

# The Effectiveness of Risk Management in Achieving Sustainability of the University of Hail

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**Abstract—** The research aims to study the effectiveness of Risk Management (RM) in achieving sustainability for the University of Hail (UOH). The research tools were represented in the general data questionnaire, the RM effectiveness questionnaire, and the university sustainability questionnaire. The research was conducted on 510 employees (leaders, faculty members, and staff) at the UOH. The research followed the descriptive and analytical approach. It was evident that the UOH attained a high degree of sustainability as a sustainable university (with a sustainable vision and mission, policies and goals, and infrastructure). On the other hand, human cadres' sustainability was medium. RM's effectiveness (planning, implementation, and evaluation) at the UOH was high. A directly proportional statistically significant correlation was found at a level of 0.01 between RM and reaching sustainability for the university. The effectiveness of RM as a whole was the most contributing factor in predicting the extent of the impact on achieving the sustainability of UOH as a whole. A statistically significant indication was also found in both achieving sustainability and the level of effectiveness of RM in the UOH, which was perceived by leaders, faculty members, and staff. Administrators and educators at UOH must account for how definitions of RM are tied to an institution's goals, agendas, and material circumstances. Developing a better understanding of how such definitions emerge can provide greater clarity in enacting change.

**Keywords:** Risk Management (RM); Sustainability; Partnerships; Higher education; sustainability culture; UOH.

## I. INTRODUCTION

SAUDI Arabia is committed to implementing sustainable development goals and attaches the highest priority to this endeavor, commensurate with the Kingdom's specific context and national principles. Sustainable development is one of the development methods imposed by the era, which is characterized by rapid development and change, and states, bodies, organizations, civil society institutions, and individuals must keep pace with these challenges to achieve the social balance resulting from globalization and its effects [1]. As the

world is facing many changes in many fields, these changes adopt new intellectual, cultural, life and practical patterns, and universities are not immune to these global changes, as international reports interested in sustainable development confirmed that there is international recognition of the role that universities can play in achieving economic, cultural, social, and political development, especially in light of the increasing challenges to natural resources and population growth. It is the role of universities in general, especially sustainable universities, to spread the culture of sustainability between all societies and move society toward a more sustainable world [2].

W Sustainable development provides the possibility of sustainable growth, achievable when the necessary factors prevail, evident in effective planning, clear developmental thinking, and financing, through employing the available resources to meet the requirement of current generations without impairing future generations. Moreover, sustainable development focuses on rendering products and benefits sustainable. Regarding knowledge and skills and individual and institutional methods that seek to maintain innovation, sustainable development aims to evolve activities to become sustainable [3]. Governance policy relates to the vision, mission, purpose, and main objectives of a university. Transforming the policy into actuality means spreading a sustainable mindset of direct accountability to both internal and external stakeholders [4], [5].

Universities play a significant role in promoting sustainability by making future decisions, issuing advanced practical models, and enriching knowledge, in addition to their great role in environmental, social and, cultural service and development. Therefore, there is a global trend in universities worldwide to shift toward the model of the sustainable university, so that it has a leading role in contributing to the development of society. Universities bear moral and ethical responsibility toward achieving sustainability. Therefore, they must adopt comprehensive policies to integrate sustainability at all levels, starting with their strategic and operational plans, initiatives, and activities, as education policies emphasized the integration of sustainability into educational curricula, scientific research, and university management [6]; [4].

The institutionalization of the principle of sustainability is only achieved when accepted and integrated into the university governance culture and progressively becomes part of the activities implemented. This will be done when three kinds of

sustainability are reached: The first is social sustainability, tackling health, poverty, education, food, social integration, and equality. The second is economic sustainability, which includes economic development, sustainable infrastructure and consumption, and production. The third one is environmental sustainability, which tackles energy, water, climate, environmental, and marine issues [6]; [7]. Universities research should empower knowledge of social, economic, and environmental systems, improving sustainable skills for graduates. Moreover, universities should partner with companies and civil society, and awareness-raising institutions to propagate a mindset of sustainability. Finally, the university should maintain sustainable leadership and passionate employees and become more involved in sustainability [7].

Every organization has some form of RM. The challenge, however, is that existing risk management practices are ad hoc, unsystematic, and informal, leading to a lack of understanding and consideration of the main organization-wide risk exposures affecting the key goals that they seek to achieve. Despite the efforts exerted in directing some KSA universities toward transformation into sustainable universities, many problems and obstacles hinder this transformation, and among the most important of these problems is the weak response to change, as well as the absence of clear vision and policies for some universities, and the weak independence of universities. Graduates struggle with the changing job market, as they cannot communicate, the ability to work with a team spirit, problem-solving, reliability, and the ability to adapt [8]; [5]. Universities are similar to profit and non-profit institutions as they are exposed to many strategic and operational risks, including financial and natural risks and human-related risks, which is one of the most important inputs to the university system. Trofimova (2020); Pompiak (2018) revealed that human resource risks interfere with every part of the employee's job operations, and that it is one of the most important major risks in the organization, which could lead to loss of opportunities [9]; [10]. Mitrofanova, et al (2017) showed that recent factors, circumstances, and data necessitate the emergence of human resource risks in universities, which overwhelm other risks [11]. Human resource risks in universities occur during the interaction of the human element with the processes of teaching and learning, scientific research, and community service in universities.

With the increasing interest in achieving sustainability in educational institutions, especially university education, the interest in thinking concerned with exploring risks and anticipating them has increased, and it has become a global trend, toward which major countries are heading. The evidence for this is the publications issued by the US federal government, as it issued several documents focusing on the idea of risks, how to deal with and prevent them and reduce their impact. This prompted decision-makers to establish a university model that is prepared to face risks and disasters [12]; [9].

Educational institutions-related risks, in general, and university education institutions, have been changing, such problematic scientific preparation of university graduates in some disciplines, and universities' output inadequacy with the requirements of the local and global labor market. This is quite evident in the perpetual rise in unemployment among

university graduates, especially with those working in specialties other than their scopes [13]; [14]. In addition to the weak financial independence of the university, which is reflected in the equipment in the laboratories and the quality of research compared with international indicators, as well as the lack of measures dealing with the risks and preventing their escalation into crises? Risk concern has become a global trend. Risk-based thinking is one of the most important criteria for the accreditation of institutions and organizations to ensure quality and become accredited [8].

University RM has components that are essential to university operations. To be organized, it is important to consider the current time and changing circumstances and obstacles such as uncertainty, lack of sufficient information, manpower, and cultural resources, and RM must be characterized by continuous dynamism, and anticipation of emergency conditions; it is necessary to constantly strive to improve workflow [8]. The purpose of this paper is to examine the effectiveness of RM in achieving sustainability for the UOH.

## II. LITERATURE REVIEW

The accumulating interest in promoting social responsibility and sustainability principles appears in the scrutiny of the evolution of the research topics, scientific contributions, and educational programs. However, until universities can effectively promote sustainable development on a global level while maintaining perpetual adaptation to/anticipation of changes in stakeholder expectations, it is pivotal that the principles of social responsibility and the related sustainability goals embolden the governance culture and organizational behaviors of each university.

### A. KSA Transformation

The Kingdom of Saudi Arabia is experiencing a dramatic and comprehensive transformation through Saudi Vision 2030 and the Vision's twelve implementation programs that are geared to build a robust economy based on a diversified production base and increased competitiveness. The Vision rests on three thematic pillars—a vibrant society, a thriving economy, and an ambitious nation. The Vision and related implementation programs, such as the National Transformation Program 2020, provide the foundations underpinning the integration of sustainable development goals into the national planning process [15]. One key program of the Vision, namely life quality, has direct relevance to the sustainable development goals. In essence, the program envisions making the Kingdom the best living place for citizens and expatriates alike. Saudi Arabia is keen to implement the Vision's economic reforms to achieve fiscal balance and reform the subsidy system within a social protection umbrella in which low-income and vulnerable groups are protected against negative impacts of economic reforms [16]; [17].

### B. Sustainable Development

One university might define sustainability as a vital educational subject, thereby offering courses and degree programs focusing on the subject. Another university might correlate sustainability with campus planning and development while launching green building initiatives, recycling programs,

and reduced energy programs. Yet another university might deem sustainability in purely economic terms, trimming budgets, cutting programs, or phasing out tenure-line positions under the guise of financial sustainability [18]. The concept of sustainable development is focused on a set of foundations, which are preserving the characteristics of current and future natural resources as a basis for ensuring the right of future generations to the available ones, the quality and manner of distributing economic returns, and their role in improving living conditions, and promoting the use of technical means more compatible with the environment to reduce the manifestations of damage and disruption. With the environmental balance, modifying investment patterns, production structures, and the prevailing consumption patterns to avoid extravagance [19]; [20].

### C. Dimensions of Sustainability and Its Characteristics

The dimensions of sustainable development include three basic dimensions, which are the economic dimension, which represents maximizing the economic return for the longest possible time by providing the elements of well-being, and the environmental dimension: It focuses on taking into account the environmental limits so that each ecosystem has certain limits that cannot be exceeded by consumption, otherwise deterioration of the system occurs. Environmental [21], and the social dimension: It focuses on the fact that the human being constitutes the essence of development and it is the goal through concern for social justice, combating poverty, and providing social service to all those in need, besides ensuring democracy through the participation of peoples in decisionmaking with full transparency [22]; [18].

Sustainable development aims to formulate a comprehensive strategy to meet its needs by adopting new strategies that focus on sustainable mechanisms and preparing national policies to adopt an innovative environment, which depends primarily on strengthening and developing research, scientific, and technological capabilities and encouraging economic growth and supporting innovation [3]. One of the most basic characteristics of sustainable development is that it is continuous and escalating, in response to the renewed and increasing needs of society. It is also a societal process, in which all segments of society must participate. It is also a conscious process, defined by goals with long-term strategies, and it is a process directed by a developmental will that focuses on societal goals and is committed to achieving them [21].

A socially responsible university assumes behaviors that seek to involve stakeholders to better understand their expectations and priorities and transfer these into defining the strategy and goals, into monitoring the objectives because of promoting the activities and accountability, to enhance a community–university engagement. Consequently, social responsibility and sustainability are associated with transparency, reputation, consensus, and effective monitoring of results, ensuring continuous quality improvements in the university's core business, as seen in figure 1 [4].

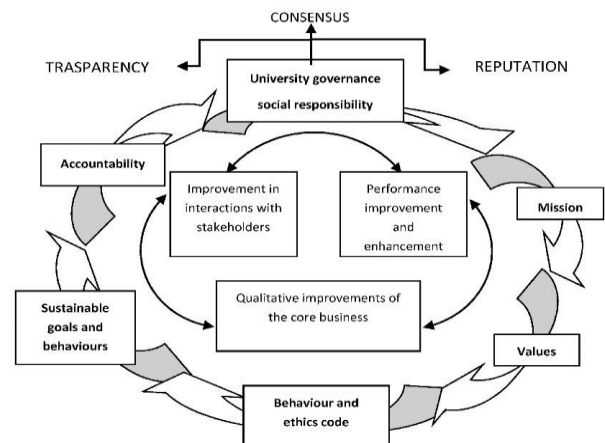


Figure 1. The virtuous cycle of sustainable development in universities

### Why RM for Organizations

RM is defined as “a process of understanding and managing the risks that the entity is inevitably subject to in attempting to achieve its corporate objectives [23].” The RM process is a set of proactive administrative measures and directed activities within the framework of a program that aims to tackle the risks that hinder the institution, and it is also known as the art of alternative choices with anticipation of upcoming events and well preparedness [24]; [14].

All organizations have expanded in activating risk management, on the basis that RM is the practice of choosing the institution for effective methods aimed at reducing the impact of potential threats that may hinder the work or reduce the level of its targeted results. The RM process aims to ensure the sustainability of the enterprise and enable it to achieve its goals [25]. The matter moved to all community institutions, including the educational sector and university education in particular, as its employees seek to achieve and ensure a great deal of safety and stability for universities against any unfavorable conditions or risks that may hinder these educational systems from performing their job efficiently and effectively, and this will only happen with possession. This grants the ability to anticipate risks and develop a set of appropriate precautionary and remedial measures [26]. University RM entails a process by which the expected risks that may face the university, the programs it proposes, and the strategic objectives it seeks to achieve is identified, evaluated, and addressed within a clear scientific methodology to deal with the conditions of uncertainty and their effects with the expected and unexpected threats with flexibility and efficiency [27]. RM identifies common and crosscutting risks and improves cross-departmental communication.

The components of the risk management process are made up of two major components. They are as follows: (1) Risk identification is the procedure of examining and documenting an organization's present information technology security situation. (2) Risk control is the procedure of applying controls to reduce risks to an organization's data and information system, as in figure 2.

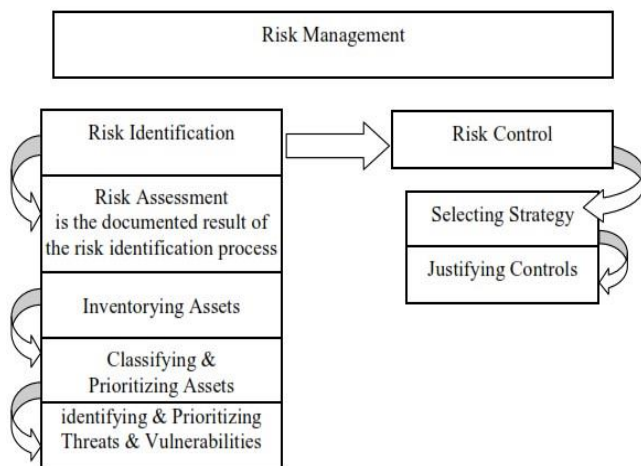


Figure 2. Components of RM [27]

### RM Process

RM process consists of three stages (Othman, & Abdelwahab, 2018; [27]; [9]):

- Risk identification: It is the assessment of the risks affecting the construction project. Deploying this process at an early stage of the project life cycle enables the client and stakeholders to be aware of the associated risks and helps control them electively. RM is beyond responding to risks; professionally, it is about being ready for unexpected risks.
- Risk analysis: This comprises individual and combined risks. It helps the client and project stakeholders to simulate their future vision for the probability and degree of risk occurrence, facilitating decision-making. Several methods are available for a typical project risk assessment. The best method varies with risk type, the scope of the project, cost, complexity, adaptability, usability, completeness, validity, and credibility.
- Risk response: This is based on the results gained from the previous two stages. There are three possible responses: (1) risk avoidance or reduction, (2) risk transfer, and (3) risk retention.

The RM process includes many steps: risk assessment (defining goals and context), risk reporting, decision-making, risk treatment, residual risk reporting, and monitoring.

### III. QUESTIONS

1. What is the reality of achieving sustainability in the UOH in terms of vision and mission, policies and goals, human cadres, and infrastructure?
2. What is the level of effectiveness of RM (planning, implementation, and evaluation) at the UOH?
3. Is there a variation in the reality of achieving sustainability at the UOH in terms of (vision and mission, policies and goals, human cadres, and infrastructure) as perceived by leaders, faculty members, and staff?
4. Is there a variation in the level of effectiveness of RM (planning, implementation, and evaluation) at the UOH as perceived by leaders, faculty members, and staff?

### IV. METHODOLOGY

#### A. The Study Population

It is determined by all leaders, faculty, and staff at the UOH, which amounted to 2205 according to the reports of the HR Department at the UOH (Statistics of Human Resources Management).

#### B. The Sample of the Study

The sample consisted of 510 academic and administrative leaders, faculty members, and staff at the UOH in the various colleges and deanships with different positions.

#### C. The Field Application

It took place during (November and December 2020). The research adhered to the study variables that were identified in RM and achieved sustainability for the UOH.

#### D. Research Tools

The researchers prepared an electronic questionnaire, which consisted of the following:

- 1-General Data: included the position that was classified into (academic leaders, faculty members, and staff at the UOH).
- 2-The RM questionnaire, which aimed to determine the level of RM at the UOH, it included 22 items, distributed on three main axes: first, the planning, including 10 items; second, the implementation, including 7 items; and third, the evaluation, including 5 items.
- 3-Achieving sustainability for the UOH questionnaire, which aimed to determine the level of achieving sustainability, it included 18 items and was distributed on four main axes: first, the vision and mission of the sustainable university, including 4 items; second, the university's sustainable policies and goals, including 7 items; third, the sustainable human elements, including 3 items; and forth, the sustainable infrastructure, including 4 items.
- 4-The obstacles to the sustainability of the UOH questionnaire, this part aims to determine the level of the obstacles to the sustainability of the UOH, including 14 items.

#### Validity:

The validity of the tools was confirmed by construct validity, which was the validity of internal consistency, by finding the coefficient of Pearson correlation between the degree of each item and its dimension. Which showed a positive correlation at the level of significance of 0.01, which indicates the validity of the tools.

#### Reliability:

The Reliability of the tools was calculated using the Alpha Cronbach method. The value of the Cronbach alpha coefficient for The RM questionnaire, achieving sustainability for the UOH questionnaire, and the obstacles to the sustainability of the UOH questionnaire were 0.829, 0.846, and 0.854, respectively. These values were high and acceptable, confirming the consistency and reliability of the tools.

#### Tool Correction:

The search tools were corrected according to the Likert quintet scale, by selecting one of multiple (Strongly Agree, Agree, Somewhat Agree, Disagree, or Strongly Disagree) in each of the questionnaire items, and it was corrected on a scale (1, 2,3,4, and 5) for both positive and negative items.

## V. RESULTS AND DISCUSSION

*A. The descriptive results of the study indicated the following:*

The percentage of leaders in the study sample was 27.3%, the percentage of faculty members was 47.2%, and the percentage of staff was 24.9%.

### *B. Limitations/Implications*

This analysis is limited to definitions of sustainability used by KSA Universities. Further studies should provide a more

comprehensive analysis of a larger sampling of universities. The data collection was based only on the questionnaire, and future studies should depend on other methods of data collection such as interviews and study analyses.

*C. The relationship between RM (planning, implementation, and evaluation) and achieving sustainability for UOH in terms of vision and mission, policies and goals, human cadres, and infrastructure)*

Table 1. The correlation between RM and achieving sustainability for UOH

Achieving Sustainability	Risk Planning	Implementation in RM	RM Evaluation	Effectiveness of RM
Sustaining the vision and mission	.864**	.853**	.835**	.871**
Sustainability of policies and objectives	.880**	.880**	.858**	.893**
Sustainability of human cadres	.864**	.881**	.878**	.891**
Infrastructure sustainability	.838**	.852**	.834**	.859**
Achieving sustainability at the UOH	.888**	.891**	.874**	.904**

\*\* Correlation is significant at the 0.01 level (2-tailed)

From table 1, there is a positive statistically significant correlation relationship at a level of 0.01 between RM (planning, implementation, and evaluation) and achieving sustainability for the UOH in terms of vision and mission, policies and goals, human cadres, and infrastructure. Meaning that the higher the effectiveness of RM at the UOH, the more the university can achieve the sustainability of the vision and mission, the sustainability of policies and goals, the sustainability of human cadres, and the sustainability of the infrastructure. This result is consistent with Al-Omri (2019) regarding the existence of a relationship between the roles of the various university departments and achieving university sustainability [30]. In addition, Ibrahim, (2019); Armored & Travel (2019) agree with this conclusion for the existence of a relationship between RM and enhancing the competitiveness of universities, which is one of the university's sustainability components [8]; [29].

*D. Effectiveness of RM (planning, implementation, and evaluation) and achieving sustainability of UOH in terms of vision and mission, policies and objectives, human cadres, and infrastructure.*

*The line, and this confirms that the data are distributed according to a normal distribution*

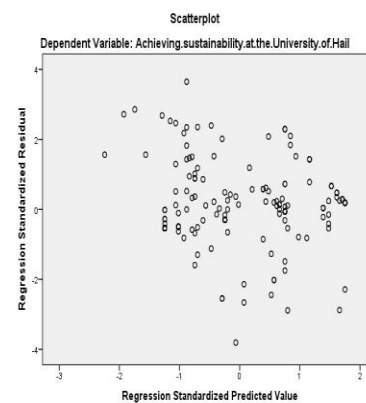


Figure 3. Represents the spreading of the buoys with the expected values, and from it, it is clear that there is no specific pattern for the residues and this is consistent with the linear condition.

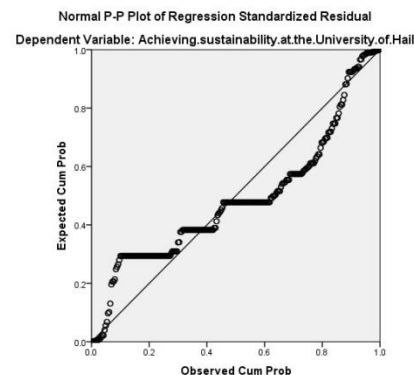


Figure 4. Shows that the points (trumpets) cluster around

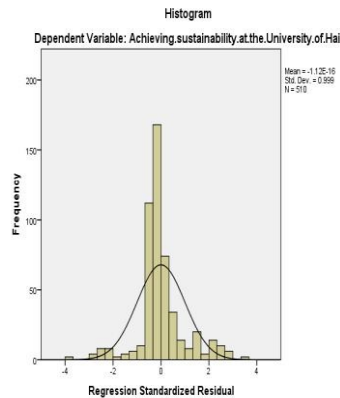


Figure 5. The histogram in the figure shows that the data are normally distributed.

Table 2. The multiple stepwise regression analysis of the effectiveness of RM in achieving sustainability of UOH

Variables		R	R2	F	Sig	B	STED. Errorr	Beta	T	Sig
Sustaining the vision and mission	Effectiveness of RM	0.871	0.759	1603.61 4	0.00 0	0.158	0.004	0.871	40.045	0.00 0
	Risk planning	0.873	0.762	809.459	0.00 0	0.097	0.046	0.634	5.539	0.00 0
Sustainability of policies and objectives	Effectiveness of RM	0.893	0.798	2001.76 1	0.00 0	0.287	0.006	0.893	44.741	0.00 0
Sustainability of human cadres	Effectiveness of RM	0.891	0.793	1948.61 6	0.00 0	0.126	0.003	0.891	44.143	0.00 0
	RM evaluation	0.892	0.796	991.196	0.00 0	0.138	0.049	0.231	2.789	0.00 5
Infrastructure sustainability	Effectiveness of RM	0.859	0.738	1427.41 0	0.00 0	0.162	0.004	0.859	37.781	0.00 0
Achieving sustainability at the UOH	Effectiveness of RM	0.904	0.817	2260.05 6	0.00 0	0.734	0.015	0.904	47.54	0.00 0

From table (2), it is evident that the effectiveness of RM as a whole is the most contributing factor in predicting the extent of the impact on achieving the sustainability of the UOH as a whole, achieving the sustainability of goals and policies, and achieving the sustainability of the infrastructure, as the value of the determination coefficient reached R2 0.904, 0.893, and 0.859, respectively. They are statistically significant at 0.001. This means that RM as a whole is most influential in achieving the sustainability of the UOH as a whole, achieving the sustainability of goals and policies and the sustainability of the infrastructure. This result is consistent with Al-Enezi (2015); Armored & Travel (2019) that RM is one of the most important strategies that seek to achieve sustainability [30]; [29].

Risk planning was the most important contribution to predicting the amount of impact in achieving the sustainability of the vision and mission of the UOH, followed by the effectiveness of risk management as a whole, as the value of the determination coefficient reached R2 0.873 and 0.871, respectively, which are statistically significant at a significant level of 0.001. This means that risk planning, followed by the effectiveness of RM as a whole, is most influential in

achieving the sustainability of the vision and mission of the UOH.

The evaluation of HR was the most contributing factor in predicting the amount of impact in achieving the sustainability of the human cadres of UOH, followed by the effectiveness of HR as a whole, as the value of the determining factor was R2 0.892 and 0.891, respectively, which are statistically significant values at a significance level of 0.001. This means that the evaluation of RM, followed by the effectiveness of HR as a whole, is most influential in achieving the sustainability of the human resources of the UOH.

This result is in agreement with the Abdelwahab & Othman (2016); Trofimova (2020) that universities can manage risks to reduce harmful events to their students and employees, save costs for many operations, achieve economic gains, and preserve their reputation and excellence [30]; [9]. All of them are concepts that constitute in their content the sustainability of the university. It also agrees with Cenar, (2016); Armored & Travel (2019) that the university's RM system must be linked to its main goals and plans [32]; [29]. Darwish & Zubari, (2020) study found that RM is an

effective management tool to help universities achieve their strategic goals [23].

*E. The reality of achieving sustainability in the UOH in terms of (vision and mission - policies and goals - human cadres - infrastructure)*

Table 3. The level of achieving sustainability in the UOH

	Low		Medium		High		Std. Deviation	Mean
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Sustaining the vision and mission	112	22	166	32.5	232	45.5	4.00517	13.6902
Sustainability of policies and objectives	132	25.9	152	29.8	226	44.3	7.06824	23.5608
Sustainability of human cadres	156	30.6	270	52.9	84	16.5	3.12609	9.8353
Infrastructure sustainability	148	29	162	31.8	200	39.2	4.16256	13.1804
Achieving sustainability at the UOH	124	24.3	166	32.5	220	43.1	17.88611	60.2667

From table (3), it is evident that the level of achieving sustainability at the UOH in terms of vision and mission, policies and goals, and infrastructure is high, while the level of achieving sustainability of human cadres was moderate. This result is consistent with Sheta (2018); and Al-Omari (2019) that the degree of realization of

sustainability of higher education institutions came with a moderate degree [2]; [28].

*F. The level of effectiveness of HR (planning, implementation, and evaluation) at the UOH*

Table 4. The level of effectiveness of HR at the UOH

	Low		Medium		High		Std. Deviation	Mean
	Frequency	Percent	Frequency	Percent	Frequency	Percent		
Risk planning	132	25.9	158	31	220	43.1	10.01668	32.9373
Implementation in RM	158	31	144	28.2	208	40.8	7.22573	22.5059
HR evaluation	160	31.4	136	26.7	214	42	5.24074	15.9843
Effectiveness of RM	134	26.3	158	31	218	42.7	22.02877	71.4275

It appears that the level of effectiveness of HR (planning, implementation, and evaluation) in the UOH is high. This result is consistent with the recommendations of Al-Garalleh, (2014) which emphasized the need to increase the role of HR by integrating HR principles and practices into management and decision-making structures in American universities [33].

However, it differs from the Al-Enezi (2015), showing that the degree of effectiveness of HR in some Saudi

universities was low [30], and the study of AL-Medree, (2019) in that the degree of effectiveness of HR in Saudi universities was medium, and this may be due to the different universities in the study sample [34].

*G. Variation in achieving sustainability at the UOH in terms of vision and mission, policies and goals, human cadres, and infrastructure as perceived by leaders, faculty members, and staff*

Table 5. The variation in achieving sustainability at the UOH perceived by leaders, faculty members, and staff

ANOVA Test		Sum of Squares	df	Mean Square	F	Sig.
Sustaining the vision and mission	Between Groups	133.147	2	66.574	4.202	.015
	Within Groups	8031.904	507	15.842	-	
	Total	8165.051	509	-		
Sustainability of policies and objectives	Between Groups	374.297	2	187.149	3.787	.023
	Within Groups	25055.319	507	49.419	-	
	Total	25429.616	509	-		
Sustainability of human cadres	Between Groups	52.966	2	26.483	2.728	.066
	Within Groups	4921.199	507	9.707	-	
	Total	4974.165	509	-		
Infrastructure sustainability	Between Groups	71.987	2	35.994	2.086	.125
	Within Groups	8747.417	507	17.253	-	
	Total	8819.404	509	-		
Achieving sustainability at the UOH	Between Groups	2039.189	2	1019.595	3.215	.041
	Within Groups	160796.544	507	317.153	-	
	Total	162835.733	509	-		

From table (5), there is a statistically significant variance in achieving sustainability for the UOH as a whole and in terms of vision and mission, policies, and goals as perceived by leaders, faculty members, and staff. This means that the job contributed to achieving variation in the university employees' evaluation of the level of achieving sustainability in it and the sustainability of the vision and mission. Regarding the sustainability of policies and objectives, the differences were in favor of faculty members who interact the most with all dimensions of the university's sustainability and are best

capable of assessing its achievement. This result is consistent with of Al-Khawalda (2016); Othman & Abdelwahab, (2018); Trofimova (2020) concerning the presence of variation among university employees in assessing the level of sustainability [35]; [36]; [9].

*H. Variation in the level of effectiveness of HR (planning, implementation, and evaluation) at the UOH as perceived by leaders, faculty members, and staff*

Table 6. The variation in the level of effectiveness of HR at the UOH as perceived by leaders, faculty members, and staff

ANOVA test		Sum of Squares	df	Mean Square	F	Sig.
Risk planning	Between groups	1236.509	2	618.255	6.290	.002
	Within groups	49833.483	507	98.291		
	Total	51069.992	509			
Implementation in risk management	Between groups	440.631	2	220.316	4.274	.014
	Within groups	26134.851	507	51.548		
	Total	26575.482	509			
HR evaluation	Between groups	299.518	2	149.759	5.550	.004
	Within groups	13680.356	507	26.983		
	Total	13979.875	509			
Effectiveness of RM	Between groups	4889.324	2	2444.662	5.119	.006
	Within groups	242111.491	507	477.537		
	Total	247000.816	509			

From table (6), it is evident that there is a statistically significant variance in the level of effectiveness of HR (planning, implementation, and evaluation) at the UOH as perceived by leaders, faculty members, and staff, and this means that the job contributed to achieving the variance in the evaluation of university employees to the level of effectiveness of HR (planning, implementation, and evaluation) at the UOH.

The differences were in favor of faculty members interacting the most with all stages of HR at the university and the most capable of evaluating the level of their effectiveness. This result is consistent with the results of AL-Rasheed, (2018); AlFuqaha, (2012); Othman & Abdelwahab, (2018) regarding the existence of a discrepancy between senior management,



middle management, and faculty members in evaluating the effectiveness of HR at the university [37]; [36]; [36].

## VI. CONCLUSIONS

The research is consistent with modern global visions that are concerned with anticipating and avoiding risks so that they do not turn into crises. It is also consistent with global transformations that are concerned with the concept of sustainability for societies and universities. So, this research sought to analyze the reality of sustainability for the UOH as one of the modern Saudi universities and identify barriers to achieving sustainability. Whereas HR is one of the most important strategies that local, regional, and international quality assurance and accreditation bodies emphasize. HR is also an important issue due to the large and diverse risks and the pursuit of developments in the current era on the one hand and its importance on the other side. The UOH has achieved a high degree as a sustainable university in terms of vision and mission, policies and goals, and infrastructure, while the level of achieving human cadres' sustainability was moderate. The level of effectiveness of HR (planning, implementation, and evaluation) at the UOH was high. A positive statistically significant correlation relationship was found at a level of 0.01 between HR (planning, implementation, and evaluation) and achieving university sustainability in terms of vision and mission, policies and objectives, human cadres, and infrastructure. The effectiveness of HR as a whole was the most contributing factor in predicting the amount of impact on achieving the sustainability of the UOH as a whole. A statistically significant indication was also found in both achieving sustainability and the level of effectiveness of HR at the UOH as perceived by leaders, faculty members, and staff.

## VII. RECOMANDATION

Increasing the activation of risk planning, as it contributed to achieving the sustainability of the university's vision and mission, besides activating the methods of evaluating RM that contributed to the sustainability of human cadres and shedding the light on the principles and practices of risk management to maintain the university's sustainability in terms of vision, mission, policies, goals, human cadres, and infrastructure. Involving leaders and administrators of university employees in risk management and university sustainability processes is imperative. However, the outcomes of this piece of research pose a practical potential, for example, encouraging policymakers to define the most optimal practices for the management of university sustainability through laws and recommendations or encouraging universities pursuing an improvement in their international ranking to netter focus on sustainability. This emphasizes universities' critical roles in the knowledge-based and innovative development of economic systems, enabling resources efficiency, sustaining more environmentally friendly practices, and encouraging a more competitive economy to encourage cultural growth. Moreover, this research can help with maximizing the additional profit received thanks to the management of HR risks.

This qualitative study could inspire future investigations using a dataset to assess the correlation between engagement in RM and university performance in the long run. Future studies could crosscheck a larger number of universities, possibly focusing on national governments' role as sustainability promoters—or consider all the universities in the KSA or Arab Gulf. Also, this study could help with evaluating how to diminish inefficiencies prevailing in the traditional segmented risk management approaches through overarching integrated risk management.

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