Journal for Business Education and Management
ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

MEASURING THE IMPACT OF INTERNET DISRUPTIONS ON THE PERFORMANCE MANAGEMENT (A CASE STUDY OF HIGHER EDUCATION INSTITUTIONS IN KARACHI)

Saadia Khan
Lecturer
Department of Management Sciences
DHA Suffa University
Saadia.khan@dsu.edu.pk

Prof. Dr Bashir Ahmad
Dean, Faculty of Management Sciences
Al-Kawthar University Karachi
dr.bashirahmad@alkawthar.edu.pk

Abstract

This paper seeks to analyze the impact of Internet Disruptions on the Performance and Motivation of Stakeholders in Higher Education Institutions in Pakistan. Nowadays, in this digital era, the internet is more of a necessity for multiple reasons, specifically in the field of academia and general organizational functioning. The research endeavor in the shape of this paper is fundamentally quantitative with a deductive approach. A questionnaire comprising 25 questions and based on a 5-point Likert scale was distributed online in four universities in Karachi. Specifically, DHA Suffa University, University of Karachi, Bahria University, and Indus University. The sample of 156 participants was collected through simple random sampling as the questionnaire was distributed amongst all stakeholders through multiple digital platforms. The data collected was analyzed to investigate Regression using SPSS. The study reveals the significant impact of internet disruption on performance management and motivation, followed by the impact of motivation on performance management and the mediating impact of motive on performance management of HEI's Stakeholders in Karachi. The paper's findings explain that proficient organizational functioning and performance management are possible through constant internet availability. These results suggest that while internet disruption deteriorates motivation and performance management, motivation also plays a role in improvement in performance management.

Keywords: Internet Disruption, Motivation, Performance Management, Organizational Performance, Higher Education Institution.

Introduction

Organizational Performance refers to how well an organization achieves its set objectives or functions (Conţu, 2020). The outcome of the engagement of all departments in an organization in individual and collective capacities leads to a marked impact on Organizational performance (Bailey, Soane, & Alfes, 2013). In organizational functioning's strategic dimensions, an organization's output depends on the maximum employment and utilization of its human resources and materials (resources and equipment), keeping in mind that the internal and external environment facilitates positive outcomes (DeNisi & Murphy, 2017). Internet availability is one of the chief resources required by any organization to compete in the digital business landscape.

This work is licensed under a Creative Commons Attribution 4.0 International License.

A widely considered productivity-enhancing factor nowadays is access to fast internet (Grimes, Ren, & Stevens, 2011). Nowadays, much research is being done on internet usage and its impact on organizational productivity (Hannula, 2011). There are no time and space limitations to accessing the internet. It can be accessed through various sources almost anywhere. It is easily manageable to transfer information of various kinds in electronic form. New markets, business models, and processes have emerged because of the fast internet access (Hannula, 2011).

The invasion of information technology, particularly the Internet, is crucial for organizations to achieve a competitive advantage in the market. Nowadays, organizations have adopted new technology, specifically the Internet, for performing various functions within and outside the organization (Daneshvar & Ramesh, 2010). However, frequent internet disruptions in the work environment can hamper an organization's efficiency, motivation, and performance (Wong, Hurbean, Davison, Ou, & Muntean, 2022).

Motivation of the stakeholders affects organizational performance. A motivated team produces remarkable performance and efficiency because it is determined to perform well. (Kalogiannidis, 2021) In the absence of an effective and efficient internet provision, stakeholders are bound to underperform. Therefore, the impact of poor internet connectivity results in demotivation and deterioration of employees' performance.

The purpose of this research is to investigate how frequently internet disruptions hamper higher education institutions' stakeholders' organizational performance, efficiency, and motivation.

Scope of Research

The scope of this research is embedded in the higher education institution's stakeholders, specifically universities from which data was acquired in Karachi. DHA Suffa University, Bahria University, Indus University, Karachi University, and certain other universities also helped collect the sample. Universities are the core hub of efficient learning. Frequent Internet disruption hampers learning and also organizational efficiency and motivation of all stakeholders. This internet disruption is becoming a permanent feature due to the poor communication infrastructure provided by universities.

Rationale of the Study

The study's justification is based on the researchers' personal experience in higher education institutions (HEIs), where reliable internet connectivity is crucial to sustaining stakeholder motivation, organizational effectiveness, and performance. Due to inadequate infrastructure, internet outages have increased in frequency in emerging areas such as Karachi. This problem impedes academic institutions' digital transition and affects administrative procedures in addition to teaching and learning. Driving significant change in institutional strategy requires an understanding of the dynamics of how internet connectivity affects the operational efficiency of academic staff, students, and administration. Research has shown that increasing productivity and digital equity is still significantly hampered by the digital gap (Haleem et al., 2022; Drăghici, 2023).

ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

Research Problem

Nowadays, in the digital era, the internet is a part of everyone's life. The impact of the Internet on society is unprecedented. People cannot live without internet access. The speed and quality of the internet have become crucial to staying updated on a global platform. These days, organizations must have reliable internet connectivity to gain a competitive advantage over their rivals. Internet technology that is indeed data-driven has the potential to improve human well-being in so many ways and empower individuals.

Additionally, distance and geographical locations are no longer barriers to organizational efficiency and performance management due to Internet technology (Drăghici, 2023). Even during the coronavirus pandemic, the only dimension of globalization that has accelerated is digital globalization. This challenging time proved how important internet connectivity is. A stable and reliable internet connection will inevitably help you enjoy a competitive advantage in the market.

However, there are frequent internet disruptions at work, which hampers organizational efficiency and performance management in multiple ways (Chandak, 2022). This problem needs to be resolved. This frequent internet disruption results in a loss of engagement, involvement and motivation. Therefore, it is crucial to study the scenarios, circumstances, and factors at work in an organization, especially a higher education institution, and the efficiency and organizational performance of the institution. This research will also give top management an understanding of exactly what factors affect organizational performance**.**

Research Questions

- Does internet disruption impact the performance management of HEIs' stakeholders in Karachi?
- To what extent is the motivation of the stakeholders impacted by internet disruption?
- To what extent does the motivation of the stakeholders mediate the relationship between internet disruption and Performance Management of the HEIs' Stakeholders?

Research Objectives

This study aims to achieve the following objectives:

1. To examine the direct impact of internet disruptions on the performance management of stakeholders in HEIs.
2. To investigate how internet disruptions influence the motivation of stakeholders.
3. To determine the role of motivation as a mediating factor between internet disruption and performance management.
4. To propose actionable strategies to mitigate the effects of internet disruptions on institutional performance.

Theoretical Framework

McKinsey's 7S Framework and Organizational Performance Theory serve as the foundation for this investigation. According to organizational performance theory, internal competencies, employee motivation, and external enablers like technology all affect how well an organization accomplishes its strategic goals (Brahma et al., 2022). In the meantime, McKinsey's 7S Model offers a comprehensive framework for assessing institutional success using both soft (skills, style, staff, and shared values) and hard (systems, structures, and strategies) components. Staff productivity and strategy execution are directly impacted by internet connectivity, a fundamental system component. Through the integration of these frameworks, the study evaluates how internet disruptions function as systemic failures that compromise institutional coherence and alignment in addition to individual performance (Suwanda & Nugroho, 2022).

Conceptual Framework

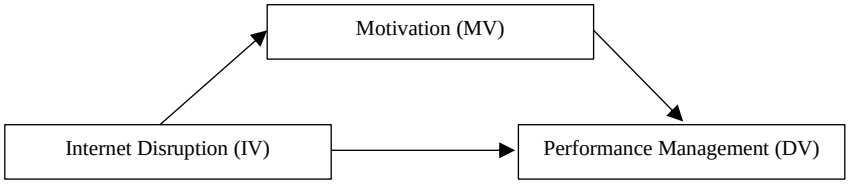


Figure 01: Study Model

Study Hypotheses

H_1: There is a significant relationship between internet disruptions and the performance management of HEIs' stakeholders.

H_2: There is a significant relationship between internet disruptions and the motivation of HEIs' stakeholders.

H_3: There is a significant relationship between motivation and the performance management of HEIs' stakeholders.

H_4: Motivation mediates the relationship between internet disruption and performance management

Significance of the study

This research is of great importance to higher education institutions and all the stakeholders of higher education institutions, as one of the causes of inefficiency and low organizational performance is internet disruptions. This research is beneficial for other organizations, too, as internet technology is now more of a necessity. The performance of the stakeholders is measured by meeting deadlines, punctuality, efficiency, coordination, and quality of work. This study can be generalized to countries around the world where internet connectivity is well below the prescribed average standards. The importance of this study could not be understated when the world is becoming digitalized.

ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

Literature Review

The performance management process is developed considering the complete details of the organizational mission, vision, objectives, and goals of the system. Any performance management mechanism has two prerequisites (Aguinis, 2009). First, details about the firm's philosophy establishment; second, complete information about various jobs in question. The organization's goals, mission, and objectives have a very pivotal importance as they must be aligned with all employees' goals and objectives in the organization from top to bottom (Hartog, Boselie, & Paauwe, 2004). To obtain information about the job, Job design and Job Analysis are done. They give a complete picture of the type of services, job description, job specification, and job activities. Without a complete, holistic picture of Job Analysis encompassing all duties, it is difficult to explain all the activities and duties an employee needs to perform on the job (Folan & Browne, 2005).. Job Analysis includes KSAs (Knowledge, Skills and Abilities) and actions to achieve these goals.

Performance management planning is done before beginning any activity in any performance cycle. All members and team leaders interact and reach a common consensus about how things need to be done, who needs to do what, and how the target or goal shall be achieved. This consensus comprises planning and developing essential behaviors, desired results, and intended actions (Aguinis, 2009).

Job descriptions and departmental assignments of individuals are core informers about the details of intended actions and their results. Performance standards are discussed; they provide information about how well an employee who is under evaluation is currently performing and achieving the assigned goals and objectives compared to his past performance (Bititci, Garengo, & Dörfler, 2012). Performance standards judge Performance levels in terms of quality, quantity, cost, and time of individuals, teams and setups. Therefore, performance standards provide information about acceptable and unacceptable levels of performance (Ana-Maria, Constantin, & Radu, 2009).. When university professors are taken as examples, teaching and research are the two areas of accountability in the university (Anjum, Yasmeen, & Khan, 2011).

In the execution phase of performance management, benchmarks are already set, and employees take steps to reach and accomplish them. Achieving these benchmarks is part of the planning process. The prime responsibility and requirement is to execute and own these commitments. (Buckingham & Goodall, 2015) First, there is a Commitment to agreeing upon goals; second, progress on performance and outcome reviews; and third, fairly good communication with the supervisor. These three are the main factors of performance execution (Aguinis, 2009). In the Planning stage, goals are planned, whereas in the execution stage, managers and performing individuals gather to inquire about and accomplish the predetermined goals (DeNisi & Murphy, 2017).

The next phase is the assessment phase, where an assessment of achievements is done. In order to measure and evaluate whether the results have been achieved and acceptable behavior accomplished, the managers and employees present themselves. The data for performance evaluation comprises a) assessment by the supervisors, b) information provided by peers and subordinates, c) mechanisms to collect feedback, and d) lastly, achievement of calculated objectives (Aguinis, 2009). The importance of this phase is evident as managers and employees assess their consequent outcomes based on their performance and give a holistic view of the 6 spectrums of activities.

Here, supervisors and even managers fill out appraisal forms based on their analysis of the employee's performance (DeNisi & Murphy, 2017).

Organizational Performance Theory

In order to achieve certain goals of an organization, a series of activities are carried out that achieve a level of achievement of results; this is defined as Performance. A measure of Organizational success in achieving its goals is Performance appraisal. An indicator of an organization's success is how successfully it maintains its performance. Organizational performance is the accumulated performance of an organization. According to Brahma, Suharto, and Subagja (2022), Human power plays a crucial role in achieving Organizational goals. As they run the organization as planned, performance is established as a result of productive work that is associated with the organization's strategic objectives.

According to Armstrong & Baron (1998), performance is emphasized and discussed in strategic planning schemes. Performance includes the implementation and achievement of policies and programs that are directed to achieve the goals, objectives, and mission of the organization. The nature of the organization can be comprehensively explained by the performance of the organization in one aspect. Three factors affect performance: 1) Personal factors, such as individual commitment, motivation, competence, and skill level. 2) Leadership traits applied by the managers and team leaders in an organization, like guidance, support and encouragement of all members. 3) Team Factor, i.e., support from colleagues and team members. 4) System Factor, i.e., in order to support organizational performance, facilities and a working system are provided to the employees. 5) Contextual Situation means the internal and external environment of the organization experiences the presence of a high level of pressure and changes (Armstrong & Baron, 1998).

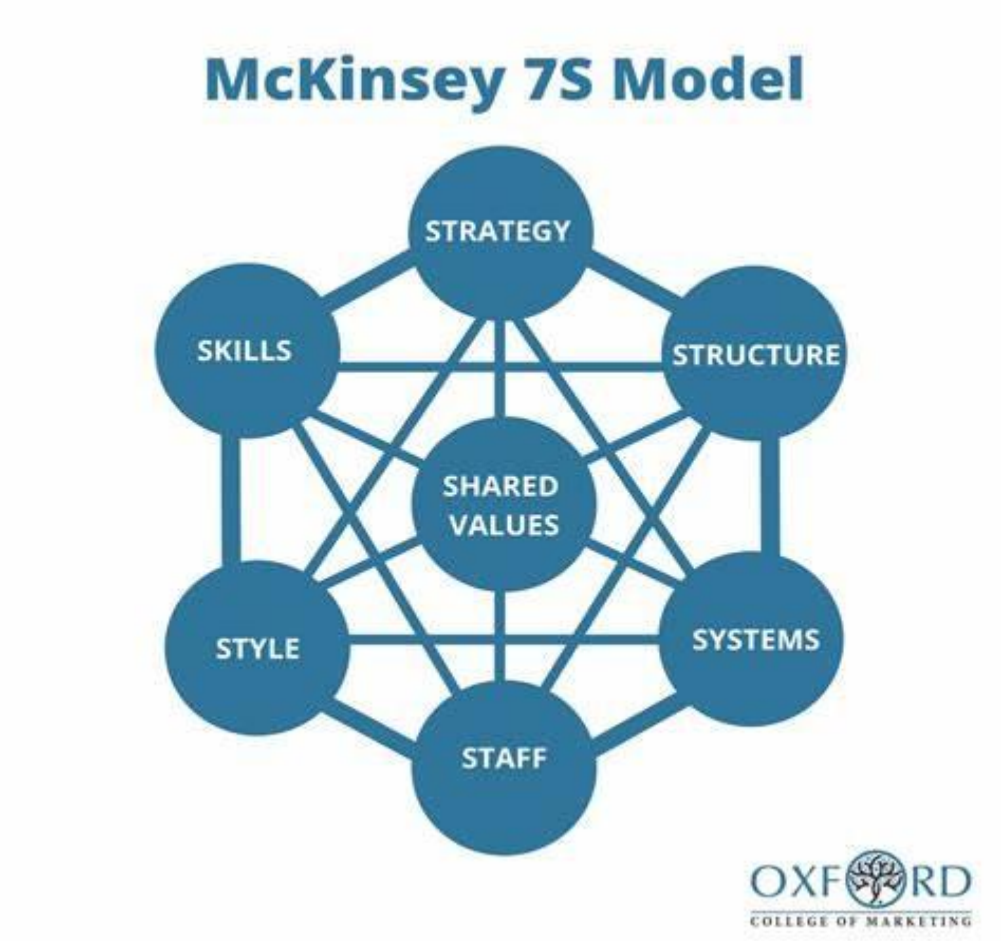
To measure, compare, and evaluate an organization's performance, whether it has improved or declined in general, the performance in the current period and the previous period is assessed to understand the performance graph. Performance measurement is an activity of evaluating the assessment of the predetermined targets and how aligned they are with the organization's strategic objectives (Lohman, Fortuin, & Wouters, 2004).

The analysis method of the McKinsey Model 7s can be utilized to measure performance. McKinsey's Model 7s can be very useful in analyzing the internal aspects of the organization, as internal problems can be diagnosed, and then a solution strategy can be implemented. The seven aspects of McKinsey's Model are further divided into two elements, namely a) Hard Elements comprising system, structure and strategy, and b) Soft Elements comprising shared values, style, skill and staff. These elements are dependent on the individuals in an organization and are always changing and, indeed, very dynamic (Peters & Phillips, 1980).

One of the advantages of the McKinsey Model 7S is that, in order to measure organizational performance and strategy that is applicable in both public and private sectors, internal variables are used. However, one of the shortfalls of this theory is that it does not utilize external factors to measure organizational strategy or organizational performance. This theory shows a relationship between strategy, organizational culture and leaders. This relationship can be further understood as a leader agreeing upon a strategy, which is supported by the implemented systems and the organizational structure in accordance with the leadership style. Overall, indicators of the McKinsey

ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

Model 7S cause the strategy to succeed. One variable that contributes to success is shared values (Suwanda & Nugroho, 2022).



McKinsey's 7S model can study the effectiveness of an organization in attaining its objectives. The model is divided into: (Suwanda & Nugroho, 2022)

- Hard elements, which include 1) System, 2) Structure, 3) Strategy
- Soft elements like 1) Style, 2) Skill, 3)Staff, 4)Shared values.

The leadership style will explain the relationship between each element, hard and soft. A leader decides the allocation and implementation of the system and structure. A leader has authority over his subordinates in an organization; these personnel (staff) or subordinates help him in running the organization, and all work to accomplish the needs of the organization. The selection of the personnel or staff is based on the skills that the staff possesses. The leader reviews the personnel's skills. Moreover, the Organization's strategy is driven by the elaboration of all these components of the elements, which further represent the shared values of the organization (Suwanda & Nugroho, 2022).

Communication plays a vital role in an organization's productivity. It is one of the factors that has a huge impact on productivity. In the words of Bill Gates, "The internet is becoming the town square for the global village of tomorrow." The internet

is a key technology that has drastically impacted people's lives globally. It is utilized in various aspects, whether in academia or business (Abubakar & Salmanu, 2018).

A widely considered productivity-enhancing factor nowadays is fast access to the internet (Grimes, Ren, & Stevens, 2011). Nowadays, much research is being done on internet usage and its impact on organizational productivity. (Hannula, 2011). There are no time and space limitations to accessing the internet. It can be accessed through various sources almost anywhere. It is easily manageable to transfer information of various kinds in electronic form. New markets, business models, and processes have emerged because of the fast internet access (Hannula, 2011).

The invasion of information technology, particularly the Internet, is crucial for organizations to achieve a competitive advantage in the market. Nowadays, organizations have adopted new technology, specifically the Internet, for performing various functions within and outside the organization (Daneshvar & Ramesh, 2010).

Frequent internet disruptions drastically affect organizational efficiency. Universities, which are a hub of student learning, are hampered as they cannot work to their full potential (Haleem, Javaid, Asim, & Suman, 2022).

These days, teachers use multimedia, laptops, and projectors to teach. Without the fast internet, they cannot deliver lectures efficiently or even upload them to various social media networks and platforms for students to study on (Haleem, Javaid, Asim, & Suman, 2022).

Motivation of the stakeholders affects organizational performance. A motivated team produces remarkable performance and efficiency because it is determined to perform well (Kalogiannidis, 2021).

Research Methodology

This research paper uses quantitative research methods with deductive methodology. Respondents across the mainstream university of Karachi were sent a Google survey form consisting of 25 questions on a 5-point Likert scale.

Data Collection Instrument

The researcher has employed a 5-point Likert scale to determine agreement (5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree). The survey has 25 questions, including 5 demographic questions. Internet disruption has been examined as an independent variable, while performance management is treated as the dependent variable, with motivation acting as a mediating variable. The market experts approved the questionnaire.

Data Collection

The questions were designed to assess the views of teaching staff, non-teaching staff, and students at different mainstream Pakistani universities on internet disruption, motivation, and performance management. The questions related to the variables included multiple-choice questions where respondents could indicate how much they agreed or disagreed with each statement. A Google survey form was sent out to the respondents, and the data was collected by email, as we understand that the vast majority of the stakeholders use Gmail accounts. The students from different universities who were working as teaching and non-teaching staff participated in the

ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

survey. The researcher received a total of 157 responses; after handling the missing data, only one response was eliminated, which means that 156 responses were consistent and complete and were utilized in the study.

Sampling & Population

A simple random sampling method was used to select the respondents for this study. The questionnaire was sent out to mainstream universities such as the University of Karachi, Federal Urdu University, Indus University, Bahria University Karachi, DHA Suffa University Karachi, etc. The researchers were able to gather data regarding a broad spectrum of perspectives. The random participants responded to the survey form because the link was shared with the teachers' groups used in the universities. The questionnaire was completed by a total of 156 participants who hailed from different ethnic backgrounds. The researchers have gained valuable insight from a wide range of teachers, students, and non-teaching faculty members from different departments of various universities, which enhanced the generalizability of the findings.

Statistical Technique

This study employed a variety of statistical techniques to analyze the data. The mean of the variables was calculated through SPSS software, and reliability tests were run. This allowed us to investigate the relationships between the variables used in the study, ensuring that the measurement model was robust.

Analyses and Interpretations

Demographic Analysis

Table 01: Demographic Characteristics

Variable	Category	Sample Size	%
Gender	Male	68	43.6
	Female	88	56.4
Age	18-25	114	73.5
	25-32	25	16.1
	32-40	7	4.5
	40-48	6	3.9
	48-55	2	1.3
	56-60	1	0.6
Qualification	Intermediate	46	29.5
	Bachelors	69	44.2
	Masters	32	20.5
	Doctorate	9	5.8

Table 01 presents the demographic profile of the study's respondents. Out of the total sample, 68 participants (43.6%) were male and 88 (56.4%) were female, indicating a slightly higher representation of females in the study. In terms of age distribution, the majority of respondents (114 participants, 73.5%) were in the 18–25 age group, suggesting that the sample largely comprised younger individuals. The 25–32 age group accounted for 16.1% of the sample, while other age brackets were represented to a much lesser extent, with only 0.6% of respondents falling in the 56–60 age range. Regarding educational qualifications, most participants held a Bachelor's degree (44.2%), followed by those with Intermediate (29.5%) and Master's (20.5%) qualifications. Only a small portion (5.8%) had obtained a Doctorate. These

demographics help contextualize the background of the participants involved in the study.

Reliability Analysis

Table 02: Cronbach's Alpha		
	N of Items	Cronbach's Alpha
Internet Disruption	8	0.885
Performance Management	7	0.848
Motivation	5	0.849

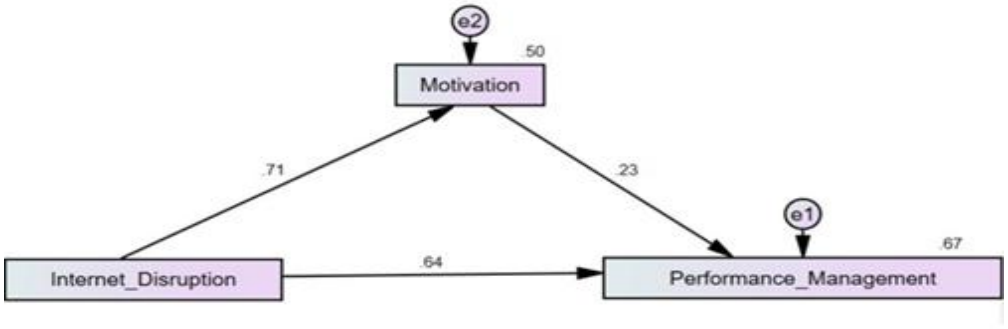
Table 02 displays the results of the reliability analysis using Cronbach's Alpha, which assesses the internal consistency of the measurement scales. The construct measuring Internet Disruption, consisting of 8 items, showed a high level of reliability with a Cronbach's Alpha of 0.885. The Performance Management scale, comprising 7 items, also demonstrated strong reliability with an Alpha of 0.848. Similarly, the Motivation scale, with 5 items, reported a Cronbach's Alpha of 0.849. All three values exceed the commonly accepted threshold of 0.70, indicating that the items used in the questionnaire were consistent and reliable in measuring their respective constructs.

Regression Analysis Using SPSS AMOS



Table 03: Structural Path Analysis				
	Estimate	S.E.	C.R.	P
Internet Disruption → Performance Management	0.815	0.049	16.744	0.00

Table 03 presents the estimated path coefficient of **0.815**, which suggests a strong positive relationship between the two variables. The standard error (S.E.) is **0.049**, and the critical ratio (C.R.)—which is the estimate divided by the standard error- is **16.744**, well above the typical threshold of 1.96 for statistical significance. The p-value is **0.00**, indicating that the relationship is statistically significant at the 0.001 level. These results imply that disruptions caused by internet-related issues have a substantial impact on performance management, validating the hypothesized direct effect.



ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

Total Effects

Table 04: Total Effects (Group number 1 - Default model)		
	Internet Disruption	Motivation
Motivation	0.742	0.000
Performance Management	0.815	0.226
Standardized Direct Effects (Group number 1 - Default model)		
	Internet Disruption	Motivation
Motivation	0.710	0.000
Performance Management	0.637	0.233
Standardized Total Effects (Group number 1 - Default model)		
	Internet Disruption	Motivation
Motivation	0.710	0.000
Performance Management	0.802	0.233

Table 04 presents the combined impact (both direct and indirect) of the independent variable (Internet Disruption) and the mediating variable (Motivation) on the dependent variable (Performance Management). The total effect of Internet Disruption on Motivation is 0.742, indicating a strong influence. On Performance Management, Internet Disruption has a total effect of 0.815, while Motivation has a smaller yet notable effect of 0.226. These values reflect the overall strength of relationships, including any indirect pathways.

Standardized Direct Effects

This table shows the standardized direct effects, which represent the immediate, unmediated impact of one variable on another. The direct effect of Internet Disruption on Motivation is 0.710, and on Performance Management, it is 0.637. Motivation has a direct effect of 0.233 on Performance Management. These values suggest that Internet Disruption directly influences both Motivation and Performance Management, while Motivation also plays a meaningful direct role in shaping Performance Management outcomes.

Standardized Total Effects

In the standardized total effects table, the direct and indirect effects are combined, but expressed in standardized form to allow for comparison. Here, the total standardized effect of Internet Disruption on Motivation remains 0.710. However, its effect on Performance Management is 0.802, indicating a strong overall impact. Motivation's effect on Performance Management is 0.233, emphasizing its role as a mediator in the model, though with a comparatively smaller influence.

Regression Weights

Table 05: Regression Weights: (Group number 1 - Default model)				
	Estimate	S.E.	C.R.	P
Internet Disruption → Motivation	0.742	0.059	12.562	0.00
Internet Disruption → Performance Management	0.647	0.067	9.734	0.00
Motivation → Performance Management	0.226	0.064	3.552	0.00

Standardized Indirect Effects (Group number 1 - Default model)		
	Internet Disruption	Motivation
Motivation	0.000	0.000
Performance Management	0.165	0.000

Standardized Indirect Effects - Two-Tailed Significance (BC) (Group number 1 - Default model)		
	Internet Disruption	Motivation
Motivation	...	...
Performance Management	0.002	...

The regression weights table provides the unstandardized estimates along with the standard errors (S.E.), critical ratios (C.R.), and significance values (P). Internet Disruption significantly predicts Motivation (Estimate = 0.742, P = 0.00) and Performance Management (Estimate = 0.647, P = 0.00). Additionally, Motivation significantly predicts Performance Management (Estimate = 0.226, P = 0.00). The high critical ratios and low p-values confirm that all the paths are statistically significant.

Standardized Indirect Effects

This table outlines the indirect effects between variables. Internet Disruption has no indirect effect on Motivation (0.000), as it is a direct predictor. However, it does have an indirect effect of 0.165 on Performance Management through the mediating variable Motivation. Motivation does not have any indirect effect on Performance Management since it directly influences it. These findings support the mediating role of Motivation in the relationship between Internet Disruption and Performance Management.

Standardized Indirect Effects - Two-Tailed Significance (BC)

This final table highlights the significance of the indirect effects using bias-corrected (BC) bootstrapping. The indirect effect of Internet Disruption on Performance Management is statistically significant with a p-value of 0.002. This confirms that the mediating path through Motivation is meaningful and contributes significantly to the total effect of Internet Disruption on Performance Management.

Discussion

The present study's results empirically support each of the four hypotheses put out on the connections between performance management, motivation, and internet disruption in the setting of higher education institutions (HEIs). According to the findings, internet disruption strongly predicts performance management (Estimate = 0.647, $p < 0.001$) and motivation (Estimate = 0.742, $p < 0.001$), hence confirming H_1 and H_2. This is consistent with previous research showing how staff effectiveness and institutional operations can be hampered by technological instability, especially in

ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

internet services (Abu Talib et al., 2021; Munir et al., 2022). HEIs depend significantly on continuous digital infrastructure, particularly in academic settings during pandemics. Any interruption may have a negative impact on service delivery, teacher involvement, and administrative coordination.

Moreover, it was discovered that motivation significantly influences performance management directly (Estimate = 0.226, $p < 0.001$), supporting H_3. This result is consistent with earlier studies that claim that employee engagement and performance in educational environments are significantly influenced by motivation (Putra & Cho, 2019). In order to sustain institutional performance standards, motivated employees typically demonstrate improved time management, dedication to institutional goals, and flexibility in the face of operational difficulties.

Crucially, the research also supported H_4 by confirming a significant indirect effect of internet disruption on motivation-based performance management (Standardized Indirect Effect = 0.165, $p = 0.002$). According to this mediating role, performance is negatively impacted by internet disruption both directly and indirectly, as it lowers motivation. Other empirical research that used motivation as a mediating variable between technology stressors and work results has shown similar trends (Ali & Anwar, 2021; Shen et al., 2020). This suggests that by cultivating a resilient and driven staff, organizations may be able to mitigate the adverse effects of digital disruptions.

The results emphasize how crucial internal motivational processes and the stability of digital infrastructure are to the development of successful performance management systems in HEIs. These findings highlight the need for focused interventions that take into account both technical and human variables, adding to the expanding body of research on digital work environments and institutional sustainability in the education sector.

Conclusion

The findings and results of this research point out that internet disruption has a significant impact on stakeholders' performance Management in Higher Education Institutions. This includes students, teaching, and non-teaching staff. Additionally, the results indicate that motivation mediates the relationship between internet disruption and performance management. In the absence of motivation as a mediating variable, the impact of internet disruption is even more severe on performance management. Therefore, the study concludes that efficient internet connectivity is a must for the enhancement of the performance and motivation of the above-mentioned stakeholders.

Recommendations

Based on the findings, several key recommendations are proposed:

- Investment in Digital Infrastructure: To reduce interruptions, HEIs should prioritize updating their IT systems and ensuring that internet services are redundant.

- Motivation Enhancement Programs: To sustain morale and performance, institutions should implement programs for employee and student involvement, particularly during times of digital upheaval.

- Digital Adaptability Training: To minimize downtime, faculty and administrative personnel should receive training on how to use alternate digital tools that can operate offline or with less connectivity.

- Policy Formulation: Institutional performance standards must include internet reliability measurements, according to university administration.

- Stakeholder Feedback Mechanisms: To inform plans for continuous improvement, surveys should be conducted regularly to evaluate how digital tools and infrastructure impact stakeholder experience.

Limitations of the study

This research was carried out only in Karachi, using data collected from higher education institutions operating in Karachi. However, data collected across the country will be of great worth and potential. The researcher will collect a larger amount of data if the questionnaire is circulated across the country.

References

Abu Talib, M., Bettayeb, A. M., & Omer, R. (2021). Analytical study on the impact of e-learning on higher education during COVID-19. *Education and Information Technologies*, 26, 6719–6746. https://doi.org/10.1007/s10639-021-10507-1

Abubakar, H., & Salmanu, Y. (2018). Impact of internet technology usage on job performance of senior secondary school teachers in Kaduna State, Nigeria. *International Journal of Curriculum and Instruction, 10*(2), 152–167.

Aguinis, H. (2009). *Performance management* (3rd ed.). Pearson Prentice Hall.

Ali, B. J., & Anwar, G. (2021). The mediating role of motivation in the relationship between digital stress and academic performance. *International Journal of English Literature and Social Sciences*, 6(4), 35–42.

Ana-Maria, G., Constantin, B., & Radu, C. (2009). The strategic performance process. *The Annals of the University of Oradea Economic Sciences*, 276–279.

Anjum, A., Yasmeen, K., & Khan, B. (2011). Performance appraisal systems in public sector universities of Pakistan. *International Journal of Human Resource Studies, 1*(1). https://doi.org/10.5296/ijhrs.v1i1.851

Armstrong, M., & Baron, A. (1998). *Performance management: The new realities*. Institute of Personnel and Development.

Bailey, C., Soane, E., & Alfes, K. (2013). Employee engagement, organizational performance and individual wellbeing: Exploring the evidence, developing the theory. *The International Journal of Human Resource Management, 24*(14), 2657–2669.

Bititci, U. S., Garengo, P., & Dörfler, V. (2012). Performance measurement: Challenges for tomorrow. *International Journal of Management Reviews, 14*(3), 305–327. https://doi.org/10.1111/j.1468-2370.2011.00318.x

ISSN (Print): 2790-7848, ISSN (Online): 2790-7856
Volume 4, Issue 2, Page 137-152, December 31, 2024

Brahma, S. O., Suharto, & Subagja, I. K. (2022). The effect of organizational culture and knowledge management on organizational performance through organizational commitment as a mediation variable at the Financial Center of the State Police of the Republic of Indonesia. *Journal of Research in Humanities and Social Science*, 10(1), 18–28.

Buckingham, M., & Goodall, A. (2015). Reinventing performance management. *Harvard Business Review*, 93(4), 40–50.

Chandak, S. (2022). Cyberloafing: Effects on employee job performance and behavior. *International Journal of Nano and Biomaterials*, 12(2), 1509–1515. https://doi.org/10.35940/ijrte.E4832.018520

Conţu, E. G. (2020). Organizational performance – Theoretical and practical approaches; study on students' perceptions. In *Proceedings of the International Conference on Business Excellence*, 14, 398–406.

Daneshvar, P., & Ramesh, H. N. (2010). Review of information technology effect on competitive advantage – Strategic perspective. *International Journal of Engineering Science and Technology*, *2*(11), 6248–6256.

DeNisi, A. S., & Murphy, K. (2017). Performance appraisal and performance management: 100 years of progress? *Journal of Applied Psychology*, *102*(3), 421–433. https://doi.org/10.1037/apl0000085

Drăghici, G. (2023). The internet, lifestyle and society. In *9th International Conference Edu World 2022 Education Facing Contemporary World Issues* (pp. 160–167). European Publisher.

Folan, P., & Browne, J. (2005). A review of performance measurement. *Computers in Industry*, *56*(7), 663–680. https://doi.org/10.1016/j.compind.2005.03.001

Grimes, A., Ren, C., & Stevens, P. A. (2011). The need for speed: Impacts of internet connectivity on firm productivity. *Journal of Productivity Analysis*, *37*(2), 187–201.

Haleem, A., Javaid, M., Asim, M. Q., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*, 275–285.

Hannula, M. (2011). How the Internet affects productivity. *International Business and Economics Research Journal*, 1(2). https://doi.org/10.19030/iber.v1i2.3896

Hartog, D. N., Boselie, P., & Paauwe, J. (2004). Performance management: A model and research agenda. *Applied Psychology*, *53*(4), 556–569.

Jr, R. H., Peters, T. J., & Phillips, J. R. (1980). The structure is not an organization. *Business Horizons*, *23*(3), 14–26.

Kalogiannidis, S. (2021). Impact of employee motivation on organizational performance: A scoping review paper for the public sector. *The Strategic Journal of Business & Change Management*, *8*(3).

Lohman, C., Fortuin, L., & Wouters, M. (2004). Designing a performance measurement system: A case study. *European Journal of Operational Research, 156*(2), 267–286.

Munir, S., Ahmad, N., & Khan, M. (2022). Internet disruptions and their effects on higher education institutions: A case study from South Asia. *Asian Journal of Technology and Innovation*, 30(2), 215–230.

Putra, R. D., & Cho, S. (2019). Employee motivation and organizational performance: Evidence from Indonesia's education sector. *Journal of Human Resource and Sustainability Studies*, 7(3), 268–278.

Shen, C., Jiang, X., & Wang, M. (2020). How does stress affect performance? The mediating role of motivation and the moderating effect of leadership. *Current Psychology*, 39, 3051–3060. https://doi.org/10.1007/s12144-019-00206-3

Suwanda, S., & Nugroho, B. (2022). Literature reviews: McKinsey 7S model to support organizational performance. *Technium Social Sciences Journal, 38*, 1–9. https://doi.org/10.47577/tssj.v38i1.7744

Wong, L. H., Hurbean, L., Davison, R. M., Ou, C. X., & Muntean, M. (2022). Working around inadequate information systems in the workplace: An empirical study in Romania. *International Journal of Information Management, 62*, 102471.