a significance level of 0.01, providing evidence that the questionnaire's axes and dimensions effectively measure their intended constructs.

3/3/3 The reliability of the survey instrument (Alpha Cronbach):

To assure the stability of the research questionnaire, the authors calculated Cronbach's alpha stability indicators for each axis and for the entire questionnaire; the results are presented in the Table (4) below.

Table (4): Cronbach's alpha reliability for the questionnaire axes and its total score

Axis	N of Sentence	Alpha Cronbach
The GRC model of governance, risk, and compliance	9	0.921
Perception of employee	11	0.914
Performance of employee	15	0.953
The total score for the questionnaire	35	0.967

Cronbach's alpha indicators for the axes of the research questionnaire ranged between (0.914-0.953), and for the questionnaire, it reached (0.967) Cronbach's alpha, which are all very high stability indicators, based on (Taber ,2018) , that stability indicators should

be as high as possible. If the value of Cronbach's alpha coefficient is (0.60), the research instrument is statistically significant and reliable; otherwise, it is not. This result verifies, from the authors' perspective, the lucidity and sobriety of the questionnaire's wording, which makes it capable of producing the same results in a different environment. The authors have therefore confirmed the validity and stability of the research instrument in terms of its sub- axes and overall degree.

3/4 Research Hypotheses:

Table (5): The significance values for the estimated variables

	Path		B	Std. Error	t	Sig.
GRC model	→	Demographic	-0.023	0.011	-2.05	0.051
Demographic	→	Employees' perception	0.130	0.125	1.04	0.299
GRC model	→	Employees' perception	0.834	0.028	29.45	***
Demographic	→	Employees' performance	0.104	0.186	0.56	0.575
GRC model	→	Employees' performance	-0.284	0.075	-3.80	***
Employees' perception	→	Employees' performance	1.248	0.074	16.85	***

As the results indicate, Table (5) displays the regression values of the relationships between the independent variables, the mediating variable, and the dependent variable.

- There was a statistically significant positive regression value (***) (0.000 0.05) between the institutional culture dimension and the employee perception measurement. The value of B was (0.834), which, based on the value of T, is statistically significant. (29.45)
- There is a statistically significant inverse regression at a level of significance (***) (0.000 0.05) between the dimension of institutional culture and the dimension of performance. Based on the T value, the B value reached (-0.284), which is statistically significant. (-3.80)
- The existence of a positive regression value with statistical significance at a significant level (***) (0.000 to 0.05) between the perception measurement dimension and the performance measurement dimension. Based on the T value, the B value was (1.248), which is statistically significant. (16.85)

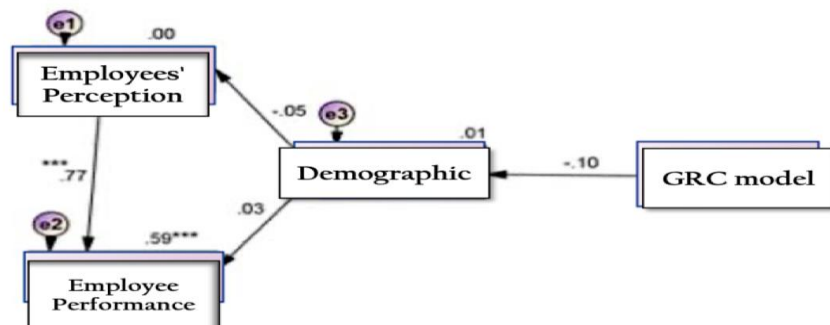


Figure (5): The paths of the relationships between the independent variable, the mediating variable, and the dependent variables of the study model

Table (6): The direct and indirect effect of independent variable on the dependent variables

Standardized Direct Effects	GRS Model	Demographic	Employees' Perception
Demographic	-0.102	0.000	0.000
Employees' Perception	0.829	0.029	0.000
Employees' Performance	-0.213	0.018	0.943
Standardized Indirect Effects	GRS Model	Demographic	Employees' Perception
Demographic	0.000	0.000	0.000
Employees' Perception	-0.003	0.000	0.000
Employees' Performance	0.777	0.028	0.000

By focusing on the results of the statistical indicators to analyze the direct Figure (5) and indirect effects Figure (6) and through Table (6) to confirm the validity or incorrectness of the study hypotheses. Regarding the first hypothesis, we find that there is a negative relationship between GRC model and employee performance, and the total impact of GRC model on employee performance is (-0.213), which is statistically significant at the 0.0000.05 level based on the value of T (-3.80)

whereas the results of the second hypothesis, there is a positive relationship between the GRC model and the employees' perception, and the total influence of the GRC model in the employees' perception is (0.829 = approximately 0.83), which is statistically significant at the 0.000 0.05 level based on the T value (29.45).

Referring to the third hypothesis, we explore based on the statistical results presented that there is a porelationship between employees' perception of the model and their performance, and based on the T value (16.85), this relationship is statistically significant with a strong degree at a significant level (0.000 0.05). →

For the sake of test the fourth hypothesis, the indirect effect between employee performance and the GRC model was examined in the presence of the perception modulator as a mediator, and the following results were found, there is a statistically significant relationship between the GRC model and the performance of employees in the presence of perception as a mediating variable, and the total effect of the GRC model on the performance of employees in the presence of awareness among employees is 0.777.

The findings of the fifth hypothesis, which states that demographic factors serve as a mediator between the culture of the GRC model and employees' perceptions".

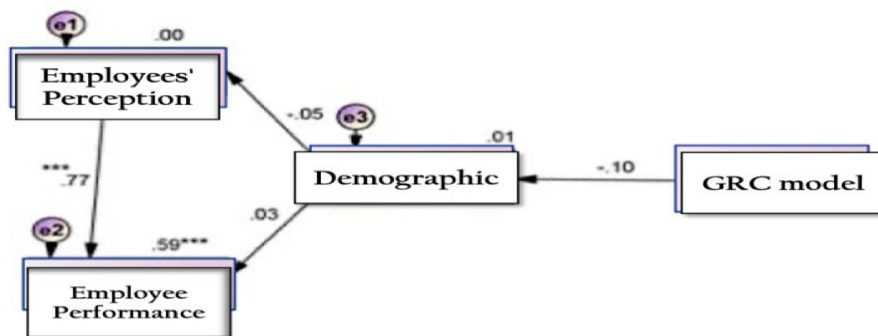


Figure (6): Path analysis of the indirect impact of institutional culture on employees' perception in the presence of demographic variables as a mediating variable.

By evident from statistical findings in table (6) and figure (6), which yield that the degree of the indirect effect of GRC model through demographic characteristics on employees' perception was (-0.003), indicating that the demographic characteristics do not serve as a mediator of the relationship between GRC model and employees' perception. It has a statistically significant effect.

4- Discussion

The authors provide a summary of the study's key findings based on path analyses of the hypotheses. The results indicate a negative association between the GRC model and employee performance. Additionally, the authors conclude that there is a statistically significant relationship between the GRC model and employee performance, considering the overall impact. This can be attributed to either the absence of favourable practices identified by the GRC model that contribute to employee performance or the improper implementation of the GRC model by workers, leading to unfavourable consequences.

On the other side, a correlation exists between the GRC model and employees' perceptions. This finding may be elucidated by asserting that a one-unit increment in the GRC model is linked to an 83% rise in employee awareness. The authors' conclusion suggests the presence of a statistically significant correlation between the GRC model and the level of employee awareness of the model.

The study highlights a significant correlation between employees' opinions of the model and their performance. The authors suggest that a 94% rise in staff awareness relates to a one-degree increase in the GRC model, thereby explaining the observed outcome. The researchers reach the conclusion that a statistically significant association exists between employees' views of the model and their performance, hence verifying the hypothesis's validity.

Moreover, the findings demonstrate a statistically significant correlation between the GRC model and employees' performance, with employees' perception serving as a mediating variable. This suggests that a slight alteration in the GRC model, when combined with employees' perceptions, leads to an improvement in employee performance. According to the researcher's findings, the influence of the GRC model on work performance is observed to be beneficial and enhanced when individuals possess a heightened level of awareness. The findings of the study suggest that demographic variables do not serve as a mediating element in the relationship between the model and employees' perspectives.

The observed outcome demonstrates statistical significance. The findings and outcomes suggest that both the GRC model and employees' perceptions of the model exert a substantial influence on performance. Furthermore, the company culture plays a role in enhancing employees' understanding of the model and subsequently affecting performance. The model possesses specific objectives, and the findings indicate that successful implementation of the governance, risk, and compliance model within an organisation, through the dissemination of its culture and processes and the enhancement of employee awareness, can yield favourable outcomes in terms of performance and organisational outcomes. This assertion is further substantiated by a study conducted by [\(Handoko et al., 2020\)](#) titled "Importance and Benefit of Applying the Governance, Risk, and Compliance Model."

5- Conclusions

5/1 Contribution

This study makes an original scientific contribution to the field of GRC by examining the GRC model from the perspective of human resource management and its impact on employee performance. This area of research has been largely neglected, with few studies addressing this specific topic. The major purpose of the study was to assess the level of awareness among government employees regarding the influence of implementing governance, risks, and compliance on their performance and productivity. The study's premise may be considered reasonably modern.

In contrast, the practical study entails the researchers' discovery of certain elements that contribute to the success and integration of the GRC model within organisations. The relevance and quantity of these characteristics exhibit variation in accordance with the level of development of the institutions.

The governance pillar promotes a culture of ongoing improvement, training, and awareness by engaging in a continual cycle of reviewing, evaluating, and enhancing GRC activities to increase efficiency and effectiveness. This entails using past occurrences and finding prospects for improving risk management and compliance practices in alignment with established standards.

The tripartite system, also known as the GRC system, has been gaining increasing attention due to its demonstrated effectiveness in managing institutions. This effectiveness is achieved through the strategic utilisation of institutional strengths, addressing weaknesses, capitalising on opportunities, and mitigating risks. The success of this system relies heavily on a comprehensive understanding of human resources and their recognition of the positive outcomes that can be achieved through its implementation.

Governance processes and principles encompass a range of interconnected concerns, including but not limited to participation, transparency, efficiency, effectiveness, risk management, and compliance. However, it is common for these elements to operate independently and asynchronously inside various organisations. Despite the prevalence and implementation of various GRC practices in numerous institutions, including control and auditing measures, audit committees, transparency, and risk management, these practices have operated independently from one another. Consequently, the work has been unsystematic, lacking cohesion and synchronisation. This disjointed approach has resulted in duplicated efforts as multiple organisational units perform similar tasks in different formats while also functioning in isolation. The occurrence of duplication and unproductive efforts, the wastage of resources in the identification and definition of risks, and the lack of organisation in managing these risks result in elevated costs. Additionally, strategies are often formed independently from these risks. One primary factor contributing to this phenomenon is the deficiency in the level of depth and awareness necessary within the field of human resources, coupled with the inherent fragility of harmony.

To optimise the advantages of the tripartite system (GRC), it is imperative that its practices are executed in a cohesive manner, in alignment with institutional governance and the associated frameworks of performance management, risk management, and compliance. These frameworks encompass oversight, internal audit, information security, and other relevant components. The examination of this tripartite system necessitates an approach that avoids division and instead focuses on its simultaneous construction, facilitated by a cohesive business strategy that aligns all its components.

An effective GRC official is characterised by their consistent dedication to fostering corporate integration, adept utilisation of technologies and resources in a flexible and efficient manner, and proactive efforts in developing and implementing automated

solutions for the future. The successful execution of these tasks necessitates a comprehensive comprehension of the influence and significance of human resources in relation to risk and compliance, as well as the utilisation of optimal methodologies and benchmarks prevalent in the industry. The commencement of the successful integration of the Governance, Risk, and Compliance (GRC) and Human Resources (HR) management models takes place at this juncture.

The GRC model may be characterised as a systematic methodology for harmonising human resources with organisational objectives while ensuring efficient risk management and adherence to regulatory obligations. One piece of evidence supporting this claim is that the integration of decision-making, resource and portfolio management, risk management, and regulatory compliance operations into the GRC model is contingent upon the endorsement of cultural transformation by executive leadership, since without such support, these activities would not be effectively included. Developing a well-defined organisational culture facilitates the identification of key attributes and conduct that contribute to the establishment of an inhospitable workplace atmosphere. By effectively communicating these elements to all staff members, individuals become cognizant of behaviours that have the potential to negatively impact the work environment. Therefore, the organisation should strive for ongoing efforts to improve its culture and increase the level of knowledge among both employees and senior management regarding the components of the GRC model. This may be achieved via the implementation of training seminars and the dissemination of targeted awareness messages.

In addition, the human resources department assumes the responsibility of recruiting, motivating, and training personnel, among other operations, in order to effectively pursue the organisation's vision and goal. The inability of the human resources department to effectively carry out the aforementioned duties increases the organisation's susceptibility to hazards. Furthermore, the organisation will encounter limitations in harnessing the full potential of its personnel and their respective contributions. It is important to ensure that individuals within organisations are cognizant of the significance attributed to the GRC model in terms of its ability to recruit talent. An effective internal control mechanism is essential for preventing discriminatory practices and the making of false promises. Furthermore, it's significant to note that the relevant parties involved have signed a contractual agreement. So, the implementation of a dedicated department to oversee and manage governance, risk, and compliance operations is imperative. This department would be responsible for overseeing and providing guidance to personnel who are assigned governance, risk, and compliance duties inside the organisation. Given the nascent stage of the model and the need for extensive study and supplemental studies, particularly in Arab nations, it is crucial that further investigations and scholarly inquiries be undertaken to further explore its potential.

The primary emphasis should be placed on the implementation of a methodology that enables regular identification, analysis, and evaluation of the GRC model. Additionally, it is important to provide employees with feedback regarding their significant contributions to the success of the model. This approach prioritises the positive aspects over dwelling on the existing challenges encountered by different agencies and departments within the organisation and accentuates the positive aspects instead.

5/2 Limitations

An in-depth analysis of the benefits of the GRC model's integration procedure is required, as the approach is still in its initial application phase and requires extensive research to answer numerous questions and ensure the viability of the theoretically determined benefits.

The complexity of the decision-making process will increase if the approach is not implemented, as a narrow perspective and focus on solving problems in the short term distract management from problems facing the facility in the future, which can be identified if the GRC method is implemented, as integration between departments enables discovery of these issues. Which necessitates more information, time, and human resources and may lead to greater coordination in the short- and long-term resolution of problems.

Also, the most significant challenge facing the approach when achieving integration between governance, risk, and compliance is the cultural and conceptual relations, not the process and technology; thus, the application of the approach is regarded as the most significant development that supports the performance of the enterprise in light of the continuous changes that occur in the business environment, the expansion of markets, the emergence of laws, and technological developments. Therefore, the application of the approach provides management with a comprehensive and expanded view of its risks, obligations, and associated costs, allowing it to choose the optimal solutions and make the optimal decisions.

One of the determining factors is that the research was limited to the government sector; given the nature of government employees, this sector is the most stable in terms of job security and compensation. Moreover, numerous studies have affirmed that the essence of government employees is less amenable to change and growth. 9/3 Future studies.

The researchers drew the conclusion from their study that the GRC approach is still in its infancy in terms of application and requires a great deal of research and study to advance; therefore, further study is recommended in this area. Such as connecting the GRC model with artificial intelligence or examining the relationship between organisational culture and GRC model application. A comparative examination of the extent of GRC model application awareness among government and private sector employees.

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