

THE STUDY OF MEASURING THE LEVEL OF ORGANIZATIONAL AGILITY AT YANBU COLLEGES AND INSTITUTES IN SAUDI ARABIA

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Abstract

This study measures the level of agility of higher education institutions in Saudi Arabia using descriptive statistical methods. A correlation analysis was carried out based on data gathered through a survey consisting of 19 items and 116 participants. The study reveals a significant petition for increasing organizational quickness to take swift action towards positive change. There is positive and significant correlation exists among the different factors presented. The hypotheses framed were found true and hence the respondents of this study are ready to accept, test and implement the changes in the organization.

Keywords: Organizational Agility, Royal Commission of Yanbu Colleges and Institutes (RCYCI), Competitive Advantages.

1. Introduction

Researchers such as Oosterhout, et al., (2006, p. 1) mention that “Business agility is the ability to swiftly and easily change businesses and business processes beyond the normal level of flexibility to effectively manage unpredictable external and internal changes”. Due to the globalization, organizations have to cope with significant, rapid changes in many aspects of culture, trade, education and politics. In higher education institutions (HEI) specifically, competitive challenges have led to many institutions to be agile in their approach to achieve rankings and attract students, investors and create a positive atmosphere for teaching and learning. New businesses are being developed and require special manpower skills. University leaders recognize the significance of establishing organizational agility in order to move forward and place their institution in the best position possible. The study herein is an attempt to measure the agility level of Yanbu Colleges and Institutes in Saudi Arabia.

2. Literature Review

Organizations are not isolated from surrounding environment where circumstances sometimes coerce organizations to make changes. Organizations make changes in order to improve their performance, increase their profits and resolve problems. To adapt to changing circumstances, many organizations establish new units and departments, reorganize their organizational structure, adapt new technology, and so on. Anderson, (2016) explains that organizational development assists in increasing the performance of an organization.

Change initiation alone by organizations would not ensure that they will reach their goals. To a large degree, it depends on how employees respond to these changes. French (2011) describes that change may be resisted by employees in organizations. There are many reasons which make employees reject or hesitate to accept such changes. They may, for instance, view certain technologies as a threat to their jobs. Other employees may see that merging two departments in

an organization as a threat to their current role in the organization. The role of organizations is to prepare their employees for any imminent changes and make them recognize the importance of the change. Stevens and Loudon (2002) also explain that organizations should encourage its employees to play a role in changes in order to avoid resistance. When employees participate in implementing change, the change would be more effective. Otherwise, conflict may occur between management and employees, thereby hindering the process of development and organizations would find themselves engulfed in a storm of conflict.

Quick response to change occurring in an external environment is very important in today's business world and helps organizations to thrive. Due to political, social, and technological changes, organizations have to be agile. If we look at international and big multinational corporations, it is evident that their change process is continuous and competitive. Oosterhout, et al., (2006) stated that there are many factors which necessitate agility such as environmental change, social change, desires of customers, and technological changes.

There are many definitions of agility found in literature with varying connotations. For example, (Bloomfield, et al., 1994; Clarke, 1959; Mathews, 1973) defined the agility as the ability to change orientation quickly. However, other authors such as (Barrow & McGee, 1971; Johnson & Nelson, 1969) defined it as the capability to alter the orientation quickly and precisely.

Mohammad and Hossein (2015) conducted a study which examined the correlation of organizational agility and organizational failing to organizational effectiveness among teaching faculty members at the Zahedan institute in Iran. The results showed that there was a significant relationship between organizational agility and organizational efficiency. Conversely, organizations which do not respond to changes to which they are subject to found themselves behind their competitors. Thus, it is apparent in the business world that some organizations thrive while others suffer losses.

Kuleelung (2015) also conducted a study on information and technology organizations in Thailand. The study found that there is a relationship between agility effectiveness of marketing and productivity of organizations. When an organization responds to changes based on the desires of consumers, it would be able to market well. This is one of strategies that every profit organization needs to follow. In addition, responding to these aspects of organizational duties such as production would reflect on organizational stability and improvement as well.

According to Lin, et al., (2006) survival and competitiveness are important for organizational agility. Aligning with suppliers and customers is the best hedge for a company as most companies do not have the resources to jump on every opportunity that comes their way. Working with suppliers and customers would lead to lean operations and boost agility for the organization. Doz, and Kosonen (2010) indicate that linking both business environment and viewing business models individually rather than applying the same concept throughout the strategy development process, contributes to strategic agility in an effective manner.

Moreover, agility is important for nonprofit organizations because they are impacted by external environmental factors. These organizations could be in the education field, social field, community services, etc. Nature of agility would be different among those organizations due to differences in nature of their work, their sizes, and their strategies of responding.

This research of the present work focuses on flexibility and adaptability of Yanbu Colleges and Institutes in responding to change. It is important to evaluate the agility of Yanbu Colleges and Institutes in order to determine weaknesses and try to improve them.

3. Research question

How much do the Yanbu Colleges and Institutes respond to change effectively?

Hypothesis:

H1: There is a positive relationship between Dynamic Strategy and Perceiving.

H2: There is a positive relationship between Dynamic Strategy and Testing.

H3: There is a positive correlation between Dynamic Strategy and Implementation.

H4: There is a positive correlation between Perceiving and Testing components of Agility.

H5: There is a positive correlation between Perceiving and Implementation components of Organizational Agility.

H6: There is a positive correlation between Testing and Implementation components of Organizational Agility.

4. Research Methodology

A standardized survey established by Worley, and Lawler (2014) is used in this research to collect the data from about 116 respondents from the Royal Commission Yanbu Colleges and Institutes (RCYCI). The questionnaire was randomly distributed to the RCYCI staff through official email and the response rate was around 77%. Similarly, a descriptive statistical approach has been used for analyzing the data collected through the questionnaire.

4.1 Results and Discussion

The data gathered for testing the agility of the organization was strictly used for research purposes and confidentiality of the respondents was maintained. There were, in total, 116 participants who responded to the questionnaire. 13% were female and 87% were male. So, a quite higher number of the respondents are of the male gender.

Table 1: Demographic Analysis of respondents for Organization's agility

Demographic Factors	N = 116	No. of Resp.	Percentage
Gender	Male	101	87%
	Female	15	13%
Age Groups	Upto 20 Years	3	3%
	21 to 30 Years	20	17%
	31 to 40 Years	37	32%
	41 to 50 Years	33	28%
	51 to 60 Years	23	20%
	Above 60 Years	0	0%
Work Experience	Upto 1 Years	18	16%
	2 to 10 Years	28	24%
	11 to 20 Years	45	39%
	21 to 30 Years	20	17%
	31 to 40 Years	5	4%
	Above 40 Years	0	0%

The overview of demographical data represents that 32% respondents belong to age group of 31 – 40 years. The next higher age group belongs to 41 and 50 years which is 28%. Other respondents belong to (51 – 60 years) and (21 to 30 years) 20% and 17% respectively. However,

there is no respondents found in the age group above 60 years (0%) and a very few found in the age group (up to 20 years) i.e. 3%. This reveals that most of the respondents are young and useful for the organization for a long-term association. 39% of the respondents have work experience between 11 to 20 years, 24% of the respondents have work experience between 2 to 10 years, 17% have experience between 21 to 30 years, 16% have experience up to 1 year and only 4% have experience between 31 and 40 years. There is no one found having experience of more than 40 years. This shows the balance of work experience in the organization with respective to age group as well.

Table 2: Results of Reliability Test using Cronbach's Alpha

Measuring Factors'	Questions	Cronbach's Alpha	No. of Items
Dynamic Strategy / Strategizing	Q1, Q5, Q9, Q13	0.850	4
Perceiving	Q2, Q6, Q10, Q14, Q18	0.852	5
Testing	Q3, Q7, Q11, Q15, Q17	0.875	5
Implementing	Q4, Q8, Q12, Q16, Q19	0.746	5
Overall Value		0.954	19

Table 3: Mean value of Dynamic Strategy Factor

Dynamic Strategy / Strategizing	Mean	Std. Deviation
Traditionally, this organization has a unifying purpose or mission other than Profitability and growth	3.26	0.82
Traditionally, this organization develops strategies with flexibility in mind	2.83	1.02
Traditionally, this organization has a culture that embraces change as normal	2.76	1.00
Traditionally, this organization has core values that reflect a change ready organization	2.73	0.85
Overall Mean Value	2.89	0.92

The Dynamic Strategy Factor has overall mean value of 2.89 which is strong enough to support the argument that the organization's approach of dynamic strategizing is highly accepted by the participants. The mean value 2.89 on a scale of 4 is strong response from the respondents. This factor consists of 4 sub-aspect and the response to the "Traditionally, this organization has a unifying purpose or mission other than Profitability and growth" found very healthy i.e. 3.26, whereas the other questions also receive a higher positive response i.e. 2.83, 2.76 and 2.73 respectively. This shows that the respondents agree to the statements of dynamic factor strongly. Table 3 presents the mean response value and standard deviation of this factor.

Table 4: Percentage response value for Dynamic strategy factor

Dynamic Strategy / Strategizing	N = 116	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Traditionally, this organization has a unifying purpose or mission other than Profitability and growth	Frequency	7	7	51	51
	Percent	6	6	44	44
Traditionally, this organization	Frequency	16	23	42	35

develops strategies with flexibility in mind	Percent	14	20	36	30
Traditionally, this organization has a culture that embraces change as normal	Frequency	17	24	45	30
	Percent	15	21	39	26
Traditionally, this organization has core values that reflect a change ready organization	Frequency	10	31	55	20
	Percent	9	27	47	17

Table 4 presents the percentage response value for each of the statements of the dynamic strategizing factor of Organization's agility. Approximately **88%** of the respondents agree or strongly agree with "Traditionally, this organization has a unifying purpose or mission other than Profitability and growth", **66%** agree or strongly agree with "Traditionally, this organization develops strategies with flexibility in mind", **66%** agree or strongly agree with "Traditionally, this organization has a culture that embraces change as normal" and **64%** of the respondents agree or strongly agree with "Traditionally, this organization has core values that reflect a change ready organization". This clearly indicates that majority of the respondents tend to agree with the statements of the dynamic factor of organization's agility. Table 4 presents the number of respondents and respective percentage value for each of the statements of Dynamic strategizing factor of organization's agility.

Table 5: Mean value for Perceiving Factor of Organization Agility

Perceiving Factor	Mean	Std. Deviation
Traditionally, this organization spends a lot of time thinking about the future	3.16	0.86
Traditionally, this organization puts as many employees as possible in contact with the external environment, especially with customers	2.68	0.95
Traditionally, this organization allows information to flow freely from the outside to units and groups where it is most valuable	2.76	0.97
Traditionally, this organization shares financial and business strategy information with all employees	2.27	1.04
Traditionally, this organization has formal mechanisms to connect senior management with people at all levels of the organization	2.66	0.97
Overall Mean Value	2.71	0.96

The second factor of organizational agility is perceiving which consists of 5 questions and overall mean value is also relatively higher (2.71) than the average response value of this factor. The sub-statement of this factor "Traditionally, this organization spends a lot of time thinking about the future" received the highest response value (3.16). It means that most of the respondents agree or strongly agree with the statement. Other values are 2.68, 2.76, 2.27 and 2.66 respectively. Table 5 presents mean response value and respective standard deviation for each the five statements of Perceiving factor.

Table 6: Percentage response value for Perceiving factor

Perceiving Factor	N = 116	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Traditionally, this organization spends a lot of time thinking about the future	Frequency	7	14	48	47
	Percent	6	12	41	41
Traditionally, this organization puts as many employees as possible in contact with the external environment, especially with customers	Frequency	16	28	49	23
	Percent	14	24	42	20
Traditionally, this organization allows information to flow freely from the outside to units and groups where it is most valuable	Frequency	13	33	39	31
	Percent	11	28	34	27
Traditionally, this organization shares financial and business strategy information with all employees	Frequency	36	28	37	15
	Percent	31	24	32	13
Traditionally, this organization has formal mechanisms to connect senior management with people at all levels of the organization	Frequency	17	29	46	24
	Percent	15	25	40	21

Table 6 provides information about the respondents approach to their response to the five statements of perceiving factor. It reveals that **82%** of the respondents agree or strongly agree to the statement “Traditionally, this organization spends a lot of time thinking about the future”, **62%** to “Traditionally, this organization puts as many employees as possible in contact with the external environment, especially with customers”, **61%** to “Traditionally, this organization allows information to flow freely from the outside to units and groups where it is most valuable”, **45%** to “Traditionally, this organization shares financial and business strategy information with all employees” and **61%** to “Traditionally, this organization has formal mechanisms to connect senior management with people at all levels of the organization”. Therefore, most of the respondents either agree or strongly agree to these statements and they understand the concepts of Perceiving of organizational agility.

Table 7: Mean value for Testing Factor of Organization’s Agility

Testing factor of Organization's Agility	Mean	Std. Deviation
Traditionally, this organization encourages innovation	3.05	0.90
Traditionally, this organization has enough budget “slack” so that people can develop new products or better ways of working together	2.58	0.96

Traditionally, this organization has flexible budgets that respond to marketplace changes	2.66	0.92
Traditionally, this organization is capable of shifting its structure quickly to address new opportunities	2.66	0.91
Traditionally, this organization regularly reviews learning from change efforts	2.81	0.83
Overall Mean Value	2.75	0.91

Third factor of this study is “Testing”. This also consists of 5 statements with an overall mean value of this factor also higher (2.75). It seems that most of the respondents agree and strongly agree with “Traditionally, this organization encourages innovation” as it has the highest mean value (3.05) and least standard deviation. Other mean response values are 2.58, 2.66, 2.66 and 2.81 respectively. Table 7 provides the details of mean value and standard deviation of Testing factor of organization’s agility.

Table 8: Percentage response value for Testing factor

Testing factor of Organization's Agility	N = 116	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Traditionally, this organization encourages innovation	Frequency	10	14	52	40
	Percent	9	12	45	34
Traditionally, this organization has enough budget “slack” so that people can develop new products or better ways of working together	Frequency	19	31	46	20
	Percent	16	27	40	17
Traditionally, this organization has flexible budgets that respond to marketplace changes	Frequency	15	30	50	21
	Percent	13	26	43	18
Traditionally, this organization is capable of shifting its structure quickly to address new opportunities	Frequency	12	39	42	23
	Percent	10	34	36	20
Traditionally, this organization regularly reviews learning from change efforts	Frequency	8	29	56	23
	Percent	7	25	48	20

Table 8 presents the percentage response value of each of the statements of Testing factor showing agreement to disagreement. The statement “Traditionally, this organization encourages innovation” received the highest response i.e. **79%**. Other statements received **57%**, **61%**, **56%** and **68%** respectively. This shows that most of the respondents are either agreed or strongly agreed to this statement of testing factor of organization’s agility.

Table 9: Mean value for Implementing Factor of Organization’s Agility

Implementing Factor of Organization's Agility	Mean	Std. Deviation
Traditionally, this organization considers the ability to change a strength of the organization	2.97	0.89
Traditionally, this organization has a well-developed change capability	2.79	0.98

Traditionally, this organization rewards seniority more than performance	2.75	0.96
Traditionally, this organization pays for skills and knowledge that contribute to performance	2.77	0.92
Traditionally, this organization encourages managers to develop the leadership skills of their direct reports	2.78	0.96
Overall Mean Value	2.81	0.94

Table 9 presents the mean response value of fourth factor of organization's agility, Implementation. The Overall mean value is quite satisfied (2.81) on a scale of 4. The highest mean value found for "Traditionally, this organization considers the ability to change a strength of the organization", 2.97. All other values are also higher such as 2.79, 2.75, 2.77 and 2.78 respectively for each of the statements of Implementation factor of organization's agility.

Table 10: Percentage response value for implementing factor

Implementing Factor of Organization's Agility	N = 116	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
Traditionally, this organization considers the ability to change a strength of the organization	Frequency	10	18	54	34
	Percent	9	16	47	29
Traditionally, this organization has a well-developed change capability	Frequency	15	25	45	31
	Percent	13	22	39	27
Traditionally, this organization rewards seniority more than performance	Frequency	12	35	39	30
	Percent	10	30	34	26
Traditionally, this organization pays for skills and knowledge that contribute to performance	Frequency	14	23	55	24
	Percent	12	20	47	21
Traditionally, this organization encourages managers to develop the leadership skills of their direct reports	Frequency	14	26	47	29
	Percent	12	22	41	25

Table 10 presents the percentage of respondents with agreement to the statements of the implementing factor of the organization's agility. The study reveals that respondents of this factor also tend to agree or strongly agree with all the five statements of the factor. **76%** of the respondents are either agreed or strongly agreed with "Traditionally, this organization considers the ability to change a strength of the organization", **66%** to "Traditionally, this organization has a well-developed change capability", **60%** to "Traditionally, this organization rewards seniority more than performance", **68%** to "Traditionally, this organization pays for skills and knowledge that contribute to performance" and **66%** to "Traditionally, this organization encourages managers to develop the leadership skills of their direct reports".

4.2 Testing of Hypothesis

A correlation analysis has been applied to test the relationship among these variables. Table 11 presents the value of coefficient of correlation among these values.

Table 11: The coefficient of Correlation values for the components of Organizational Agility

Organizational Agility Components	Dynamic Strategy	Perceiving	Testing	Implementing
Dynamic Strategy	1.000	.868**	.844**	.814**
Perceiving	.868**	1.000	.880**	.838**
Testing	.844**	.880**	1.000	.862**
Implementing	.814**	.838**	.862**	1.000

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

The data analyzed reveals that there is a strong relationship exists amongst the variables used. The data consistency was also verified and tested using standard Cronbach's Alpha Test. This test has a value of 0.954 which clearly indicates that the data is consistent and can be used. The other agility factors also found consistent were; Dynamic strategy / Strategizing (0.850), Perceiving (0.852), Testing (0.875) and Implementing (0.746) respectively. Furthermore, the data in table 2 represents the reliability test results for all the agility factors used in the questionnaire.

H1: There is a positive relationship between dynamic strategy and perceiving.

The coefficient of very significant (**0.868**). This furnishes that these components support in the organizational agility about **87%** and hence the hypotheses is accepted.

H2: There is a positive relationship between dynamic strategy and testing

There is very significant and positive correlation found between the Dynamic Strategy and Testing (**0.844**) and the contribution of testing to dynamic strategy is **84%**. Therefore, we accept the hypothesis.

H3: There is a positive correlation between dynamic strategy and implementation.

The correlation between dynamic strategy and implementing is also found positive and highly significant (**0.814**). Thus, the hypothesis is accepted.

H4: There is a positive correlation between perceiving and testing components of agility.

The most significant and positive relationship has been found between perceiving and testing (**0.880**), therefore, the hypothesis is accepted

H5: There is a positive correlation between perceiving and implementing components of organizational agility

Table 11 shows that the correlation between perceiving and implementing is also highly significant and positive (**0.838**), thus, the hypothesis is accepted.

H6: There is a positive correlation between testing and implementing components of organizational agility.

Finally, the correlation between testing and implementing has also found positive and very significant (**0.862**). Therefore, the hypothesis is accepted.

Table 12 : Presents the summary of hypotheses used for the testing and all of them are accepted

Hypotheses	Result
H1: There is a positive relationship exists between dynamic strategy and perceiving.	Accepted
H2: There is a positive relationship exists between dynamic strategy and testing.	Accepted
H3: There is a positive correlation exists between dynamic strategy and implementation.	Accepted
H4: There is a positive correlation exists between perceiving and testing components of agility	Accepted
H5: There is a positive correlation exists between perceiving and implementation components of organizational agility.	Accepted
H6: There is a positive correlation exists between testing and implementing components of organizational agility.	Accepted

This reveals that the components of organizational agility are significantly correlated with each other.

5. Implementation & Limitation

This research has been implemented in the field of organizational development and human resources. Developing organizations require making positive changes, and at the same time organizations need to understand aspect of resistance to change by the employees. Secondly, human resource department strives to develop employees' skills, so, it is important to identify whether employees would accept development and improvement strategies or not. The research has some limitations regarding implantation in other organizations. Each organization has its own environment. Therefore, the results might not be benefit to other organizations as they are for RCYCI. In addition, there is a need to conduct the same study in the future to see the readiness of RCYCI because factors which related to strategic management, employee behavior or level acceptance might change with time as well.

Conclusion

The study revealed that all dimensions used in the research indicate positive correlations among the entire aspects of variables, for example, dynamic strategy, perceiving, testing and implementation. The research study consists of a question "If the employees of RCYCI respond to the change effectively" and found a very positive response. The sample of 116 employees collected to examine the hypothesis using descriptive statistical analysis techniques and correlation analysis. The study found that all the hypotheses are true and positively significant by using both the tools i.e. statistical descriptive approach and correlation analysis and hence accepted. Therefore, the respondents of this study are ready to accept, test and implement the change in the organization effectively.

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