

## Organizational agility to counter coronavirus implications in emerging Saudi universities

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### ABSTRACT

Objective: The study's primary goal was to uncover the reality of organizational agility in emerging universities. It also aimed to determine the statistical variances between the mean scores of the sample used in the axes of the organizational agility questionnaire for these universities. The main variables used are gender, academic position, and years of experience. Methodology: The study utilized the descriptive method. The data collection process entailed handing out questionnaires to a sample of seven hundred and forty-seven faculty members in Jazan, Bishah, Hafar Al-Batin, Shaqraa, and Najran Universities. Results: Emerging universities regularly practice organizational agility in light of the emerging coronavirus with high flexibility at moderate costs. The study's results also indicated mathematically substantial variances at the degree of viability between the male sample's average and the female sample's average in favor of the female sample in the timing and the flexibility of practices. It also indicated statistically significant variances at the degree of significance between the mean scores of the research sample, attributed to the difference in the academic position in the timing, flexibility, and cost of practices.

Keywords: Coronavirus, Degree of variability Emerging universities, Organizational agility, Strategy,

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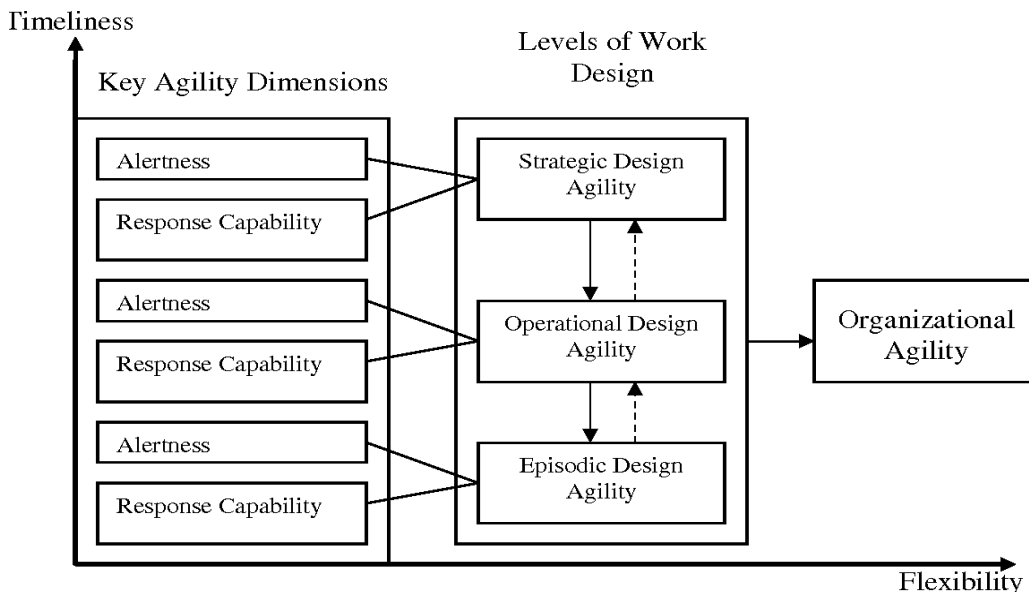
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## 1. Introduction

At the third millennium's dawn, there have been noticeable economic changes in the degree and level of global societies, the reference being to the weakening of confidence in the institutions of the international capital market, the increase in consumer demand, and the emergence of what is known as the immediate product. These economic and other aspects have been reflected in many different aspects of life - social and educational (Al-Omouh et al., 2020, 281). Regardless of their fields, organizations possess a range of capabilities and resources to respond positively to change and adapt to these aspects. Simultaneously, a noticeable rise in environmental volatility because of more significant uncertainties in global fiscal markets, unstable customer desires, and swift product uselessness has triggered businesses to reflect their aptitude to react to the transformation. Following fast and unexpected transformation, agility has developed, alongside configuration, as a critical corporate imperative. Moreover, agility has gathered noteworthy responsiveness from a comprehensive variety of IS researchers (Tallon, 2011, 464). These researchers have tried to establish the approaches that organizations can utilize to achieve considerable agility.

### 1.1 Conceptual or Theoretical Framework

Organizational agility relates to firms' ability to respond to changes in the marketplace. Organizations with considerable agility respond to situations swiftly, preventing debilitating impacts. Researchers have opined many theories and concepts to discuss agility, highlighting its influence on organizational success. The current paper uses a work-design conceptual framework to investigate the response of Saudi Arabian emerging universities to market dynamics. Below is the representation of this framework:



### 1.2. Related Research

Researchers have tried to respond to the questions on organizational agility from multiple perspectives. For example, industry professionals have focused on specialization and group strategies, allowing more space to react to the difficulties flexibly, and for information systems

professionals. They have also focused on technology's role in enhancing agility by reducing time, improving product design and development quality, and facilitating the necessary communications to coordinate work activities. At the same time, researchers in knowledge management have emphasized some cognitive practices that enable agility by providing greater and faster awareness (Haider & Kayani, 2020, 15). However, one of the changes remains that agility is a concept and the factors that constitute it differ between researchers and specialists. Agility is the capability to perceive, evaluate, and react to threats and prospects in the corporate world (Batra, 2020, 363). Also, agility means fast, prompt, and active movements – the ability to move quickly, easily, and contemplate efficiently and wisely (Shiri, 2014, 88). In the twenty-first-century context of competitiveness, organizations are always looking to be agile. This fact is attributed to the following reasons and justifications:

All institutions must be agile in the 21st-century competition since contemporary institutions face increased pressures to be innovative in the vigorous worldwide markets.

Agility enhances an institution's ability to supply high-quality goods and services and, subsequently, determines an organization's productivity.

Many organizations are functioning in a rapidly evolving environment whose rapid changes make adaptive approaches vital. The problem of how they can be successful in a vibrant and volatile environment is very crucial contemporarily.

Despite the multiple solutions like networking, virtual organizations, and reengineering, the organization's agility is still very significant in organizational performance (Shiri, 2014, 87-88).

One of the researchers contributed to these justifications by asserting that agility is a development methodology (Araujo, 2010, 1). It is worth noting that agility is not a goal in itself. Still, it is considered a work method, which the organization can use in the face of all circumstances, especially the difficult ones. The management literature frequently uses concepts close in meaning and intertwined with the idea of agility, such as flexibility, response, and adaptability (Niqresh, 2021, 9). Agility capabilities are divided into powers axes of product adjusting, having the capability in adjusting operations, internal and internal collaboration and lastly, employees, information, and ingenuity (Rahimisadr, 2020, 10). The first axis is allied with approaches involving products and obligatory procedures for responding towards deviations and market unpredictability. The aptitude in altering processes into skills offers means and strategies for production systems to manage short-term and long-term adjustments (Shiri, 2014, 88). The axis of teamwork and partnership is linked to an establishment's departments' capacity to liaise and the firm's competence (as a complete entity) to join forces with clients and dealers.

The emerging Saudi universities are not far from other organizations regarding successes or failures under this global challenge. Considering that they are regional universities, it is incumbent on them to effectively face the current challenges and changes in Saudi Arabia. That is because Saudi Arabia requires those universities to improve their organizational performance and develop their capabilities and skills, enabling them to interact positively with those global and local circumstances (Alsayyar & Almakki, 2020, 12). Despite officials' efforts in emerging Saudi universities, it is noticeable that some challenges persist and that officials in these universities lack some administrative skills related to the planning process, organization process, control process, and decision-making process. In association with this, the main gap that the current research seeks to tackle is strategies for achieving organizational agility. The question for both researchers and practitioners is, how can an organization achieve and maintain agility?

### **1.3. Purpose of the Study**

This study aims to assess emerging Saudi universities' ability to face the adverse effects of the coronavirus endemic. The specific goals are:

To uncover the reality of organizational agility in emerging Saudi universities.

To determine the statistical variances between the research sample's mean scores in the axes of the organizational agility questionnaire for emerging Saudi universities, which refer to the following variables: Gender, Academic position, and Years of Experience.

To present a proposal for using the organizational agility approach to face the repercussions of the coronavirus in emerging Saudi universities.

## **2. Literature review**

### **2.1. Organizational Agility and Its Relationship to Some Concepts**

Common concepts are associated with organizational agility, such as resilience, hedging, malleability, and robustness. Flexibility is more closely related and overlaps with agility. Its characteristics are closely related to the ability to anticipate, agility, and adaptability, and this overlap has caused confusion among researchers. Therefore, agility is the highest degree of flexibility. In other words, flexibility is considered a degree of organizational agility.

### **2.2. Evolution of Interest in Organizational Agility**

Agility is a terminology that has its roots in the industrial recession in the United States of America and the loss of competitiveness from 1980 to 1990. A collection of specialists and fellows at the University of Lehigh in Pennsylvania, representing the Ministry of defense, congregated to scrutinize the businesses of the United States to identify suitable approaches for the success of the sector. The outcome of its effort was a declaration with a designation '21st Manufacturing Enterprises' (Shiri, 2014, 88; Mehrotra, 2020, 208). These efforts resulted in the emergence of agility - as a concept - in manufacturing, and then soon, the idea spread more widely (Aghina, Handscomb, Ludolph, Rona, and West, 2020,17). The spread paved the way for the emergence of the concept of organizational agility.

As a result of the growing interest in organizational agility, the concept has gained wide acknowledgment among moguls and scholars in applying it to projects. The necessity for organizational adaptation is in the wave of changing and emerging market circumstances and with the needed swiftness (Harraf, Wanasika, Tate, and Talbott, 2015, 675). So, it is evident that the emergence of the idea of organizational suppleness came in the circumstances of the American industrial recession during the ninth decade of the twentieth century, intending to help the recovery of American industries.

### **2.3: Justifications for applying organizational agility**

Organizational agility represents the future of pioneering organizations. The rate of change of each business has increased steadily over the past two decades, showing no sign of abating so that the organization remains competitive. It must have the capacity to continually acclimatize to adjustments in the market, changes in customer expectations, business changes, and keep pace with the tremendous advances in information technology (Araujo, 2010, 1). These are the most important justifications for applying organizational agility in higher education institutions:

### **2.3.1: Encouraging competitiveness.**

The term competitiveness has become a common term in administrative and economic writings in the last two decades. The concept of competitiveness has become of great importance for monetary policy. The idea of competitiveness varies according to the different economic levels. There is competitiveness at the macro level, which is the competitiveness of the state, and competitiveness at the middle level, which is the competitiveness of the economic sector, and the competitiveness at the micro-level, which is the organization's competitiveness (Saha, N., Saha, T., Gregar, and Saha, P, 2020, 588). The literature has tended to encourage competitiveness under the umbrella of ethics. The recommendations of scientific forums and conferences emphasize the need to formulate a process for applying ethical dimensions' in strategies to improve the competitiveness of organizations.

There is a connection between competition and organizational flexibility. Thriving market and service competition needs an agile organization. The degree and intensity of competition also require a high degree of skill for the organization and may even lead to an increased need to apply organizational agility (Zainal, Yousuf, & Salloum, 2020, 768). The ability of the organization to achieve a new competitive advantage in the context of changing situations stems from appropriately designing business, at the right time, with a degree of flexibility, and at reasonable prices, in a way that contributes to maintaining the competitive advantages of the organization in turbulent environments (Holsapple, 2008, 4). That means that the organization needs to be competitive to achieve the required organizational agility.

### **2.3.2: Meeting the Needs of Organizational Development.**

Among the organizational changes calling for organizational agility are the organization's need for job planning and flexibility in work procedures and renewal. The routine at work is a strong justification for adopting agility at the strategic and operational levels. Thus, the organization's agility is manifested on more than one level, and the speed of each group is affected by the organization's response to internal changes (Chan, Chu, & Liu, 2021, 211). However, an organization may be agile at a certain level and more successful than some other levels. The decision in achieving the degree of agility at any level is the availability of three main factors in the establishment: the degree of involvement of employees in the management of the organization, the extent of the participants' willingness and ability to change social relations, and managing relationships (Holsapple, 2008, 3-4). It is clear from these factors that they affect the organization's leadership style, which is also related to the internal dimension.

**2.3.3: The Unprecedented Development in Information Technology.** Park posed a question: How can information technology improve the agility of organizations? At the same time, Park mentioned a difference among researchers about the roles of information technology in enhancing organizational agility (Park, 2011, 13). Concerning the first part; The study showed that information technology plays a vital role in changing business processes, organizational environments, and capabilities, and pushing towards environmental change, such as digital convergence of products, by providing new digital platforms. From here, information technology enables organizations to develop organizational agility to deal with troubled environments successfully.

Regarding the other part, Park mentioned a study whose literature emphasized the critical role of information technology in achieving and enhancing its agility. In contrast, the literature on strategic management largely ignored this role (Park, 2011, 16). It is assumed that some

organizations prefer maintaining a state of balance and stability, which reduces the need for these organizations to change since they are interested in securing the current situation (Talon, 2011, 464; Melian-Alzola, Fernandez-Monroy & Hidalgo-Penate, 2020, 335). That does not mean severing the link or underestimating the role of information technology in imparting a kind of regulatory agility, which has a technological dimension.

#### **2.4. Principles of Organizational agility.**

Charles Araujo's (2010) study explained five principles of organizational agility: awareness, discipline, inclusiveness, rebalancing, and repetition. Perception means the belief that we must change all views to understand all risks threatening the organization. On the other hand, discipline is highly demanded – when an organization is rapidly developing, its agility is inclusively related to discipline (Menon & Suresh, 5). The goals of discipline can only be achieved after shifting from individualism to inclusiveness. That can be done in a way that helps in searching for solutions to the organization's problems and creating a shared understanding among everyone. In many organizations, change management looks like an inflated bureaucracy (Kuhn, Dolle, Riesener, and Schuh, 2020, 625). When the emphasis is placed on conservative documents and methods that harm the organization's agility and slow down the degree of response, the organization needs to rebalance.

#### **2.5. The Repercussions of the Coronavirus (COVID-19) in Emerging Saudi Universities**

The Coronavirus pandemic is an ongoing global pandemic. The disease was first identified in December 2019 in Wuhan, central China, and was noted by the World Health Organization on March 11, 2020 pandemic (World Health Organization, 2020). The first case of the Coronavirus pandemic appeared in the Kingdom of Saudi Arabia on March 2, 2020. The Saudi government began to take several precautionary and early actions to thwart the spread of the virus and support countries and international organizations' efforts to confront this pandemic.

Given the current conditions resulting from the new Coronavirus (COVID-19) outbreak, the Minister of Education decided on 7/13/1441 AH to suspend studies in educational institutions starting 7/14/1441 AH until further notice. There has been the activation of virtual classrooms and distance education during the suspension period. This aspect has worked in the interest of Saudi Arabian universities as they attempt to develop practical solutions to the current situation (Zitoun, 2020, 64). University agencies for educational and academic affairs confirmed that several points are considered. They must be considered during the study suspension period to prevent the Coronavirus spread (Ministry of Education, 2020, 3-5). The universities need to Facilitate students and provide them with all kinds of academic support and guidance to overcome this critical period.

Saudi universities have made efforts to address the Coronavirus pandemic by presenting 619 research and scientific papers. That is why the Kingdom ranked 17th globally and first in the Arab world to publish scientific research related to the Coronavirus pandemic (Ministry of Education, 2021). Studies in Saudi universities still work on a remote system, as courses are taught through virtual classes. Saudi universities launched these classes through technological applications such as Blackboard, Modular Object-Oriented Dynamic Learning Environment (Moodle).

### **3. Method and Materials**

### 3.1. Research Model

The study used a descriptive approach. A questionnaire was built and codified by calculating the stability factor per the study objectives. The reliability coefficient reached (0.88) is a high stability coefficient. The questionnaire was disseminated to five Saudi universities from the emerging Saudi universities, those established a year later (1424 H). These five universities are Jazan University and Najran University, representing the southern region in Saudi Arabia; Bisha University representing the western region in Saudi Arabia; Shaqra University representing the central region; and Hafar Al-Batin University representing the eastern and northern regions.

### 3.2. Participants

The questionnaires were applied to a random sample of faculty members in these five universities. We disseminated them through these universities' official e-mail and the WhatsApp communication group by sending the link to the questionnaire. The respondents answered and sent their responses electronically. The period of applying the questionnaire lasted three weeks. The total number of respondents was 747 from all five universities.

### 3.3. Data Collection Tools and process

The questionnaire comprises two sections: the first section handles the study variables; namely, gender, academic position, and, years of experience. The second part deals with the elements of the questionnaire, which are the planning process (five paragraphs), the organizing process (four paragraphs), the control process (six paragraphs), and the decision-making process (six paragraphs). Each paragraph concerns three primary responses: (timing of practice, the flexibility of practice, and cost of practice). Also, each main answer has three sub-responses:

1. The timing of the practice (always– sometimes– rarely).
2. Flexibility of practice (high - middle - low)
3. Cost of practice (high– middle- few).
4. The following is a description of the research sample based on the study variables:

#### 3.1. Gender Variable

**Table 1:** Study sample according to the gender variable

Gender	Frequency	Percent
Male	539	72.2
Female	208	27.8
Total	747	100.0

Table 1. shows that the percentage of the male group is almost double the percentage of the female group. This is due to the study population's nature, which is the teaching



staff of Saudi universities, where the number of males is high than the number of females.

### 3.2 Academic Position Variable

**Table 2:** study sample according to the academic position variable

Academic position	Frequency	Percent
Professor	51	6.8
Associate Professor	181	24.2
Assistant Professor	441	59.0
Teaching Assistant / Lecturer	74	9.9
Total	747	100.0

Table 2. shows that the Assistant Professor group's percentage constituted 59% of the study sample group, since the Assistant Professor position is the most prominent in Saudi universities in general, and universities depend on this position in the academic field. A large percentage of the faculty members are non-Saudis, and they occupy this position. The percentages of higher positions (Professor, Associate Professor) are lowered, and fewer positions (Teaching Assistant / Lecturer) are much lower.

### 3.3 Years of Experience Variable

**Table 3:** study sample based on the years of experience variable

Years of Experience	Frequency	Percent
Less than (5) years	179	24.0
(5-10) years	301	40.3
More than (10) years	267	35.7
Total	747	100.0

Table 3. shows that the percentage of members with 5 to 10 years of experience is higher than others, reaching (40.3%) of the total study sample. The proportion of members with less than five years' experience is lower (24%), and the percentage of members who had experience of more than (10) years is in-between (35.7%).

### 3.4 Data analysis tools

The study used SPSS to determine:

- The mean average and the standard deviation for the responses of the study sample in each item, each pack, and the questionnaire. We also used it to determine the degree of organizational agility through the weighted mean, and Table No. (4) shows this.



**Table 4:** the weighted average

Practice	Practice time			Practice flexibility			Practice cost		
	Always	Sometimes	Rarely	High	Middle	Low	High	Middle	Few
Scale	3	2	1	3	2	1	1	2	3
weighted average	3,- 2.34	2.33- 1.67	1.66- 1.00	3,- 2.34	2.33- 1.67	1.66- 1.00	1.00- 1.66	1.67- 2.33	2.34- 3.00

Table 4. shows:

- The weighted average in both timings of practice and flexibility is the same and follows the same direction.
- The weighted average in the cost of practice differs. The degree of organizational agility increases if the cost of practice is less, while the degree of organizational agility decreases if the cost of practice is high.
- T-test to determine the statistical variances between the means of the research sample because of the gender variable (male-female).
- One-way analysis to determine the statistical variances between the mean of the research sample regarding the variables of the academic stand (Professor Associate Professor, Assistant Professor, Teaching Assistant and Teaching Assistant / Lecturer), years of experience variable (Less than (5) years, (5-10) years, More than (10) years).
- Schiffe test to determine the direction of the statistical indicators, if any.

#### 4. Results and Analysis

##### 4.1: Reality of Organizational Agility in Emerging Saudi Universities

###### 4.1.1: The Degree of Agility in the Planning Process.

The data on the level of organizational agility in the planning course in emerging Saudi universities from the faculty members' viewpoints showed that:

- The average of the study sample's responses when practicing the planning process is (2.58) with a standard deviation of (0.59).
- The mean of the study sample's responses in the flexibility of practicing the planning process is (2.50) with a standard deviation (0.60).
- The average of study sample responses in the cost of practicing the planning process is (1.70) with a standard deviation of (1.70).

###### 4.1.2: The Degree of Agility in Organization Process.

The data on the level of organizational agility in the organization course in emerging Saudi universities from the faculty members' viewpoints showed that:

- The average of the study sample's responses at the time of practicing the planning process is (2.49) with a standard deviation of (0.59).

- The average of the study sample's responses in the flexibility of practicing the planning process is (2.42) with a standard deviation of (0.62).
- The average of the study sample responses in the cost of practicing the planning process is (1.82) with a standard deviation of (0.69).

#### **4.1.3: The degree of Agility in Control Process.**

The data on the level of organizational agility in the control course in emerging Saudi universities from the faculty members' viewpoints showed that:

- The average of the study sample's responses at the time of practicing the planning process is (2.50) with a standard deviation of (0.63).
- The mean of the study sample's responses in the flexibility of practicing the planning process is (2.45) with a standard deviation of (0.63).
- The mean of the study sample responses in the cost of practicing the planning process is (1.75) with a standard deviation of (0.71).

#### **4.1.4: The Degree of Agility in the Decision-Making Process.**

The data on the level of organizational agility in the decision-making course in emerging Saudi universities from the faculty members' viewpoints showed that:

- The average of the study sample's responses at the time of practicing the decision-making process is (2.52) with a standard deviation of (0.61).
- The mean of the research sample's responses in the flexibility of practicing the decision-making procedure is (2.48) with a standard deviation of (0.62).
- The mean of the study sample's responses in the cost of practicing the decision-making process is (1.73) with a standard deviation of (0.71).

#### **4.1.5: Degree of organizational agility in the whole questionnaire**

- The average of the research sample replies at the time of practicing in the whole questionnaire is (2.52) with a standard deviation of (0.605).
- The mean of the study sample's responses in the flexibility of practicing in the whole questionnaire is (2.46) with a standard deviation of (0.6175).
- The research sample responses in the cost of practicing in the whole questionnaire are (1.75) with a standard deviation of (0.685).

### **5.2: Determine the Statistical Variances Between the Mean Scores of the Study**

**5.2.1: Gender Variable.** Table (9) shows the statistical variances between the study sample's mean scores in the whole questionnaire.

**Table 5:** The Results of the T-Test in the Whole Questionnaire

Practices	agility	N	Mean	Std. Deviation	t	Sig	Statistical significance
The whole questionnaire	Practice time	539	52.0464	10.42978	4.836	.000	significance
		208	55.3846	7.55758			
	Practice flexibility	539	51.2709	10.61163	2.400	.017	significance
		208	53.0048	8.06884			
	Practice cost	539	37.0501	11.79437	1.468	.142	not significant
		208	35.6683	10.80618			

Table 5 shows the following:

As for Practice time: It is evident that the average of the male sample is (52.0464) with a standard deviation of (10.42978), which is less than the average of the female sample of (55.3846) with a standard deviation of (7.55758) as the result of a test T (4.836) with a (0.00) possibility value lower than the significance level (0.05). Accordingly, the study determined that statistically significant variances exist at the degree of significance (0.05) between the male sample's average and the female sample's average in favor of the higher average females.

As for Practice flexibility: It is evident that the average of the male sample is (51.2709) with a standard deviation (10.61163), which is less than the average of the female sample of (53.0048) with a standard deviation (8.06884) as the result of a test T (2.400) with a (0.017) possibility value lower than the significance level (0.05). Accordingly, the study determined statistically significant variances at the level of significance (0.05) between the average of the male sample and the average of the female sample in favor of the higher average females.

As for Practice cost: It is evident that the average of the male sample is (37.0501) with a standard deviation of (11.79437), which is higher than the average of the female sample of (35.6683) with a standard deviation (10.80618) as the result of a test T (1.468) with a (.142) possibility value lower than the significance level (0.05). Accordingly, the study determines no statistically significant variances at the level of significance (0.05) between the male sample's average and the female sample's average.

#### 4.2.2: Academic Position Variable.

Table 6. demonstrates the statistical variances between the average scores of the study sample in (planning process, organization process, control process, and decision-making process) that are attributed to the variable of the academic position:

**Table 6:** One-way Analysis of Variance (ANOVA) of the Scores in the Whole Questionnaire

Practices	agility	Source	Sum Squares	of df	Mean Square	F	Sig.
The questionnaire	Practice time	Between Groups	1581.146	3	527.049		
		Within Groups	70438.420	743	94.803	5.559	.001
		Total	72019.566	746			
	Practice flexibility	Between Groups	1354.321	3	451.440		
		Within Groups	73156.356	743	98.461	4.585	.003
		Total	74510.677	746			
	Practice cost	Between Groups	1784.477	3	594.826		
		Within Groups	97513.855	743	131.243	4.532	.004
		Total	99298.332	746			

Table 6 shows the following:

As for Practice time: There are statistically significant variances between the mean scores of the research sample in the total score of the questionnaire attributable to the variable of the academic position, with an F-value of (5.559) with a significance value (0.001), which is statistically significant at the level of significance (0.05).

As for Practice flexibility: There are statistically significant variances between the mean scores of the research sample in the total score of the questionnaire attributable to the variable of the academic position, with an F-value of (4.585) with a significance value (0.003), which is statistically significant at the level of significance (0.05).

As for Practice cost: There are statistically significant variances between the mean scores of the research sample in the total score of the questionnaire attributable to the variable of the academic position, with an F-value of (4.532) with a significance value (.004), which is statistically significant at the level of significance (0.05).

**Table 7:** Scheffe Test Results for Comparisons of the Arithmetic Mean Scores

Agility	Group	Professor	Associate Professor	Assistant Professor	Teaching Assistant / Lecturer.
Practice time	Professor (54.666667)		4.22468	.93197	1.18018
	Associate Professor (50.441989)			-3.29270*	-3.04450-
	Assistant Professor (53.734694)				.24821

	Teaching Assistant / Lecturer (53.486486)			
	Professor (53.4510)	3.90954	.88182	2.31585
Practice flexibility	Associate Professor (49.5414)		-3.02772-*	-1.59370-
	Assistant Professor (52.5692)			1.43403
	Teaching Assistant / Lecturer (51.1351)			
	Professor (36.6275)	-2.61012	.62745	2.26259
Practice cost	Associate Professor (39.2376)		3.23757*	4.87270*
	Assistant Professor (36.0000)			1.63514
	Teaching Assistant / Lecturer (34.3649)			

\* The mean difference is statistically significant at the 0.05 level in favor of the higher average.

Table 7 shows the following:

As for Practice time: Statistically significant variances in favor of the Assistant Professor sample compared to the Associate Professor sample. The average for the Assistant Professor sample is (53.734694) whereas the average for the Associate Professor sample is (50.441989).

As for Practice flexibility: Statistically significant variances in favor of the Assistant Professor sample compared to the Associate Professor sample. The average for the Assistant Professor sample is (52.5692) whereas the average for the Associate Professor sample is (49.5414).

As for Practice cost: Statistically significant variances in favor of the Associate Professor sample compared to the Assistant Professor sample. The average for Associate Professor sample is (39.2376) whereas the average for Associate Professor sample is (36.0000). Also, Table No. (11) shows statistically significant variances in favor of the Associate Professor sample compared to the Teaching Assistant / Lecturer sample. The average for Associate Professor sample is (39.2376) whereas the average for Associate Professor sample is (34.3649).

**5.2.3:Years of Experience variable.** Table 8. illustrates the statistical variances between the mean scores of the study sample (planning process, organization process, control process, and decision-making process) attributed to the variable 'years of experience'.

**Table 8:** One-Way Analysis of Variance of the Scores in the Whole Questionnaire

Agility	Group	Less than (5) years	(5-10) years	More than (10) years
Practice time	Less than (5) years (51.9888)		70220	1.96997
	(5-10) years (52.6910)			1.26777
	More than (10) years (53.9588)			
Practice flexibility	Less than (5) years (50.2179)		1.50305	2.60235 *
	(5-10) years (51.7209)			1.09929
	More than (10) years (52.8202)			
Practice cost	Less than (5) years (36.3240)		.16123	1.13665
	(5-10) years (36.1628)			1.29788
	More than (10) years (37.4607)			

\* The difference in mean difference is statistically significant at the 0.05 level In favor of the higher average.

Table 8. shows the following:

As for Practice time: Table No. (8) shows no statistically significant variances between the mean scores of the study sample in the total score of the questionnaire attributable to the 'years of experience' variable.

As for Practice flexibility: Table No. (8) shows that there are statistically significant variances between the mean scores of the study sample in the total score of the questionnaire attributable to the 'years of experience' variable, where the value of F (3.662) with a significance value (0.026), which is statistically significant at the level of significance (0.05).

As for Practice cost: Table No. (8) shows no statistically significant variances between the mean scores of the study sample in the total score of the questionnaire attributable to the 'years of experience' variable.

**Table 9:** Scheffe Test Results for Comparisons of the Arithmetic Mean Scores

Agility	Group	Less than (5) years	(5-10) years	More than (10) years
Practice time	Less than (5) years (51.9888)		70220	1.96997
	(5-10) years (52.6910)			1.26777

Practice flexibility	More than (10) years (53.9588)			
	Less than (5) years (50.2179)		1.50305	2.60235 *
	(5-10) years (51.7209)			1.09929
Practice cost	More than (10) years (52.8202)			
	Less than (5) years (36.3240)		.16123	1.13665
	(5-10) years (36.1628)			1.29788
	More than (10) years (37.4607)			

\* The difference in mean difference is statistically significant at the 0.05 level In favor of the higher average.

Table 9. shows the following:

As for Practice flexibility: Table No. (9) shows statistically significant variances in favor of the 'more than (10) years' sample compared to the 'less than (5) years' sample. The average for the 'more than (10) years' sample is (52.8202) while the average for the 'less than (5) years' sample is (50.2179).

## 5. Discussion

### 5.1. Reality of Organizational Agility in Emerging Saudi Universities

**5.1.1. The Timing of Practicing Organizational Agility in Emerging Saudi universities.** This study's results indicated that the general average of the timing of practicing administrative work (planning, organizing, control, decision-making) in emerging Saudi universities was (2.58), with a standard deviation of (0.60). This result indicates that emerging Saudi universities regularly practice organizational agility considering the emerging coronavirus (COVID-19). (58.42%) of the respondents agreed that emerging Saudi universities always practice organizational agility. However, (35.33%) of the respondents said that sometimes emerging Saudi universities practice organizational agility, and (6.27%) reported that emerging Saudi universities seldom practice organizational agility. It may be because most colleges have a clear vision to reduce the adverse effects of the coronavirus on the educational process. They provide electronic education as a suitable alternative to ensure the success and continuity of the educational process rather than stopping it, as it happened in some educational systems in other countries. In doing so, they achieved this degree of organizational agility. They can also be linked to the financial capabilities of Saudi universities in the provision of e-learning tools.

The overall results show that the emerging Saudi universities targeted survival and prosperity considering the COVID-19 pandemic. These universities allocated resources and made efforts to develop their capabilities and practices in planning to face the repercussions of the coronavirus on the educational process (Batra, 2020, 361). Overall, the results of this study support this fact. The emerging practices of Saudi universities in planning are considered



traditional (Khalil, Mansour, Fadda, Almisnid, Aldamegh, Al-Nafeesah, Alkhalifah, and Al-wutayd, 2020, 4). Regardless, these practices are useful in facing the repercussions of COVID-19. A scientific paper "Post-agility: What follows a decade of agility?" suggested more balanced approaches between existing traditional planning methods and the new agile methods. (Baskerville, Richard, Pries-Heje, Jan and Madsen, Sabine, 2011, 553-554).

**5.1.2: Flexibility to Practice Organizational Agility in Emerging Saudi Universities.** The study's results also indicated that the general average of the flexibility of practicing administrative work (planning, organizing, controlling, and making decisions) in emerging Saudi universities was (2.48) with a standard deviation (0.62). This result indicates that emerging Saudi universities practice organizational agility with a high degree of flexibility considering the emerging coronavirus (COVID-19). (54.93%) of the respondents agreed that the emerging Saudi universities practice organizational agility with a high degree of flexibility. However, (37.88%) of the respondents agreed that the emerging Saudi universities practice organizational agility with a moderate degree of flexibility, and (7.18%) of the respondents said that emerging Saudi universities practice organizational agility with a low degree of flexibility.

The possible reason for this result is that the fluctuation of Coronavirus (COVID-19) cases has increased and decreased at the world's level, including Saudi Arabia. This fluctuation has forced universities to be flexible in administrative processes, teaching and learning processes, and student evaluation (Hidayat-ur-Rehman, Ahmad, Ahmed, and Alam, 2021, 5). It is worth noting that when the number of individuals infected with the coronavirus decreases, Saudi universities reduce their preventive measures, and when cases of infection increase, Saudi universities increase precautionary measures, depending on the instructions of the Saudi Ministry of Health. Therefore, some Saudi universities, such as the University of Hafr Al-Batin and the University of Jazan, held the first semester exams 2020/2021 in the presence of students in their colleges, while the second semester 2019/2020 exams were held in all Saudi universities.

**5.1.3: The Cost of Practicing Organizational Agility in Emerging Saudi Universities.** The study's results also indicated that the general average cost of practicing administrative work (planning, organizing, controlling, and making decisions) in emerging Saudi universities was (1.73) with a standard deviation of (0.71). This result indicates that emerging Saudi universities practice organizational agility at a moderate cost considering the (COVID-19) pandemic. Also, (41.73%) of the respondents agreed that the emerging Saudi universities practice organizational agility with a medium-cost degree. However, (42.42%) of the respondents agreed that the emerging Saudi universities practice organizational agility at a high cost, and (15.87%) of the respondents said that emerging Saudi universities are practicing organizational agility at a low price.

This finding is most likely accredited to the Coronavirus (COVID-19) repercussions on emerging Saudi universities. Non-profit educational institutions have not significantly changed the cost of educational services since they are governmental, so the salaries of faculty and workers are still being paid. Also, e-learning expenses may have increased in these universities since universities are entirely relying on e-learning (Hoq, 2020, 460). In return, universities' expenditures in the field of maintenance of facilities and services have decreased due to the permanent absence of students for a long time. This indicates some emerging Saudi universities' ability to control costs during the pandemic while maintaining pre-Corona outputs, which were initially low.

Batra (2020) states that business success stems only from tangible assets, controlling costs, maintaining quality, and improving stocks. In return, Batra warned against over-optimism,

which entails relying on dynamic capabilities due to the burden of cost changes in light of the emerging coronavirus pandemic (Batra, 2020, 361). There is a high degree of organizational agility in the emerging Saudi universities in terms of timing of practices and flexibility of practices in planning, organizing, controlling, and making decisions. However, these universities need to develop their information systems urgently, to achieve and predict organizational agility, as indicated by the study (Batra, 2020, 361-362). It also needs to develop its e-learning system (Naciri, A., Baba, M., A, Achbani, A., & Kharbach, A., 2020, 1-2). The teaching style should incorporate online education and remote teaching strategies supporting student-centered learning during this pandemic.

## **5.2: Determining the Statistical Variances Between the Mean Scores of the Study**

**5.2.1: Gender Variable.** The study's results indicated statistically significant variances at the (0.05) level of significance between the mean of the male sample and the average of the female sample in favor of the female sample in the timing and the flexibility of practices. This result was similar to the result of the study (Hamdan, M.K., El Talla, S.A., Al Shobaki, M.J., & Abu-Naser, S.S, 2020, 85), which indicated that there are statistically significant variations in the dimensions' scale due to the variable of sex. In the dimensions of strategic agility, the variances were in favor of the female sample. This result also agrees with a study (Akkaya, B. & Üstgörül, S., 2020, 121-137), which showed that women managers have more poor leadership qualities. It also showed that women leaders could be presented to have the opportunity to lead others towards a better future. The reason shows that that emerging Saudi universities need women in more leadership positions and that they need effective and agile leaders who understand the complexities of the rapidly changing university environment in light of the Corona pandemic (Alotaibi, 2020, 156).

The results also indicated no statistically significant time at the (0.05) level of significance between the male sample's average and the female sample's average in the cost of practices. This may be because cost practices in Saudi universities are determined and controlled by the higher management of the universities. That is, they are central, and there is no link for faculty members in determining the cost.

**5.2.2: Academic Position Variable.** The study's results indicated statistically significant variances at the level of significance (0.05) between the mean scores of the study sample, attributed to the difference in the academic position in the timing, the flexibility, and the cost of practices. The feasible reason for this result may be the difference in the nature of the academic job and the tasks of each job. That is because the perception of faculty deans and department heads in some practices differs from the perception of other faculty members. This result contrasted with the study results (Hamdan, M.K., El Talla, S.A., Al Shobaki, M.J., & Abu-Naser, S.S, 2020, 85-86), which indicated that there are no statistically significant variances in the dimensions of the scale. This contradiction may be attributed to the job variable in the strategic agility dimensions.

**5.2.3: Years of Experience Variable.** The study results indicated no statistically significant variances at the level of significance (0.05) between the mean scores of the study sample, which was attributed to the difference in years of experience in the timing of practices, and the cost of treatment. The feasible reason for this finding may be that all study sample members believe that emerging Saudi universities are regularly practicing organizational agility considering the emerging coronavirus (COVID- 19). Also, these practices are clear to everyone despite the

number of years of experience of the faculty. The same reason is related to the cost of practice. The cost of practices in these universities and the corresponding budget are central issues related to university administration. There are statistically viable variances at (0.05) significance level between the mean scores of the study sample due to the different years of experience in the flexibility of practices. This indicates that the more years of experience, the greater the degree of organizational agility and its practices.

## **6. Recommendations**

Emerging Saudi universities are regularly practicing organizational agility considering the emerging coronavirus (COVID-19) pandemic. The degree of flexibility in the practice of these universities has also increased. Therefore, the emerging Saudi universities are recommended to focus on more practices regarding administrative processes considering the repercussions of the coronavirus pandemic. Following this recommendation will significantly contribute to the quality of procedures, the quality of the educational process, and the improvement of outputs. In turn, the emerging Saudi universities' planning practices will not become of the traditional type. Considering the COVID-19 pandemic, emerging Saudi universities practice organizational agility at an average cost. Therefore, the study highlights the need to reduce the restrictions of the central administration of Saudi universities. It also suggests creating room for colleges and academic programs to set their budget. The spending expenditure should vary according to the nature of each college and each educational program or department.

## **7. Limitations of the Study**

This study attempted to determine the degree of agility of the practices of emerging Saudi universities in four areas only: planning, regulation, oversight, and decision-making. In doing so, it ignored other areas that may also be adversely affected by the Coronavirus (COVID-19) pandemic. Also, it collected data from a limited number of universities. Despite the limitation, the collected data were obtained from a representative sample of members of teaching in emerging Saudi universities.

## **8. Future Directions**

Saudi universities, especially emerging universities, face internal and external challenges due to the Coronavirus pandemic (COVID-19) and other factors. Saudi universities can either remain satisfied with their performance and ignore the ongoing change or move forward in the face of the repercussions of the coronavirus pandemic. Naturally, moving forward in facing the repercussions of the pandemic will help these universities maintain competitiveness, especially at the local level. Being satisfied with the regular performance will lead these universities out of the competition. So far, no previous studies have attempted to address organizational agility in emerging universities, considering the repercussions of the coronavirus pandemic in the Saudi context. This study enriches the existing literature on organizational agility in higher education by listing the most critical practices in the administrative fields of planning, regulation, oversight, and decision-making. By following this study's recommendations, emerging Saudi universities can achieve agility and effectively counter the coronavirus pandemic's adverse effects. The study's results will help senior management in emerging Saudi universities adopt the current study practices and publish them in their colleges and academic programs.

## 9. Authors' Contributions

Prof. Dr. Qassem bin A'ail Al-Harbi: I mainly contributed to conceptualizing the introduction and review of the literature for this study, and I also assisted in conducting the questionnaire application online in the local language.

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