

Impact of Management Commitment with Green Organization on Organizational Performance: A Mediated Model

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Abstract

Organizational performance is a major corporate challenge and organizations are becoming more and more dependent on digitalization to achieve performance. For better performance, organizations need digitalization and management commitment. This quantitative study was conducted to investigate the impact of management commitment with green organizations on organizational performance in the presence of digitalization as a mediator. Data was collected from service-oriented organizations and the I.T sector in Lahore, Punjab, Pakistan. For data analysis, the study used SmartPLS and Structural Equation Modeling (SEM) to determine the relationship between the variables. The structural model analysis focused on assessing the relationships between variables in the model. The theories of the Resource-Based View (RBV) and the Technology Acceptance Model (TAM) clarified data analysis, directed the research process, and offered a framework for understanding the phenomena. The study's findings show that management commitment with green practices improves organizational performance. Organizations that embrace digitalization and green practices have higher profitability and enhanced operational efficiency. The research's conclusions have important implications for practitioners. The research's conclusions have significant implications for practitioners. In order to successfully implement green practices, organizations must concentrate on developing a strong managerial commitment to sustainability.

Keywords: Management Commitment, Green Organization, Organizational Performance.

Introduction

The performance of an organization is a remarkable challenge. Organizations are employing green practices to enhance their positive environmental effect and boost organizational performance with the use of digital technologies (Orji, 2019; Shumaila et al., 2020). The idea of organizational performance is multifaceted, and there are numerous definitions of it in the literature (Venkatraman & Ramanujam, 1986; Tsuma, 2013; Truss et al., 2013; Torlak, 2004; Teixeira et al., 2012; Tarigan et al., 2022; Syafarudin, 2021). The ability of an organization to carry out its plan is measured by both objective and subjective criteria, such as financial and non-financial indicators (Mahdani et al., 2012).

Organizational performance is crucial for success, sustainability, and competitiveness, achieving strategic goals, ensuring financial stability, enhancing employee morale, customer satisfaction, stakeholder confidence, operational efficiency, and innovation (Soomro et al., 2011; Sobel, 1987; Smollan & Mooney, 2024; Sivasubramanian & Umaselvi, 2010; Sheng & Mykytyn, 2002; Seibert et al., 2001; Schroeder & Flynn, 2001). Organizational performance is

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a comprehensive measure of a company's health and effectiveness, significantly impacting its ability to survive, compete, and achieve both short- and long-term goals (Girod et al., 2023). Businesses are becoming more and more dependent on the relationship between digitalization and organizational success as they adjust to the rapid improvements in technology. Organizations may access real-time data, streamline procedures, and enhance operations through digitalization, which improves resource management and decision-making. This shift fosters innovation and competition in addition to increasing production and efficiency (Mishra & Mohanty, 2014).

Organizations may enhance consumer experiences, adapt more quickly to market needs, and achieve long-term sustainability by incorporating digital tools and tactics. across this sense, organizational performance is shaped and enhanced by digitization across a variety of industries (Cress & Kimmerle, 2008). Previous research studies have highlighted the importance of management commitment in the implementation of quality management systems, with notable contributions from scholars like (Dawadi et al., 2021).

Management commitment is vital for steering organizations toward sustainable business models, a transition that can be facilitated by digitalization. A committed senior management team plays a vital role in shaping an organization's strategic direction and driving performance. Research indicates that strong leadership support is linked to better environmental performance, including reduced emissions, improved waste management, and greater resource efficiency (Csiki et al., 2023).

By analyzing organizational performance and managerial commitment to digitization, the study fills the gap in the literature. The results of the current research are definitive in this respect. Second, the mediating role of digitalization was not examined in earlier research (Khattak et al., 2023; Khan et al., 2023).

The objective of the current study is to investigate the impact of management commitment with green organization on organizational performance. The "digitalization" was employed as the mediator. Previous studies have provided guidance for further research in this area (Lichtenberg, 1995; Kraus et al., 2021; Maik & Frank, 2021; Moore & Rosenbloom, 2016).

Literature Review

Organizational success, particularly as a result of DT (digital technology), necessitates the adoption of three critical leadership skills within the management commitment: DT (digital technology) awareness, DT (digital technology) acceleration, and DT (digital technology) harmonization (Saleem, 2021). Each skill entails distinct leadership qualities and competencies, and businesses that are confident in their ability to possess all three leadership skills are better prepared to face the challenges of digital transformation.

Managers must not only watch and respond to developments but also be aware of the vast amount of data and emerging digital technologies, as well as their properties. Managers must recognize that these variables are rapidly evolving and that they are interconnected with issues relating to the respective characteristics of the market. A theoretical review critically analyzes and synthesizes existing theories and models relevant to a particular research topic. The previous study was conducted to determine Information Technology and Organizational Performance: An Integrative Model of IT Business Value. Miller (2004) this research review investigates the relationship between information technology and organizational performance, as well as the hypothesized structure of organizational performance.

Olson and Henry (1982) conducted a study to identify high-performing organizations by defining and measuring their organizational performance. In this literature review, the study investigates how managers are looking for strategies to strengthen their companies so that they can not only deal with dangers but also quickly capitalize on opportunities, allowing them to develop and thrive (Rao & Holt, 2005).

Research studies are conducted to assess the role of corporate data-driven culture in promoting the use of robust business analytics for product innovation and organizational performance. In this context, the author emphasized the organization's use of AI and digitalization as integrated business analytics tools. In this context, the purpose of this study is to look into how a data-driven culture affects process performance and product innovation, which leads to improved overall organizational performance and increased business value.

According to Ranft and Lord (2002) organizational theory encompasses a set of interconnected concepts centered around the sociological examination of the structures and functions of formal social organizations. It aims to explain how various organizational units either interact or remain disconnected. Additionally, organizational theory explores group behavior, which can differ from individual behavior, often emphasizing goal-oriented actions. This theory spans both the study of dynamics within organizations and relationships between different organizations.

In the early 20th century, organizational theories began with a rational approach but have since evolved to include a wider range of perspectives. A rational organizational system consists of two key elements: goal specificity and formalization. Labor division, which involves the specialization of individual roles, is linked to higher productivity and trade expansion.

Institutional theory explains the development and structure of academic and governmental research sectors, noting that successful organizations in industrialized countries often serve as models, even when applied in different contexts from where they originated Sivasubramanian and Umaselvi (2010) this theory proposes that organizational performance improves when employees possess the necessary skills, motivation, and opportunities to execute their tasks effectively.

Another study was conducted to establish the relationship between green innovation and organizational performance: the influence of big data and the moderating function of management commitment and HR practices. This study focuses on management commitment with green innovation, human resource practices, environmental and economic performance, and corporate environmental ethics through the utilization of large-scale data (Zadeh & Ahmad, 2012).

The managers must possess management skills in order to accelerate DT (digital technology) in the execution of the strategy linked to innovation mechanisms within a multidimensional framework. These abilities include the intellectual ability to conceptualize processes and novel digital products based on internal and external resources, as well as the desire to commit managerial attention and financial resources during periods of episodic upheaval. The managers must be able to work in harmony with digital technology when it comes to organizational change procedures. These processes are once again linked to the mechanisms of the multidimensional framework, but with a focus on integration. The ability to harmonize with DT (digital technology) includes managerial skills, which allow new goods and digital processes to be integrated into the existing company (Zhang et al., 2021).

The new financial services business models prioritize client demands above all else, allowing for fast digital transactions and gaining a durable competitive edge. However, the introduction of innovative technology has generated operational issues for emerging organizations, necessitating the development of operational strategies within the financial services industry from the client's perspective (Zhu & Sarkis, 2007). Zadeh and Ahmad (2012) present a hybrid decision-making approach to evaluate service innovation, prioritizing new commercial partners.

Leadership theory and management commitment are deeply connected, with strong leadership playing a crucial role in shaping an organization's dedication to its objectives and values. Leadership is a critical element in managing businesses, teams, or organizations. The insights

from leadership theories are highly relevant to research on management commitment, as they guide organizations in selecting the right leaders for various roles. For example, certain situations may call for a leader who excels in decision-making, such as during a crisis, while others might require someone skilled at fostering strong relationships, particularly in a tightly-knit team.

Theories on leadership, such as Kotter's change model, emphasize the crucial role leaders play in guiding teams through periods of transformation. When management demonstrates a genuine commitment, they can effectively communicate the need for change, fostering a sense of security and motivation among employees. This, in turn, reinforces their dedication to the organization's future goals and objectives.

Research consistently shows that effective leadership is a key driver of positive organizational outcomes. Committed leaders establish clear expectations, model productive behaviors, and foster employee engagement, creating a self-reinforcing cycle of commitment that benefits the entire organization. Leadership theory provides valuable guidance on how leaders can inspire and nurture commitment among team members, ultimately enhancing organizational performance and success.

The Social Exchange Theory posits that relationships thrive on reciprocal benefits. When managers demonstrate dedication to their employees through supportive actions and recognition, employees often reciprocate with heightened commitment to the organization. Meanwhile Commitment Theory explores the dynamics of individual and organizational commitment. This framework highlights key factors such as job satisfaction, perceived organizational support, and value alignment between employees and the organization. These elements are significantly influenced by management practices, shaping the commitment levels of both employees and the organization as a whole.

Technological innovation is a key strategic driver of competitiveness and performance. Previous research has established “a positive link between innovation and organizational performance (Taghizadeh, 2006). A few studies have found “a negative influence of product innovation on performance.” In a digitalization scenario, certain mixed results may be noticed. On the other side, Rhoades and Eisenberger (2002) discovered no link between IT competency and organizational performance. Furthermore, only a few studies have examined “the mediation effect of product innovation on the relationship between performance, technology orientation and technological capability” (Smollan & Mooney, 2024).

Rawley and Lipson (1985) suggested that “managers consider innovation as a mediating element for technology orientation in order to improve business success. Data for this study were acquired from 105 SMEs in Malaysia's industry.” This study used Zhou et al.'s (2005) measurements, which were developed from Gatignon and Xuereb's (1997) original measures. The items examine a company's commitment to utilize digital technologies in new product creation as well as its willingness to seize digital opportunities. The Technology Acceptance Model (TAM) posits that perceived ease of use and perceived usefulness influence technology adoption. In the context of green organizations, digital tools can streamline operations and enhance sustainability practices. Resource-Based View (RBV) theory suggests that digital capabilities can serve as a competitive advantage, enabling organizations to leverage their resources more effectively in pursuing green initiatives. These theories highlight the multifaceted impact of management commitment to green practices on organizational performance, with digitalization playing a crucial mediating role.

The study addresses a gap in the literature by examining managerial commitment to digitalization and organizational performance. The current study provides conclusive findings in this regard. Second, previous studies did not assess the mediator role of digitalization and management commitment, and this is the first time that research has measured the mediating impact of management commitment in the relationship between green organizations and

organizational performance (Prajapat et al., 2023). After extensive literature review, the following hypotheses were developed for testing.

H1: The impact of management commitment with green organization on organizational performance is significant.

H2: The impact of management commitment with green organization on digitalization is significant.

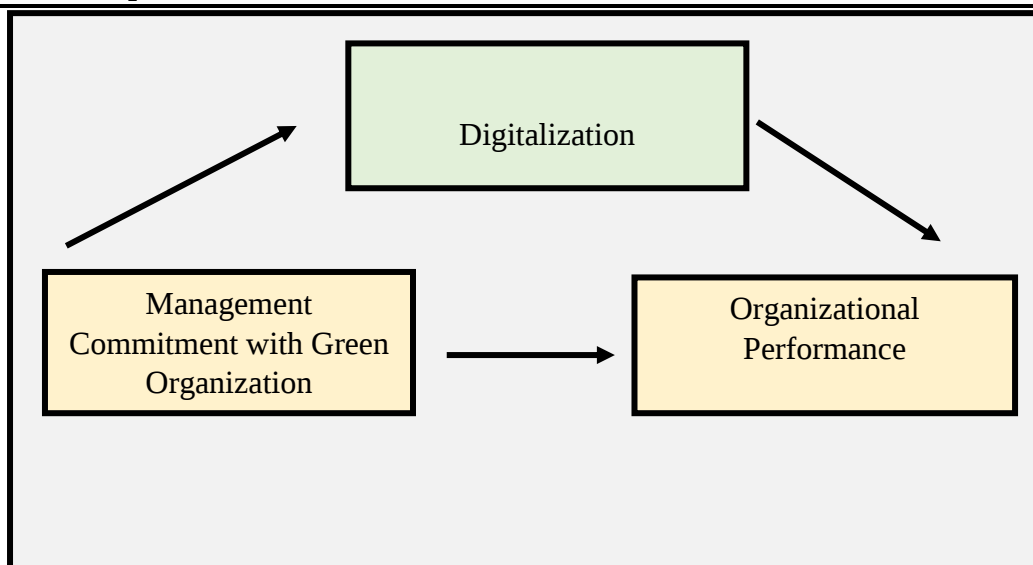
H3: The impact of digitalization on organizational performance is significant.

H4: Digitalization mediates the relationship between management commitment with green organization and organizational performance.

Conceptual Framework

Figure 1 shows the conceptual framework. Management commitment with green organization is an independent variable, organizational performance is dependent variable and digitalization used a mediating variable.

Figure 1: Conceptual Framework



Methodology

This study employed the quantitative research design to examine relationships between variables. The target population for this study comprises professionals employed in Pakistan's IT sector and service-oriented companies based in Lahore. Specifically, the focus is on organizations that have actively embarked on green initiatives and digital transformation journeys. A convenient sampling technique has been utilized to ensure diverse representation across various industries, including manufacturing and services. The data was gathered from 350 responses through a structured questionnaire that has been adapted from previously validated instruments. Structural Equation Modeling (SEM) was employed to explore the relationships between variables. Data analysis was analyzed using software tools like SPSS and Smart PLS version 4.0. The existing survey instruments are as follows:

Table 1: The Items of the Survey Instruments

Construct	Items	Sources
Management Commitment with Green Organization	12	(K. Digalwar et al., 2013) Hotlan Siagiana et al., 2021)
Organizational Performance	13	(Qurat-ul-Ain Mahmood, Riaz Ahmed et al., 2022)
Digitalization	15	(Hao et al., 2023), (Awawdeh et al., 2022), Nigel Melville, Kenneth Kraemer et.al., 2004)

Analysis and Results

Performance within an organization is a challenge. This quantitative study was carried out to look at how management commitment to green businesses affected organizational performance when digitalization was present as a mediating factor. Information was gathered from the IT industry and service-oriented enterprises in Lahore, Pakistan. In order to ascertain the link between the variables, the study employed SmartPLS and Structural Equation Modeling (SEM) for data analysis.

The Table 4.1 show the descriptive analysis. The mean of 1.404 (close to 1) indicates a higher proportion of one gender (e.g., males if coded as 1). The skewness (0.394) suggests a slight positive asymmetry, and kurtosis (-1.86) indicates a flat distribution compared to normal. The mean of 1.768 suggests a predominance of younger age groups (if coded numerically). The skewness (1.057) shows a strong positive skew, implying more younger respondents, while kurtosis (-0.022) is close to normal. The mean of 1.62 indicates that respondents tend to have lower education levels (if coded). The skewness (0.584) indicates a slight positive skew, while kurtosis (-0.651) suggests a flatter-than-normal distribution. The mean of 1.932 reflects respondents' position level. Skewness (0.076) shows the data is nearly symmetrical, while kurtosis (-0.723) indicates a flat distribution.

Table 2: Descriptive Analysis

	N	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic
Gender	250	1.404	0.49168	0.394	-1.86
Age	250	1.768	0.97467	1.057	-0.022
Education	250	1.62	0.65522	0.584	-0.651
Current Position Level	250	1.932	0.66418	0.076	-0.723
Type of organization	250	1.844	0.52609	-0.161	0.249
Work Experience	250	1.836	0.87874	0.326	-1.631
Monthly Income	250	1.816	1.2346	1.775	2.711
Primary industry of your organization	250	1.828	0.37814	-1.749	1.067
Valid N (listwise)	250				

The mean of 1.844 suggests the prevalence of a specific type of organization. The skewness (-0.161) indicates a slightly negative skew, while kurtosis (0.249) shows a near-normal distribution. The mean of 1.836 indicates lower levels of work experience. Skewness (0.326) shows slight positive asymmetry, while kurtosis (-1.631) indicates a flatter-than-normal distribution. The mean of 1.816 reflects income levels skewed positively (1.775), indicating

more respondents in lower-income categories. High kurtosis (2.711) suggests a peaked distribution. The mean of 1.828 suggests respondents are concentrated in a specific industry type. A strong negative skew (-1.749) indicates the majority is clustered in the lower category (e.g., 1), with kurtosis (1.067) showing a peaked distribution.

Table 3: Frequencies Statistics

	N	Valid	Missing	Mean	Std. Deviation	Variance
Gender		250	0	1.404	0.49168	0.242
Age of respondents		250	0	1.768	0.97467	0.95
Education of respondents		250	0	1.62	0.65522	0.429
Current position level		250	0	1.932	0.66418	0.441
Type of organization		250	0	1.844	0.52609	0.277
Work experience		250	0	1.836	0.87874	0.772
Monthly income		250	0	1.816	1.2346	1.524
Organization		250	0	1.828	0.37814	0.143

Table 4: Frequency Table

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	149	59.6	59.6	59.6
	Female	101	40.4	40.4	100
	Total	250	100	100	
Age	Under 30	132	52.8	52.8	52.8
	31-40	66	26.4	26.4	79.2
	41-50	30	12	12	91.2
	Above 50	22	8.8	8.8	100
	Total	250	100	100	
Education	Bachelor's Degree	119	47.6	47.6	47.6
	Masters	107	42.8	42.8	90.4
	Doctorate	24	9.6	9.6	100
	Total	250	100	100	
Current Position Level	Lower Management	64	25.6	25.6	25.6
	Middle Management	139	55.6	55.6	81.2
	Upper Management	47	18.8	18.8	100
	Total	250	100	100	
Type of organization	Public	57	22.8	22.8	22.8
	Private	175	70	70	92.8
	Other	18	7.2	7.2	100
	Total	250	100	100	
Work Experience	Less than 5 Year	120	48	48	48
	6-10 Years	51	20.4	20.4	68.4
	More than 10 Years	79	31.6	31.6	100
	Total	250	100	100	
Monthly Income	Less than PKR 100,000	142	56.8	56.8	56.8

	PKR 100,001 - PKR 200,000	59	23.6	23.6	80.4
	PKR 200,001- PKR 300,000	23	9.2	9.2	89.6
	PKR 300,001- PKR 400,000	12	4.8	4.8	94.4
	PKR 400,001- PKR 500,000	7	2.8	2.8	97.2
	Above PKR 500,000	7	2.8	2.8	100
	Total	250	100	100	
Organization	Manufacturing	43	17.2	17.2	17.2
	Services	207	82.8	82.8	100
	Total	250	100	100	

The table presents the gender distribution of the respondents in the study, with a total of 250 valid responses. The gender distribution reveals that 59.6% of respondents are male, while 40.4% are female. The data indicates a higher representation of males (59.6%) compared to females (40.4%) among the respondents. This distribution may reflect the gender dynamics within the surveyed organizations or sectors. This indicates a significant gender imbalance; a large number of males are working in the corporate sector of Pakistan rather than females.

The age demographics show that 52.8% of respondents are under 30, 26.4% fall within the 31-40 age range, 12.0% are in the 41-50 age group, and only 8.8% are above 50. The data shows a predominant representation of younger respondents, with over half (52.8%) under the age of 30. The age distribution indicates a younger workforce, with a significant drop in numbers for older age brackets.

In terms of education, 47.6% of respondents hold bachelor's degrees, 42.8% have master's degrees, and 9.6% possess doctorates. This educational distribution suggests a well-educated respondent pool, with a significant emphasis on undergraduate and graduate education. Regarding position levels, 25.6% of employees are in lower management positions, 55.6% are in middle management roles, and 18.8% hold upper management positions. This distribution suggests a workforce that is predominantly situated in middle management roles, which could influence organizational dynamics and decision-making processes.

The organizational composition shows that 22.8% of employees work in public organizations, while 70.0% are in private and 7.2% in other companies. The data indicates that a significant majority of respondents (70.0%) are affiliated with private organizations. This distribution highlights a predominance of the private sector. The percentages represent how respondents' job experience is distributed: 48.0% have less than 5 years of experience, 20.04% have 6-10 years, and 31.6% have more than 10 years. This distribution implies a wide range of expertise levels.

The data indicates that a significant majority of respondents who earn less than PKR 100,000 belong to the 56.8% income bracket per month, while PKR 100,001 - PKR 200,000 are 23.6%, PKR 200,001 - PKR 300,000 are 9.2%, PKR 300,001 - PKR 400,000 are 4.8%, PKR 400,001 - PKR 500,000 are 2.8%, and above PKR 500,000 are 2.8%. This distribution highlights a concentration of lower-to-middle-income respondents. According to the primary industry breakdown, 17.2% of employees work in the manufacturing sector, while 82.8% are in service industries. This distribution focuses on the importance of service-oriented businesses in creating job opportunities of employment in the corporate sector.

Correlation Analysis

The correlation analysis reveals significant relationships between McGo (management

commitment to a green organization), OP (organizational performance), and D (Digitalization). There is a strong positive correlation between McGo and OP ($r = 0.721$, $p < 0.01$), indicating that greater management commitment to green practices is associated with improved organizational performance. Similarly, D and OP are strongly correlated ($r = 0.710$, $p < 0.01$), suggesting that increased use of Digitalization contributes positively to organizational performance. Additionally, there is a moderate positive relationship between McGo and D ($r = 0.532$, $p < 0.01$), highlighting that management commitment to green initiatives is moderately linked with the adoption of Digitalization.

Table 5: Correlations Analysis

		McGo	OP	D
McGo	Pearson Correlation	1	.721**	.532**
	Sig. (2-tailed)		0	0
	N	250	250	250
OP	Pearson Correlation	.721**	1	.710**
	Sig. (2-tailed)	0		0
	N	250	250	250
D	Pearson Correlation	.532**	.710**	1
	Sig. (2-tailed)	0	0	
	N	250	250	250

All correlations are statistically significant, emphasizing the interconnection of these factors in driving organizational success.

The measurement model analysis demonstrates strong reliability and partial validity for the constructs in the study. Cronbach's Alpha values for all constructs—D (0.935), McGo (0.911), and OP (0.909)—exceed the recommended threshold of 0.70, indicating high internal consistency.

Table 6: Reliability and Validity

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
D	0.935	0.936	0.943	0.526
McGo	0.911	0.913	0.924	0.505
OP	0.909	0.909	0.922	0.478

Similarly, the composite reliability values (rho_a and rho_c) for all constructs are above 0.70, further confirming that the constructs are measured consistently and reliably. In terms of convergent validity, the Average Variance Extracted (AVE) values for D (0.526) and McGo (0.505) exceed the minimum threshold of 0.50, indicating that these constructs explain sufficient variance in their indicators. However, the AVE for OP (0.478) falls slightly below the recommended level, suggesting that the OP construct may not adequately capture the variance in its indicators.

Discriminant Validity

Heterotrait-Monotrait (HTMT) Ratio

The Heterotrait-Monotrait (HTMT) ratios between the constructs D, McGo, and OP are provided to assess discriminant validity. The HTMT value between McGo and D is 0.575, which is below the commonly accepted threshold of 0.85, indicating good discriminant validity.

between these two constructs. However, the HTMT values between OP and D (0.770) and between OP and McGo (0.794) are relatively high, though still below the strict threshold of 0.85. These values suggest a strong relationship between OP and the other two constructs, but discriminant validity is not yet compromised according to the HTMT criterion.

Table 7: Heterotrait-Monotrait (HTMT) Ratio

	Heterotrait-Monotrait ratio (HTMT)
McGo <-> D	0.575
OP <-> D	0.770
OP <-> McGo	0.794

Management Commitment with Green Organization ↔ Digitalization (McGo ↔ D)

HTMT Value: 0.575

The value is below the commonly accepted threshold of 0.85, indicating good discriminant validity between these two constructs.

While this indicates that the constructs McGo and D are sufficiently distinct from one another and do not overlap excessively in what they measure.

Organizational Performance ↔ Digitalization (OP ↔ D)

HTMT Value: 0.770

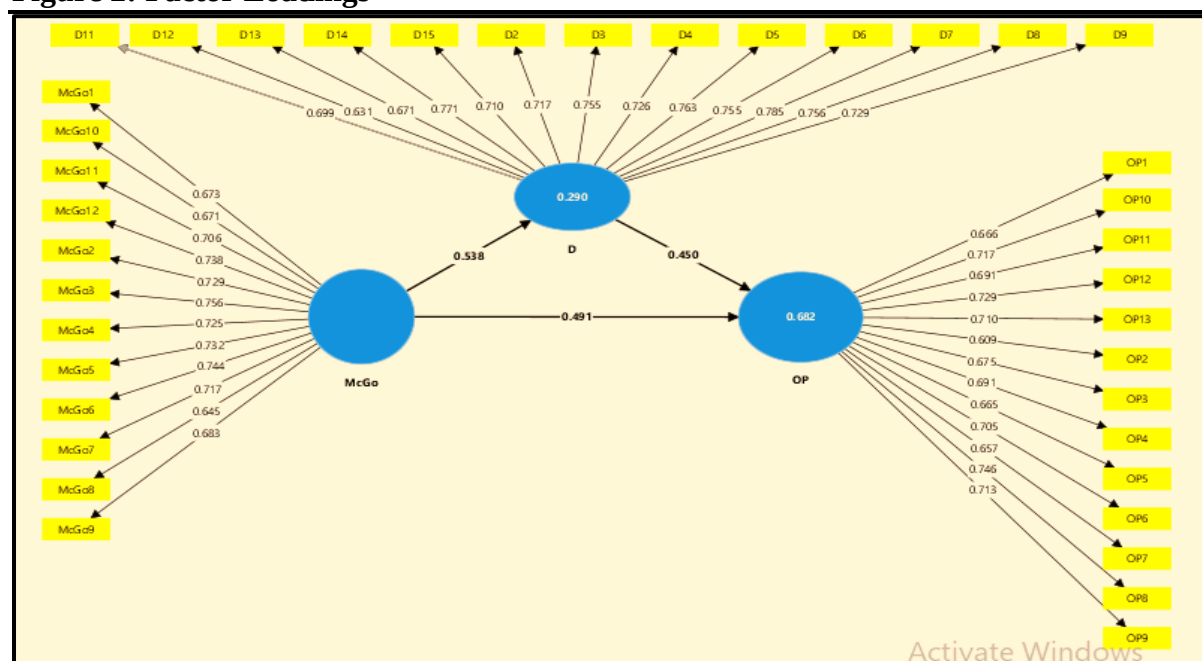
This value is well below the threshold of 0.85, indicating strong discriminant validity between OP and D

This value suggests a strong relationship between OP and the other two constructs, but discriminant validity is not yet compromised according to the HTMT criterion.

Organizational Performance ↔ Management Commitment with Green Organization (OP ↔ McGo)

HTMT Value: 0.794

This value is below the threshold of 0.85, confirming adequate discriminant validity between OP and McGo. This indicates that OP and McGo are distinct constructs, though the relatively high value suggests a strong relationship. They remain sufficiently differentiated within the model. All three HTMT values fall below the recommended threshold of 0.85, confirming adequate discriminant validity among the constructs in the measurement model.

Figure 2: Factor Loadings

The R-Square value also known as the coefficient of determination, is a statistical measure that indicates how well the independent variables in a regression model explain the variability of the depend variable R-square values range from 0 to 1.

Table 8: R-square

	R-square	R-square adjusted
D	0.290	0.287
OP	0.682	0.679

Digitalization

This indicates that 29.0% of the variance in D is explained by the mediator variable. After accounting for the number of predictors. The mediator variables have a moderate explanatory power.

Organizational Performance

This indicate that 68.2% of the variance in the dependent variable (OP) is explained by the independent variables in the model. This reflects a substantial level of explanatory power. The adjusted value slightly decreases to 67%, showing that the slightly more conservative estimate by accounting for the number of predictors and sample size.

Table 9: Structural Model Analysis

Hypothesis	Relationship	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
H2	D -> OP	0.45	0.453	0.066	6.8	0.000	Significant
H1	McGo -> D	0.538	0.539	0.077	7.029	0.000	Significant
H3	McGo -> OP	0.491	0.49	0.074	6.605	0.000	Significant

D → OP (Direct effect of D on OP)

D (the predictor) has a strong, positive, and statistically significant impact on OP (the dependent variable).

McGo → D (Direct effect of McGo on D)

McGo significantly and positively influences D. This suggests that McGo plays an important role in shaping or driving D.

McGo → OP (Direct effect of McGo on OP)

McGo also has a strong, direct, and statistically significant positive effect on OP. This shows that McGo contributes directly to the outcome variable (OP).

Table 10: Indirect effect

Indirect Effect	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
McGo -> OP	0.242	0.247	0.063	3.847	0.000

McGo → OP (Indirect effect through D)

The indirect effect of McGo on OP via D is significant and positive. This confirms that D partially mediates the relationship between McGo and OP.

Table 11: Mediation analysis

Type of effect	Effect	Path Coefficient	T State	Remarks
Total effect	McGo -> OP	0.737	21.956***	Significant Total Effect
Indirect Effect	McGo ->D-> OP	0.247	3.847***	Significant Indirect Effect
Direct Effect	McGo -> OP	0.49	6.605***	Significant direct Effect
VAF	IE/TE	0.335142469		

Total Effect (McGo → OP)

The total effect of McGo on OP (combining direct and indirect effects) is very strong and statistically significant.

Indirect Effect (McGo → D → OP)

The mediation effect of D between McGo and OP is significant. This indicates that D explains part of the relationship between McGo and OP.

Direct Effect (McGo → OP)

Even after accounting for the mediation effect, McGo still has a significant and substantial direct impact on OP.

Variance Accounted For (VAF)

VAF = 0.335 (calculated as Indirect Effect / Total Effect).

Approximately 33.5% of the total effect of McGo on OP is explained through the mediator D. This indicates partial mediation, as the VAF is between 20% and 80%.

Conclusion

The findings of the study show that management commitment drives green practices, enhancing performance. Digitalization, through advanced technologies like data analytic, improves efficiency and effectiveness of green practices. Organizations committed to green practices and supported by digitalization achieve better performance outcomes, including increased profitability, operational efficiency, and stronger brand reputation. Digitalization also strengthens the link between management commitment and performance, allowing organizations to maximize the potential of their green initiatives.

This study explored the mediating role of digitalization in the relationship between management commitment and organizational performance, providing a holistic perspective. This research explores the mediating role of digitalization in the relationship between management commitment and organizational performance, providing a holistic perspective. By applying theoretical frameworks like the Resource-Based View (RBV) and the Technology Acceptance Model (TAM), the study highlights that digital capabilities serve as a competitive advantage, enabling organizations to leverage their resources effectively in pursuit of green objectives.

The study's results support a comprehensive approach that integrates effective management leadership, technological advancements, and sustainable practices to achieve exceptional business outcomes. A moderately strong partial mediation effect of the mediator variable (M) between the independent variable (IV) and the dependent variable (DV) exists. This conclusion is based on the fact that approximately 50% of the effect is mediated, and the direct effect remains significant. Therefore, we can say that the mediator partially and moderately strongly explains the relationship between the IV and DV. On the basis of result, the statement is established that a steadfast commitment to sustainability and digitalization will be essential for fostering long-term success and maintaining competitiveness.

The findings from this research carry significant implications for practitioners. Organizations need to focus on cultivating a robust management commitment to sustainability, as this is vital for successfully implementing effective green practices. Moreover, it is crucial for companies to invest in digital transformation. By adopting digital tools, organizations can improve their operational efficiency while also aligning with contemporary sustainability standards that require adaptability and responsiveness to evolving market conditions.

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