

The Effect of Organization Agility on Organization Performance in the Time of Covid-19: A Case of Universities in Kenya

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Abstract

The COVID-19 pandemic has ushered in an unprecedented era of challenges, particularly for institutions of higher education worldwide. In Kenya, universities have grappled with disruptions to traditional academic operations, including the sudden shift to remote learning, financial uncertainties, and changes in student and staff dynamics. This dynamic context has underscored the importance of organizational agility as a critical determinant of performance in the face of uncertainty. The ability of universities to swiftly adapt, innovate, and strategically respond to the evolving landscape is paramount for maintaining operational continuity, sustaining educational quality, and safeguarding the well-being of their academic community. Therefore, this study assessed the effect of organization agility on organization performance in the time of Covid-19 in universities in Kenya. The study was anchored The Path Goal Theory and Expectancy Theory. The study utilized mixed research design. The target population was 68 Chartered Public and Private Universities in Kenya. Structured questionnaire was distributed to human resource officer and top management officers from 34 selected universities. Construct validity and Cronbach's alpha was to determine validity and reliability of research instruments. Data was analysed descriptively and inferentially using multiple linear regression. Human resources agility had a positive and significant affect organization performance ($\beta = 0.317$; $p=0.000$). Also, innovation agility had a positive and statistically effect on organization performance ($\beta = 0.182$; $p=0.016$). Further, information technology agility had a positive and statistically effect on organization performance ($\beta = 0.163$; $p=0.020$). Lastly, strategic agility had a positive and statistically effect on organization performance ($\beta = 0.196$; $p=0.014$). Based on the findings, it is recommended that universities institutions should strategically invest in enhancing agility across these four agilities.

Keywords: Agility, organization, capability gaps, competitive landscape, firm internal factors

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Introduction

The global pandemic has posed unprecedented challenges to higher education, necessitating a paradigm shift in the way universities operate. In Kenya, universities have faced several disruptions, including the sudden transition to remote learning, financial strains, and shifts in student and staff dynamics. With these unpredictable conditions organization agility is the way to go as it provides the going concern a need for swift reaction in decision making for not only helping it survive but also thrive (Prange & Heracleous, 2018). Firm agility is more about fast or swift reaction to the fast-wavering circumstances in the business environment with the objective of achieving predetermined expectations. Organization agility thus, is critical if a firm as a going concern is interested in developing itself into a profitable and sustainable enterprise (Gonçalves, 2022).

Unlike in the past when organizations faced fairly unchanged or steady business environment, in the recent past and especially during Covid-19 period, institutional business environment has been very erratic which calls for new ways of doing things and proactive alertness not only for the business to survive but also thrive in the unpredictable circumstances (Mbaidin et al., 2020). Agility's importance therefore, helps organizations make the most of a potentially advantageous occasion or circumstances and thus reaping the benefits that go with it. Agility is more about adjustment as situation demand while agile employees are able to

adjust and bring out excellent outcomes in different work situations. Agile employees

are adaptable to the ever-changing business remote environment. Agility in the workforce require employees who are enterprising, who are expertise in their area of specialization and those who portray great versatility and resilience. Agile employees who are generally described as flexible and resilient have been found to have profound effect on the competitive edge and positive results in the organizations where they serve (Karman, 2019).

Innovation is an undertaking by an organization to modernize its existing business processes or to renew its procedures by making them more efficient and time bound. Organizations agility is about swift and continuous adjustments not only for the purpose of survival but for them to also thrive in an unpredictable business remote and macro environment. Innovative organizations will therefore, be in a position to quickly restructure their operations to help them take advantage of new business opportunities (Rini et al., 2022). Innovation ability is critical in organization success as it focuses its attention on novel undertakings including introduction of new manufacturing procedures, modernization of administrative actions, acquisition of new technology, investment in research and development among other novel activities thus aiding in organization agility and thus competitiveness (Xiangui Ju, 2019).

Information technology agility culminates from IT capability and capacity of the concerned organization. An

organization is described to possess IT capability based on its capacity to acquire and harness the information technology talented human resources and its capacity in the acquisition of modern information technology infrastructure that is capable of supporting current and future business operations and thus aiding in business agility (Pintaric & Bronzin, 2013). IT capability therefore, is an essential ingredient for organization to recognize changes in business environment and adjust its operations to cope with it. Lack of IT capability in essence, means that organizations agility in retaining competitive edge over its business rivals may be adversely affected (Rini et al., 2022).

Strategic agility posits that firms need to be adaptable to the unending and unpredictable uncertainties in business environment (Mohammad et al., 2020). The four key dimensions of a strategic agility include; workforce and team agility, management agility, agility of strategic business units and organization agility (Wangasa, 2018). It is the capability of organizations to rekindle in face of volatility of some factors in the remote or macro environment which may negatively affect commercial activities of the company (Mohammad et al., 2020). The capability of a business entity to exhibit agility depends most on its workforce's capacity to demonstrate its own agility. Agile employees are able to adjust and bring out excellent outcomes in different work situations. Strategic agility is critical for all entrepreneurial organizations as it helps them to remain focused not only in the identification of opportunities in the business environment but also in facing the uncertainties in the business ecosystem (Xinga et.al., 2019). Therefore, this study assessed the effect of organization agility on organization performance in the time of Covid-19 in universities in Kenya

Theoretical review

The Path Goal Theory

The Path Goal Theory was initially advanced in the 1970s by management theorist and developed and refined further by Robert J. House in 1996. Path goal theory of leadership posits that leader's behavior is critical on productivity and organization outcomes and therefore, it requires versatility in relation to followers needs (Bans-Akutey, 2021). Agility is more about adjustment as situation demand while agile employees are able to adjust and bring out excellent outcomes in different work situations. In the dynamic and uncertain environment created by the pandemic, leaders in Kenyan universities can leverage the Path-Goal Theory by clarifying the path to agility. This involves providing clear guidance on adapting to remote learning, implementing innovative teaching methods, and aligning university strategies with changing circumstances. Also, the supportive leadership behavior emphasized in the Path-Goal Theory is crucial during times of crisis. Leaders in universities can support their academic community by showing concern for well-being, addressing challenges related to remote work, and fostering a positive and supportive organizational culture.

Expectancy Theory

The theory first developed by Victor H. Vroom in 1964, asserts that employees in the workplace will adjust to give outcomes if they are assured of envisioned considerations (Ogundare & Omotosho, 2022). The theory further, posits that workers will only give desirable outcomes if their work is rewarded accordingly. The theory therefore, portrays that workers are ready to adjust based on the expected desirable rewards and incentives. Agility is more about adjustment as situation demand while agile

employees are able to adjust and bring out excellent outcomes in different work situations. Expectancy Theory provides a way to understand and predict how individuals within universities in Kenya may respond to and be motivated by organizational agility efforts during the COVID-19 pandemic.

Methodology

The study adopted mixed method research design. The target population was top university management from 68 Chartered Public and Private Universities in Kenya as per 2023 approved data from the Commission for University Education. In descriptive research, a sample size of 10-50% is acceptable (Mugenda & Mugenda, 2003). Therefore, this study sample size was 34 Universities. Closed ended questionnaires was used to collect the data. The pilot study to pre-test the research tools was carried out in 10% of the universities. Construct validity was employed to determine the degree to which the operationalized measures of organization agility can be inferred on organizational performance as perceived by universities top management. To assess the consistency of the content instruments in prompting similar responses, the research utilized Cronbach's alpha to evaluate the reliability of the questionnaire. The alpha values for each identified measurement significantly exceeded the minimum acceptable threshold of 0.70, with coefficients for all items indicating a strong reliability ranging from 0.8 to 0.955. The collected data were analyzed using descriptive statistics in order to determine their frequency. The data was analyzed using descriptive statistics such as standard deviation, frequency distribution, percentages and means. The results were presented in form tables. The study also used multiple linear

regression analysis to analyse the effect of organization agility on organization performance.

Model specification

$$Y = \beta_0 + C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots \text{(Model 1)}$$

Where;

Y = Organizational Performance;

B_0 = Constant term or intercept;

C = Control variables in the model;

B_1, \dots, β_4 = the coefficients of the variables in the model;

x_1 = Human Resources Agility

x_2 = Innovation Agility

x_3 = Information Technology Agility

x_4 = Strategic Agility

ϵ = error term

Results and discussion

Human resources agility

Human Resources Agility involves the capacity of an organization's workforce to respond promptly and effectively to unforeseen circumstances. Analyzed data presented on Table 1. shows that the computed mean score and standard deviation of human resource agility on Kenyan universities during covid-19 pandemic. The responses were coded such that 0= does not apply at all, 1= to a small extent, 2= to a moderate extent, 3= to a higher extent, 4= to a very high extent.

In reference to Table 1, majority of the respondents agreed that to a to a small extent the existence of creative or enterprising workforce in the Universities is either not existing or very minimal ($\bar{x} = 1.8$, $SD = 1.2$). The study results are inconsistent with the Nabila and Shireen (2014) who found that staff creativity is a necessity for the enhancement of organization advancement. Respondents agreed to a moderate extent of the existence of skilled employees in the Universities ($\bar{x} = 2.4$, $SD = 1.3$).

Table 1: Descriptive statistic for human resources agility

Statement	Mean (\bar{x})	Standard Deviation
Creative or enterprising Workforce	1.8	1.2
Skillful employees	2.4	1.3
Versatile/Flexible employees	3.4	1.2
Employee Resilience	2.0	1.3

The result thus, demonstrate that the Universities overall are having no challenges on this critical human resource agility factor. Further, majority of the respondents agreed to a higher extent the existence of Versatile/Flexible employees in the Universities (\bar{x} =3.4, SD=1.2). The result thus, demonstrate that the Universities overall are having no challenges on this critical human resource agility factor. The research findings are in concurrent with Attia et. al., (2012) who found that, to support organizational agility, workforce versatility ranks highly as one of the most critical factors. Finally, respondents to a moderate extent agreed presence of employee Resilience in the Universities (\bar{x} =2.0, SD=1.3). The study results are inconsistent with Prieto and Talukder (2023) who found that a resilient organization workforce is adaptive

regardless of the ever-changing business environment.

Innovation agility

Innovation Agility in Human Resources (HR) refers to the ability of HR practices and processes to adapt, evolve, and foster a culture of continuous innovation within an organization. This form of HR Agility is crucial, especially in dynamic environments such as the modern workplace and during periods of change like the COVID-19 pandemic. Analyzed data presented on Table 2. shows that the computed mean score and standard deviation of innovation agility on Kenyan universities during covid-19 pandemic. The responses were coded such that 0= does not apply at all, 1= to a small extent, 2= to a moderate extent, 3= to a higher extent, 4= to a very high extent.

Table 2: Descriptive statistic for innovation agility factors

Statement	Mean (\bar{x})	Standard Deviation
Adoption of new operating procedures (e.g. New teaching methods)	3.6	1.2
Modernization of administrative actions (e.g. online applications)	2.3	1.1
Acquisition new technology	3.0	1.8
Investment in Research and Development	2.0	1.2

According to the results presented in table 2, majority of respondents to a higher extent stated that the Universities were eager to adopt new operating procedures for example online teaching during especially Covid-19 epidemic (\bar{x} =3.6, SD=1.2). The study results are consistent with Prieto and Talukder (2023) who found that flexible organizations are

more competitive as compared with industry rivals. Further, participants to a small extent agreed that the Universities were eager to adopt new and Modern administrative actions for example allowing online applications during especially Covid-19 epidemic (\bar{x} =3.6, SD=1.2). The result though with a marginal result demonstrates that the Universities

reluctantly accepted the inevitable change. The study results are consistent with Prieto and Talukder (2023) who found that adoption of new and Modern technology is a major contributor to economic and social wellbeing of organizations. In addition, majority of respondents to a higher extent stated that the Universities were eager to acquire new technologies especially during Covid 19 Pandemic ($\bar{x} = 3.0$, $SD=1.8$). The study results are inconsistent with Whittall and Philip (2008) who found that for an agile institution, acquisition of the necessary technical requirements for smooth operations is a mandatory action and the same must be acquired at a competitive price. Also, participants to a moderate extent agreed that the existence of Research and Development department in the Universities is either not existing or very minimal investment is allocated to this

critical innovation agility factor ($\bar{x} = 2.0$, $SD=1.8$). The study findings are in contrast with Wang (2011), who found that investment in Research and Development is critical in the enhancement of organization performance.

Information technology agility

Information Technology (IT) Agility within the context of Human Resources (HR) refers to the integration and alignment of agile IT practices to enhance HR functions and processes. This approach recognizes the pivotal role of technology in optimizing HR operations, improving employee experiences, and facilitating organizational adaptability. This study assessed the Information Technology Agility in Kenyan universities during Covid-19 pandemic. Results are presented in table 3 below.

Table 3: Descriptive statistic for Information Technology Agility

Statement	Mean (\bar{x})	Standard Deviation
Acquisition of Information Technology Infrastructure (Necessary Hardware)	2.3	1.1
Acquisition of Information Technology (Necessary Software)	2.8	1.2
Acquisition and Retention of talents (IT skilled staff)	1.5	1.1
Culture of innovation	2.0	1.2

According to table 3, majority of the respondents to a moderate extent agreed that the Acquisition of Information Technology Infrastructure (e.g. the necessary Hardware) in the Universities is either not existing or very minimal investment is allocated to this critical information agility factor ($\bar{x} = 2.3$, $SD=1.1$). The result thus, demonstrate that the Universities are having challenges of this critical information agility factor. The study findings are inconsistent with research results by Ridwandono and Subriadi (2019), who found that, for effective information technology innovation to be achieved,

organization must acquire the necessary technological architecture that shall assist in the attainment of the overall organization agility. Also, participants to a higher extent agreed that the Universities were eager to acquire new Information Technology (Necessary Software) especially during Covid 19 Pandemic ($\bar{x} = 2.8$, $SD=1.1$). The study findings are in concurrence with Lyytinen and Rose (2006), who found that for an organization to achieve information technology agility they must react quickly to new technologies requirements to enable them take the necessary advantage of incoming

business prospects. Further, participants to a moderate extent agreed that the Universities attraction and retention of qualified and competent staff in the IT field is a challenge thus affecting critical Information Technology agility factor (\bar{x} =1.5, SD =1.1). The study findings are inconsistent with research results as per Azmy et al., (2022), who found that talent acquisition and retention have a great impact on employees and overall organization agility. Finally, majority of the respondents to a moderate extent agreed that the Universities have not adopted a culture of innovation in their strategic objectives thus affecting negatively this critical information technology agility factor (\bar{x} =2.0, SD =1.2). The study findings are inconsistent with research results as per Gonçalves (2010), who found that

generally culture and by extension agile cultural perspective help in the advancement of innovation agility.

Strategic agility

Strategic agility within the context of Human Resources (HR) refers to the capability of HR practices and functions to align with and support the overall strategic goals and objectives of the organization. It involves the ability of HR to adapt and respond quickly to changing organizational priorities, industry dynamics, and external factors. This study assessed the Strategic Agility in Kenyan universities during Covid-19 pandemic. The responses were coded such that 0= does not apply at all, 1= to a small extent, 2= to a moderate extent, 3= to a higher extent, 4= to a very high extent. Results are presented in table 4 below.

Table 4: Descriptive statistic for strategic agility factors

Statement	Mean (\bar{x})	Standard Deviation
Workforce and Team agility factor	2.8	1.2
Management agility factor	2.6	1.1
Strategic Business Unit Agility (adaptability, decisive, effective actions and speed)	3.4	1.2
Organization Agility (adaptability, decisive, effective actions and speed)	2.0	1.3

Study findings in table 4 above revealed that majority of participants agreed to a high extent that the Universities workforce and team agility very high especially during Covid 19 Pandemic (\bar{x} =2.8, SD =1.2). Also, majority of the respondents to a moderate extent agreed that the Universities Faculties/Schools/Departments were eager to quickly adapt especially during Covid 19 Pandemic (\bar{x} =2.6, SD =1.1). The finding is consistent with Gagnon and Hadaya (2018), who found that strategic agility being the swiftness of adjustment to the environmental turbulence facing the institutions, require that, this happens quickly both at strategic business Units and

enterprise-wide levels. Furthermore, participants to a high extent agreed that the Universities Faculties/Schools/Departments were eager to quickly adapt especially during Covid 19 Pandemic (\bar{x} =3.4, SD =1.2). The findings are consistent with Gagnon and Hadaya (2018) who found that strategic agility being the swiftness of adjustment to the environmental turbulence facing the institutions, require that, this happens quickly both at strategic business Units and enterprise-wide levels. Furthermore, majority of participants agreed to a moderate extent that the Universities themselves as institution of higher learning have not adopted a culture of change in

their strategic objectives thus affecting negatively this critical information strategic agility factor ($\bar{x} = 2.0$, $SD=1.3$). The result thus, demonstrate that the Universities overall are having real challenges on change management and bureaucracy thus affecting this critical strategic agility factor. This is in consistent with Gagnon and Hadaya (2018), who found that agile organizations dynamism is inevitable and

must be directed at specific initiatives that are capable of driving change.

Regression coefficients

The study conducted t-test of statistical significance of each individual regression coefficient. The study was conducted to examine whether individual regression coefficients were statistically significant. The analysis results are shown in Table 5.

Table 5: Multiple linear regression model significant test results

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig
(Constant)	1.317	.390		3.404	.001
Human Resources Agility	.317	.064	.460	5.121	.000
Innovation Agility	.182	.074	.222	2.453	.016
Information Technology Agility	.163	.069	.214	2.366	.020
Strategic Agility	.196	.063	.225	2.613	.014

a. Dependent Variable: Organization Performance

Human resources agility, innovation agility, information technology agility and strategic agility positively and significant affects organization performance ($\beta = 1.317$; $p=0.001$). Human resources agility had a positive and significant affect organization performance ($\beta = 0.317$; $p=0.000$). Also, innovation agility had a positive and statistically effect on organization performance ($\beta = 0.182$; $p=0.016$). Further, Information Technology Agility had a positive and statistically effect on organization performance ($\beta = 0.163$; $p=0.020$). Lastly, strategic agility had a positive and statistically effect on organization performance ($\beta = 0.196$; $p=0.014$).

Conclusion and recommendation

Human resources agility, innovation agility, information technology agility and

strategic agility positively and significant affects organization performance. The findings underscore the critical role played by a flexible and innovative human resource, adapt information technology systems, and strategic adaptability in universities' overall performance, navigating uncertainties brought about by the global health crisis.

Based on the findings, it is recommended that universities institutions should strategically invest in enhancing agility across these domains. This involves continuous efforts in upskilling and fostering a creative workforce, leveraging innovative technologies, embracing strategic adaptability, and integrating information technology systems that facilitate agility and responsiveness. Furthermore, universities should prioritize the development of policies and practices

that promote organizational resilience, employee well-being, and a culture of continuous improvement. By prioritizing agility in human resources, innovation, information technology, and strategic planning, universities can not only navigate the current challenges effectively but also position themselves for sustained success and resilience in the dynamic landscape of higher education, particularly during times of crisis.

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