Financial Performance and Firm Value: The Moderating Role of Going Digital among Companies Listed in Nairobi Security Exchange

Charles Kiprono Sang Keter[1]* Josphate Yegon Cheboi[1], David Kosgei[2] and Amos Kiptalam Chepsergon[3]

[1]Department of Accounting and Finance, Moi University, P.o Box 652-30100 Eldoret Kenya

[2]Department of Agricultural Economics & amp; Resource Management, Moi University, P.o Box 3900-30100 Eldoret Kenya

[3]Department of Management Science & amp; Entrepreneurship, Moi University, P.o Box 3900-30100 Eldoret Kenya

***Corresponding author's email address:** csketer1@gmail.com

Abstract

In the new global economy, marked with the technological uncertainty, financial performance and digital activities has emerged as a major concern for shareholders and stakeholders. The study looks at the role of going digital on the relationship between financial performance and firm value through a macro-level data. The sample consisted of (39) firms listed at Nairobi Security Exchange (NSE) in Kenya. Representing a 61.905% of firms listed NSE, with 390 observations during the period (2010-2019). The study hypotheses were tested on fixed effect linear model. The study's findings indicate that there was a significant main effect found between financial performance [ROA] and firm value [Tobin's Q], and also a significant main effect of going digital [DGTL] on firm value [Tobin's Q]. There was a significant interaction of going digital on financial performance and firm value. The study results confirmed that financial performance is a positive signal that enhance stock price, positively contributing to high firm value. Overall, going digital at lower levels enhances the relationship between financial performance and firm value. In conclusion organization in search of new technology practice conservative disclosure of digital activities since unsuccessful research activities my influence future performance.

Keywords: Financial Performance (FP); Firm value; Going Digital; Tobin's Q index

INTRODUCTION

Firm value reflects the trust of the stakeholders in the management of the firm. Hence, effective management is reflected in the company's achievements in terms of performance. Essentially maximizing the value of the company is a clear indicator in the share prices of the stock transactions. In the face of increasing rapid change in markets, technologies, and competition, organizations must identify new opportunities to maintain their competitiveness. Financial performance is an important attribute to shareholders and stakeholders in the new global economy,

marked by technological uncertainty. Essentially, the multidisciplinary nature of financial performance, especially in relation to firm value has eluded a lot of studies (Battisti et al., 2019; Buallay et al., 2020). Firm investment decisions are a major attribute in enhancing firm value (Suteja & Gunardi, 2016). According to Sasongko, (2019), an investor's desire is high business value, since it's an indication of shareholder wealth. The Nairobi security exchange is the most efficient, active and capitalised stock market in East Africa (CMA, 2019). However, companies operating in NSE are faced with the dilemma of maximizing firm value taking into account external pressure such as environmental and legal regulations set by the government to regulate it.

According to Wijaya & Sedana, (2020), the price that a potential buyer is willing to pay for the company if is sold is firm value. Additionally, firm value is a long-term measure of financial performance (Samiloglou & Dermigunes, 2008). Similarly, the survival of any business is highly pegged on the financial performance of an organization (Handley & Li, 2018; Widyaningsih, Harymawan, Mardijuwono, Ayuningtyas, & Larasati, 2019). Financial performance is core to the business and involves maximizing profits to enhance business value (ACCA, 2015). From the perspective of signalling theory, financial performance reflects the current and future status of the business. Thus, profit-maximizing organizations are concerned with value maximization (Bay and Michel, 2006). According to Ghosh and Saima (2021), profitability is a key determinant in establishing corporate value. Similarly, Chen and Chen (2022) established that financial performance influences the firm value of green energy companies for a period (2008-2017). The findings were consistent with the findings of Siueia, Wang, & Deladem (2019) did a comparative study in the Sub-Saharan Africa banking sector and established firm value was influenced by financial performance positively. Sugianto, Oemar, Hakim and Endri (2020) established financial performance had a positive and no significant effect on firm value among listed commercial banks in Indonesia. The present study has focused on a macro level rather than a micro level so as to establish the difference in findings from previous studies. In addition, Hakim and Sugianto (2018); and Sigit and Nurul (2014) established that financial performance had no significant effect on firm value. However, they attributed the inconsistent result to measurement fault of firm performance indicators, based on historical data.

Considering there are still contradictory results between financial performance and firm value, there are other factors/variables that have contingent effect on firm value. Hence, we added going digital as a moderating variable. Chen and Srinivasan, (2023) found a relationship between digitalization and the valuation of the market-to-book value of a firm engaging in digital activities.

Generally, a digital firm is one which nearly all of the organizations significant business relationship with customers, suppliers, and employees are digitally enabled and mediated. An evaluation of the pre-pandemic Kenya ICT sector reveals a relatively robust industry. With a growth rate of 2.5% in 2019, and an average growth rate of 10.8% from 2016-2019. The Kenyan, government has focused on six pillars (Digitalization of Government, Digital Business, Infrastructure, Innovation, Digital Skills and Values and Digital Inclusion). However, an organization taking part in digitalization (going digital) is still voluntary. Even though digitalization/going digital is one of the constructs that can

enhance firm value. Going digital represents a shift in the environment, by allowing the creation of new technical innovative skills in an organization (Zhou *et al*., 2021). Previous studies have established those digital technologies enhances firm value, through coordination aand workflow efficiency (Athey and StERN, 2002; Ransbotham, Overby and Jernigan, 2016). Generally, digital activities increase asset turnover, an indication that digital activities offer immediate gains in firm productivity and efficiency. However, digital activities are often undervalued due to the high uncertainty related to the digital activities (Leung et al., 2015). As such the management/CEO will present information to conceal going digital activities fearing that unsuccessful research activity may influence firm performance and firm value respectively (Jia, 2019).

Digitalisations have been established to have mixed results on firm value (Chen & Srinivasan, 2023). The study added control variables to the model; company firm size, leverage, institution ownership and liquidity. The reason is based on the study Sandy, A. *et al*., (2019), who established that firm size had a negative significant effect on firm value. While, Yanti and Dwirandra (2019), established that liquidity had a positive effect on firm value. Additionally, institutional ownership was established to have a positive effect on firm value (Chen et al., 2008). Lastly, Brigham and Houston (2016) established that firm value increases with an increase in debt until the marginal benefits from leverage are equal to the marginal bankruptcy costs.

Based on the discussion, the study sought to examine and analyse: [1] the effect of financial performance on firm value. [2] the effect of going digital on firm value. [3] Going digital moderates the effect of financial performance on firm value

LITERATURE REVIEW

Theoretical Foundation

Legitimacy Theory

Companies must be part of the general community and must get positive perception results. There are four strategies adopted by organizations to deal with the threat of legitimacy. First, the company has to provide relevant information about changes in organization performance, second, companies change performance perception, third, firms should change perceptions by interfering with changing perception, fourth mitigating the legitimacy (Indblom, 2010). The four play a critical role in maintaining legitimacy. Generally, positive and expectations may be built by voluntary disclosure of going digital. Lack of disclosure may be seen as unsuccessful research and development in digitalization. Generally, the company uses annual reports and financial performance as a form of disclosure to legitimize the company's survival and operations in the community. Generally, a company will report activities if management perceives that the activities are expected by the community in which they operate (Deegan 2002; Deegan, Rankin and Voght 2000; Cormier and Gordon 2001, Cuganesan, 2007).

Signaling Theory

Signalling theory describes signals that companies send to the market regarding the state of the company (Spence, 1973). Thus, signalling theory focuses on the behaviour of managers in well-performing fiirms. Moreover, signalling theory

explains why businesses feel compelled to share financial information with stakeholders. Since the executive knows more about the company and its prospects than outside parties (Simanungkalit, 2009). Therefore, a company's goal is to ensure it provides useful information to its customers to signal positive information.

Hypothesis Development

Financial performance and firm value

According to signalling theory, a company's financial performance should constantly be represented by its current status and potential future growth. The positive signal from company profitability will be able to enhance the stock price. While the corporation's capital structure has no influence on its value, according to the Modigliani and Miller (1958) theorem, thus, the market value is determined by the present value of future earnings. According to Ghosh and Ghosh (2008), profitability is the most suitable measure of financial success and an important criterion for defining firm value. Previous studies have established a positive and significant effect of financial performance on firm value (Sucuahi and Cambarihan, 2016; Gharaibeh and Qader, 2017; Jallo & Mus, 2017; Firdaus et al., 2018; Almagtome & Abbas, 2020). Similarly, Hassan and Halbouni (2013) used ROA to measure financial performance and established a positive and significant effect of financial performance on firm value. However, Sigit Hermawan and Afiyah Nurul (2014) concluded that organization profitability had no influence on firm value. Similarly, Handley & and Li (2018) and Karima (2016) concluded that there is no relationship between financial performance and firm value. Hence the a need to re-examine the effect of financial performance and firm value, and to whether better financial performance contributes to a positive reputation as it sends signals of asymmetry. We hypothesize that financial performance has no statistically significant effect on firm value.

Going Digital and firm value

Digital technologies increase growth opportunities and productivity of organizations (Brynjolfsson, Rock and Syverson, 2017; Cockburn, Henderson and Stern, 2017). Generally, the initial investments in new technologies are concentrated in tech firms, recent developments have seen non-tech firms investing in the technology. Building on the technological adoption literature, we seek to determine if digital activities (going digital) increase firm value. Digital technology adoption generally increases firm output (Brynjolfsson and Hitt, 1996). Additionally, firms that have adopted digital activities are likely to expand vertically and horizontally. Generally, digital activities enhance productivity as a result of increased production, which signals to investors of potential growth. Firms that embrace new technology have higher valuations (Bharadwaj, Bharadwaj, and Konsynski 1999). According to Kleis *et al*. (2012), digital activities increases innovation, productivity; hence, increases the valuation of firms. Similarly, Chen and Srinivasan (2023) demonstrated that a company's digital activities influence firm value. Therefore, the adoption of digital technology increases firm value. We hypothesize that going digital has no statistically significant effect on firm value.

Financial Performance, Going Digital and firm value

The difference between the market-book value is associated to the intangible assets

often undisclosed under the traditional financial reporting (Hulten & Hao, 2008; Rieg & Vanini, 2015; Dashti, Aleemi, & Tariq, 2016; Brand Finance Institute, 2017). According to Suteja and Gunardi (2016), firm investment decisions are concerned with enhancing the firm's value. Digital technologies provide a wide ray of benefits to firms; studies have established market-to-book ratio of non-tech firms engaging in digital activities is higher than that of their industry peers in an economically significant way (Chen & Srinivasan, 2023). However, the disadvantage associated with new technologies is that the return on investment might delay its benefits (Bresnahan and Greenstein 1996; Brynjolfsson, Rock, and Syverson 2017). We can attribute the delayed benefit of digital activities to the inconsistency in the association between financial performance and firm value; we hypothesize that Going Digital does not moderate the relationship between financial performance and firm value.

Conceptual Framework

Figure 1 below represent the effect of financial performance and firm value of firms listed in Nairobi Security Exchange.

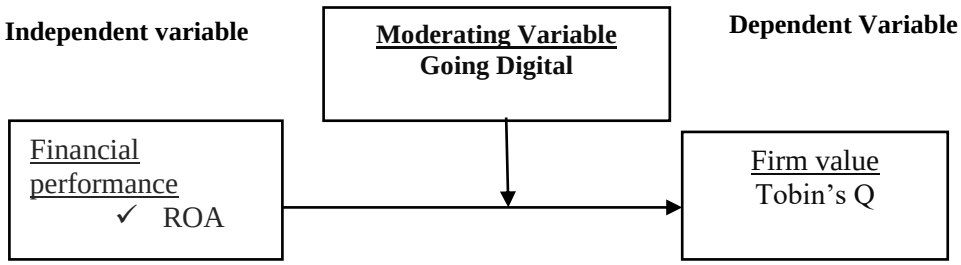

Figure 1: Conceptual Framework

Source Data, Researcher (2023)

The independent variable of the study is financial performance and dependent variable is firm value as illustrated in figure 1.

RESEARCH METHODOLOGY

Sample

The study considered 63 listed firms in Nairobi Security Exchange (NSE); considering that few studies have sought to investigate the association between financial performance, going digital and firm value in NSE, which has the most efficient, active and capitalized stock market in East Africa (CMA, 2019). Additionally, the NSE offers great insight since it is composed of firms from different sectors. For accurate analysis, we trimmed the sample through the following ways to enable the testing of the research hypothesis, we excluded (9) firms that dint have complete audited published reports on their website, as well as (15) that had missing CEOs statements and at one point they were discontinued from trading their shares in NSE during the period (2010-2019).

As a result, we deleted 240 observations from 630 observations, and the remaining 390 observation from 39 firms was used for analysis. The study adopted a balanced panel data approach for analysis.

Measurement of Variable and Research Model

Dependent variable

Firm value is the ability of a firm to give its stakeholders a satisfying return on investment. The study measured firm value using Tobin's Q. Tobin's Q has been widely utilized in previous studies (Gompers et al., 2003). Tobin's Q is the ratio of firm market value to assets replacement cost. Therefore, the Tobin's Q parameter used for the study was expressed following the formula (Balagobei, 2018):

$$\text{Tobins Q} = \frac{\text{EBV}}{\text{EMV}} \tag{3.1}$$

where EBV is equity book value and EMV is the equity market value

Moderating variable

The mediating variable was going digital. The study adopted the disclosure index approach to calculate going digital activities. Previous studies have used the disclosure index approach (Tambe, 2014; Chen & Srinivasan, 2020). The data was utilized for analysis since it was comprehensive and available for all the stakeholders at a lower cost. The HTML web pages of sample firms were analyzed on the presence of going digital activities on the CEO statements. Specifically, we give a score of 0 if the item is not disclosed in the CEO statement and 1, 2 and 3 if digital mentions fall in the bottom, middle and top tercile of digital mentions in the year final statements respectively. The study utilized the weighted approach as the main proxy for digital activity as follows:

$$DGTL_{it} = \frac{\sum_{j=1}^{h} d_{jit}}{N} \tag{3.7}$$

where d_{jit} is the score conferred on each $DGTL$ (0 if the item is not disclosed and 1, 2 and 3 if digital mentions fall in the bottom, middle and top tercile), and h, represent the tercile of $DGTL$ items are disclosed in the 1st ; 2nd and 3rd categories, respectively. N is the total number (6) of tercile score.

Independent variable

Financial performance is the company's ability to make profits (Nurazi, Zoraya and Wiardi, 2020). ROA measures how well a company uses its resources. Thus, a high ROA indicates that the firm is maximizing the value of its assets (Gul, Irshad, & Zaman, 2011; Shaw et al., 2013; Van Vu, Tran, Van Nguyen, & Lim, 2018). The ROA was calculated as follows:

(3.6)

$$ROA_{it} = \frac{PBT}{TA}$$

where ROA is the return on assets (ROA), PBT is profits before tax and TA is the total assets.

Research model

The study developed the 4 hierarchical multiple regression model to test the study hypothesis:

(M.1)

$$TQ_{it} = \alpha_{it} + \beta_{11} SIZE_{it} + \beta_{12} LEV_{it} + \beta_{13} LIK_{it} + \beta_{14} ISO_{it} + \varepsilon$$

(M.2)

$$TQ_{it} = \alpha_{it} + \beta_{21} SIZE_{it} + \beta_{22} LEV_{it} + \beta_{23} LIK_{it} + \beta_{24} ISO_{it} + \beta_{25} ROA_{it} + \varepsilon$$

(M.3)

$$TQ_{it} = \alpha_{it} + \beta_{31} SIZE_{it} + \beta_{32} LEV_{it} + \beta_{33} LIK_{it} + \beta_{34} ISO_{it} + \beta_{35} ROA_{it} + \beta_{31} DGTLs_{it} + \varepsilon$$

(M.4)

$$TQ_{it} = \alpha_{it} + \beta_{41} SIZE_{it} + \beta_{42} LEV_{it} + \beta_{43} LIK_{it} + \beta_{44} ISO_{it} + \beta_{45} ROA_{it} + \beta_{46} DGTLs_{it} + \beta_{47} DGTLs_{it} * ROA_{it} + \varepsilon$$

where the $DGTL$ is going digital (Moderating), TQ is the firm value (Dependent variable), and ROA is the financial performance (Independent variable), LEV is Leverage, LIK is Liquidity and SIZE is firm size (ln TA)

RESULTS AND DISCUSSION

Descriptive and Correlation Results

The study presented descriptive data such as the mean; minimum; maximum; and standard deviation as shown in Table 1. Firm values ranged from a min of 0.10064 to a max of 1.60517, allowing for enough variation and an average value of 0.607483. Financial performance represented by return on asset, was (min = -1.38569 and max = 0.92807; sd = 0.12832). Financial performance varies widely across firms. Moreover, leverage varied at a range of min of 0.08497 to a max of 9.13304, and a mean of 2.00880. The majority of the firms had a larger equity multiplier suggesting that the firms were more financial leverage. Lastly, going digital (min= 0.01698; max = 2.8267; mean = 0.724104; sd = 0.58924). Going digital activities varied widely across listed firms.

Table 1: Descriptive Statistics

	Mean	Std. Deviation	Minimum	Maximum
Tobin's Q	.607483	.29501	.10064	1.60517
ROA	.070471	.12832	-1.38569	.92807
Going Digital	.724104	.58924	.01698	2.82367
Institution ownership	.690935	.16545	.10148	.96932
Firm Size	7.33757	1.84722	3.51157	13.69782
LEV	2.00880	1.89080	.08497	9.13304
LIK	1.87682	1.52901	.07963	9.63869

Note: Tobin's Q – firm value; ROA firm performance; DGTL – Going Digital; LEV- Leverage; LIK- Liquidity

Source: Research Data, 2023

Table 2 present results of correlations among variables related to the regression. Correlation analysis is the basis for regression analysis and therefore key in establishing a relationship. The correlations among the study's independent variables are generally weak. For, instance the correlation of (r = 0.226, ρ<0.1), indicated that financial performance has a positive effect on firm value and (r = 0.421, ρ<0.01) between going digital and firm value.

Table 2: Correlation Matrix between Variables and VIF Values

Control Variables		Tobin's Q	ROA	ICD
SIZE & IO & LEV & LIK	Tobin's Q	1.000		
	ROA	.226**	1.000	
	DGTL	.421**	.197**	. 1.000

Note(s): the table presents the correlation matrix between variables of the study: Tobin's Q – firm value; ROA - firm performance; DGTL – Going Digital; LEV- Leverage; LIK- Liquidity; IO- Institution ownership; SIZE - firm size (ln TA); Obs = 390; All numbers are rounded to four decimal places; ***p-value < 0.01; **p-value < 0.05; *p-value < 0.1

Source: Research Data, 2023

Moderation Effect of Going Digital on the Relationship between Financial Performance and Firm Value

The Hausman test was carried out to determine the choice between the fixed effect model (FEM) and the random effect model (REM). The null hypothesis was rejected when ρ- value > 0.05 of the chi-square (Green, 2008). Based on the results in Table 3, models 1^a, 2^a, 4^a and 5^a had chi-square ρ- value < 0.05, thus the study utilized the fixed effect model (FEM). Additionally, based on the results in Table 3, model 3a had a chi-square ρ- value > 0.05 (ρ = 0.2637) of the chi-square greater than 0.05. Hence the study utilized the random effect model to establish the relationship between going digital and firm value. Model 2^a: shows results of the relationship between financial performance and firm value. The results depict a coefficient estimate of financial performance that is positive and statistically significant (β = 0.112, ρ < .05). The result is an indication that financial performance is positively associated to firm value. The study findings are in line with the findings of Gharaibeh & Qader (2017) and Yanto (2018), which attribute high firm value to better financial performance. However, the result contradicted the findings of Pascareno and Siringoringo (2016) and Hakim and Sugianto (2018), which established that there was no significant association between financial performance and firm value. Thus, we attribute firm value to better financial performance reported which acts as a signal to the investors. In regards to the control variable introduced in the model, the results showed that all the control variables had no significant effect on the study phenomenon, except for firm size which had a negative and statistically significant effect on firm value (β = -0.0550, ρ < .05).

Model 3^a; relates to the effect of going digital on firm value, The results revealed that going digital had a positive and statistically significant effect on firm value, based on the coefficient estimate (β = .117, ρ < .05). Hence, Firms provide information on success potential of digital efforts so as to convince that going digital will succeed in the long-run so as to receive due credit for their digital investments. High digital activity is a positive signal that the company will have better prospects in the future from the perspective of signalling theory. The study findings are similar to Chen & Srinivasan, (2023) and demonstrate that a company's digital activities significantly affect firm value. Thus firms/CEOs should disclose/present information to investors on the success potential of their digital efforts so as to convince the market that going digital will succeed in the long run so as to receive due credit for their digital investments.

Table 3 (See Model 5^a) relates to the moderating effect of going digital on the relationship between financial performance and firm value among listed firms in the Nairobi Security Exchange in Kenya. A moderation test was run, with financial performance [ROA] as the predictor, firm value [Tobin's Q] as the dependant, and going digital [DGTL] as a moderator. The ANOVA method showed that the combined estimation of the variables as shown in Table 3 below was statistically significant [F (7,344) = 9.11, ρ < 0.05 (ρ = 0.0000)]. The model was thus fit to predict firm value. To test the suitability of the research model, the distribution F-statistic test was used. The study findings in ANOVA Table 3 (See Model 5^a) indicated that the above-discussed coefficient of determination was significant as evidenced by (Sig. F) ratio of [F (7,344) = 9.11, ρ < 0.05 (ρ = 0.0000)] and the study concluded that the model used was appropriate in predicting firm value.

There was a significant main effect found between financial performance [ROA] and firm value [Tobin's Q], based on the coefficient estimate [β1 = 0.112, p < 0.05 (p > |t| = 0.015)]. Additionally, a significant main effect of going digital on firm value [Tobin's Q], based on the coefficient estimate [β1 = 0.117, p < 0.05 (p > |z| = 0.000)] (see Model 3[a], Table 3). Table 3 also depicted that there was a significant interaction found by going digital on financial performance and firm value, (ΔR^2 = .009, ΔF (9.11), p < .05), based on the coefficient estimate [β1 = 0.170, p < 0.05 (p > |t| = 0.008)]. To establish the moderation index we adopt the 2*2 condition process analysis design Igartua and Hayes, (2021). Thus, by multiply the conditional effect of identification. Essentially, $\Theta_{x \rightarrow Y} = a_1 + a_3W = (\beta_{25} + \beta_{47} DGTL_{it}) = .112 + .170W$.

Introducing; W= -0.5 (third person) and W = 0.5 (First-person) into the two estimates of conditional effects of financial performance (ROA) on firm value. In the third-person condition, Θx→M| (w= -0.5) = 0.027, implying that firms in similar condition of going digital, had higher firm value 0.027 units on average. The difference is statistically significant for the third-person voice. In the first-person condition, Θx→M|(w= 0.5) = 0.197, implying that firms in similar condition of going digital had higher firm value by 0.197 units on average. The difference is statistically not significant. It was found that CEOs/firms that reported lower than average levels of going digital experienced lower effect of financial performance on firm value [b = 0.027, LLCI-ULCI (-3.550, 1.707)], when compared to higher than average levels of going digital [b = 0.197, LLCI-ULCI (0.418, 5.895)].

From these results, it can be concluded that the effect of financial performance on firm value is moderated by digital activities (going digital) at a lower level. Hence, digital activity (going digital) moderates the relationship between financial performance and firm value. The Hypothesis stated that there is no significant moderating effect of Going Digital on the relationship between financial performance and firm value. Therefore, the null hypothesis was rejected. Generally, a firm innovative strategy drives the disclosure practices. For instant an exploratory firm determinedly in search of new technologies, might show conservative disclosure practices, fearing that unsuccessful research may influence future performance (Jia, 2019). In regards to the control variable introduced in the model (firm size, institution ownership, leverage and liquidity), the results showed that all the control variables had no significant effect on the study phenomenon.

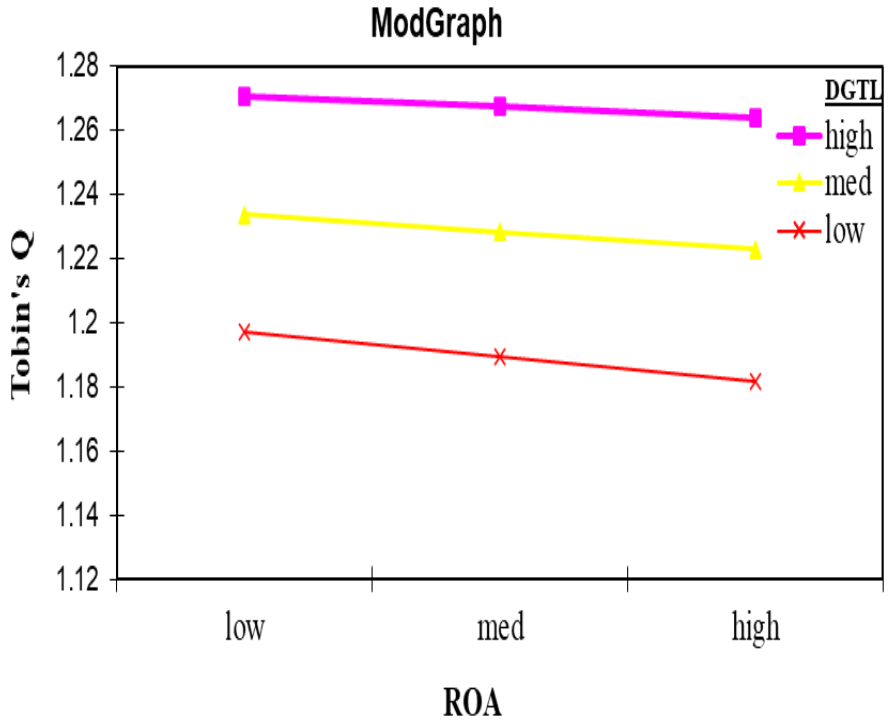

Figure 1: Mod graph of DGTL on the link between ROA and Tobin's Q

Examination of the interaction plot in Figure 1 reveals a buffering effect that, as the level of financial performance increases, the CEO Statements on going digital decrease, and the firm value also reduces. This is depicted in the graph where it's negative slope. Since, with decrease in CEOs' statements in relation to digital activities both at high and low levels are associated with low firm value and higher financial performance. This is because firms with high financial performance are likely not to engage in disclosure activities of going digital regardless of the level of investment in digital activities. However, at lower financial performance CEOs will tend to disclose more digital activities to justify the low level of organization performance. Thus, digital activities at lower-level increase valuations of earnings and sales, which lead to enhanced valuations (Chen & Srinivasan, 2023).

Table 3: Regression for the Moderating Effect Of Going Digital on the Relationship between Financial Performance and Firm Value

	MODEL 1[a]		MODE2[a]		MODE3[a]		MODEL 4[a]		MODEL 5i[a]	
	ß	t	ß	t	B	z	ß	t	ß	t
(Constant)	1.118**(.152)	7.38	1.0735**(.152)	7.08	.240**(.115)	-2.09	0.748**(.155)	8.28	.8028**(.155)	5.17
Predictor Variables										
SIZE	-.0600**(.0183)	-3.27	-.0550**(.018)	-3.00	.039**(.012)	3.29	-.02(.019)	-1.08	-.022(.018)	-1.22
IO	-.034(.0717)	-0.48	-.0378(.0713)	-0.53	-.0366(.093)	-0.40	-.053(.068)	-0.77	-.063(.067)	-1.05
LEV	-.0134(.0072)	-1.85	-.0123(.007)	-1.69	-.0204**(.0097)	-2.11	-.005(.007)	-0.78	-.006(.007)	-0.81
LIK	-.0101(.008)	-1.42	-.0103(.007)	-1.45	.0141(.010)	1.41	-.012(.007)	-1.75	-.0126(.007)	-1.89
ROA			.112**(0.046)	2.44			.0709(.045)	1.59	-.126(.086)	-1.47
DGTL					.117**(0.025)	4.71	.102**(.0171)	5.77	.068**(.020)	3.33
ROA* DGTL									.170**(.064)	2.68

Conditional ("Simple") Effect $[\Theta_{X\rightarrow Y} = b_1 + b_3W]$

	Effect	**LLCI**	**ULCI**
Third-Person Voice $\Theta_{X\rightarrow Y}$ | (w= -0.5)	0.027	-3.550	1.707
First-Person Voice $\Theta_{X\rightarrow Y}$ | (w= 0.5)	0.197	0.418	5.895

Model Summary						
R	.566	.853	R	.504	.860	.865
R Square	.320	.728	R Square	.254	.739	.748
Adjusted R Square	.320	.725	Adjusted R Square	.245	.735	.743
R Change	.320	.408	Δ R Square	.254	.011	.009
F Change	16.776**	.006**41 .90	Wald chi2(5)	39.60**	38.62**	9.11**
chi2 [χ2]	28.79**	38.80**		6.46	348.35**	15.06**

[a] Dependent Variable: Tobin's Q

Note(s): the table presents the regression between variables of the study, standard errors are given in parentheses: Obs = 390, Tobin's Q – firm value; ROA firm performance; DGTL – Going Digital; LEV- Leverage; LIK- Liquidity; SIZE- firm size (ln TA); ***p-value < 0.01; **p-value < 0.05; *p-value < 0.1; All numbers are rounded to four decimal places; **FE/RE: fixed or random effect; χ2(k) <χ2(Hausman) RE ; χ2(k) <χ2(Hausman); **Prob>chi2

Source: Survey Data, 2023

CONCLUSION AND RECOMMENDATION

High performance is a signal to investors since it contributes to a better reputation; thus, organizations disclose non-financial information to legitimize their success away from the traditional symbol of firm success based on tangible recourses. Additionally going digital enhances valuation as the market-book value of that engages in digital activities. Secondly, financial performance always reflects the current and its potential for future growth, thus financial performance is a positive signal that boosts the company value. Financial performance demonstrates the ability of a firm to manage its resources. While digital technology has potential to increase firm value by improving coordination and work flow efficiency in an organization.

REFERENCES

Abdul-Hameed, A. B., & Matanmi, O. G. (2021). A modified Breusch–Pagan test for detecting heteroskedasticity in the presence of outliers. *Retrieved online from the website: http://article. pamathj. net/pdf/10.11648. j. pamj, 20211006*.

Abeysekera, I. (2011). The relation of intellectual capital disclosure strategies and market value in two political settings. Journal of intellectual capital, 12(2), 319-338.

Abhayawansa, S., & Guthrie, J. (2016). Does intellectual capital disclosure in analysts' reports vary by firm characteristics? Advances in accounting, 35, 26-38.

Ahangar, R. G. (2011). The relationship between intellectual capital and financial performance: An empirical investigation in an Iranian company. African Journal of business management, 5(1), 88.

Alfraih, M. M., & Almutawa, A. M. (2017). Voluntary disclosure and corporate governance: empirical evidence from Kuwait. International Journal of law and Management, 59(2), 217-236.

AL-Shatnawi, H. M., & Al-Dalabih, F. A. (2019). Role of Bank Characteristics in Determining the Effect of Non-financial Information Disclosure on Bank's Value on Tobin's Q Scale: An Applied Study on the Jordanian Commercial Banks. *International Journal of Business Administration*, *10*(4).

Anam, O. A., Fatima, A. H., & Majdi, A. R. H. (2011). Effects of intellectual capital information disclosed in annual reports on market capitalization: Evidence from Bursa Malaysia. Journal of Human Resource Costing & Accounting, 15(2), 85-101.

Balagobei, S. (2018). Corporate governance and firm performance: Empirical evidence from an emerging market. Asian Economic and Financial Review, 8(12), 1415-1421.

Biscotti, A. M., & D'Amico, E. (2016). Theoretical foundation of IC disclosure strategies in high-tech industries. International Journal of Disclosure and Governance, 13, 1-25.

Bordeianu, G. D., & Radu, F. (2020). Basic Types of Financial Ratios Used to Measure a Company's Performance. *Economy Transdisciplinarity Cognition*, *23*(2).

Brainard, W. C., & Tobin, J. (1968). Econometric Models: Their Problems And Usefulness Pitfalls In Financiai, Model, Building. American Economic Review, 58(2).

Brainard, W. C., & Tobin, J. (1968). Pitfalls in financial model building. The American economic review, 58(2), 99-122.

Brusov, P., Filatova, T., Orekhova, N., Kulik, V., Chang, S. I., & Lin, G. (2021). Generalization of the Modigliani–Miller theory for the case of variable profit. *Mathematics*, *9*(11), 1286.

Brusov, P., Filatova, T., Orekhova, N., Kulik, V., Chang, S. I., & Lin, G. (2021). Generalization of the Modigliani–Miller theory for the case of variable profit. Mathematics 9 (11): 1286.

Cooke, T. E. (1989). Disclosure in the corporate annual reports of Swedish companies. Accounting and business research, 19(74), 113-124.

Di Tullio, P., Valentinetti, D., Nielsen, C., & Rea, M. A. (2020). In search of legitimacy: a semiotic analysis of business model disclosure practices. Meditari Accountancy Research, 28(5), 863-887.

Farooq, O., & Nielsen, C. (2014). Improving the information environment for analysts: Which intellectual capital disclosures matter the most?. Journal of Intellectual Capital, 15(1), 142-156.

Farooq, O., & Nielsen, C. (2014). Improving the information environment for analysts: Which intellectual capital disclosures matter the most? Journal of Intellectual Capital, 15(1), 142-156.

Freeman, R. E., J. S. Harrison, A. C. Wicks, B. L. Parmar, and S. D. Colle. 2010. Stakeholder Theory: The State of the Art. First ed. Cambridge University Press. The UK.

Gharaibeh, A. M. O., and A. A. A. A. Qader. 2017. Factors influencing firm value as measured by Tobin's Q: Empirical evidence from the Saudi Stock Exchange (TADAWUL). International Journal of Applied Business and Economic Research 15(6): 333–358.

Goebel, J., Grabka, M. M., Liebig, S., Kroh, M., Richter, D., Schröder, C., & Schupp, J. (2019). The German socio-economic panel (SOEP). Jahrbücher für Nationalökonomie und Statistik, 239(2), 345-360.

Goebel, V. (2019). Drivers for voluntary intellectual capital reporting based on agency theory. Journal of Intellectual Capital, 20(2), 264-281.

Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. The quarterly journal of Economics, 118(1), 107-156.
Gould, W., & Rogers, W. H. (1994). Quantile regression as an alternative to robust regression. In *Proceedings of the Statistical Computing Section* (pp. 171-210). American Statistical Association Alexandria, VA.
Gul, S., Irshad, F., & Zaman, K. (2011). Factors Affecting Bank Profitability in Pakistan. Romanian Economic Journal, 14(39).
Hamann, P. M., Schiemann, F., Bellora, L., & Guenther, T. W. (2013). Exploring the dimensions of organizational performance: A construct validity study. Organizational research methods, 16(1), 67-87.
Hamrouni, A., Miloudi, A., & Benkraiem, R. (2015). Signalling firm performance through corporate voluntary disclosure. Journal of Applied Business Research (JABR), 31(2), 609-620.
Hasanudin, H., Nurwulandari, A., Adnyana, I. M., & Loviana, N. (2020). The effect of ownership and financial performance on firm value of oil and gas mining companies in Indonesia. *International Journal of Energy Economics and Policy*, *10*(5), 103.
Heryana, T., Wahyudi, S., & Mawardi, W. (2020). The mediating effect of intellectual capital disclosure between firm characteristics and firm value: empirical evidence from Indonesian company with non-recursive model analysis. *International Journal of Financial Research*, *11*(2), 14-25.
Ilmi, M., A. S. Kustono, and Y. Sayekti. 2017. Ownership to the Corporate Value with Financial Performance as Intervening Variables: Case on Indonesia Stock Exchange. International Journal of Social Science and Business 1(2): 75–88.
Jallo, A., and A. R. Mus. 2017. Effect of corporate social responsibility, good corporate governance and ownership structure on financial performance and firm value: A Study in Jakarta Islamic Index. IOSR Journal of Business and Management (IOSR-JBM) 19(11): 64–75.
Javeed, S. A., and L. Lefen. 2019. An Analysis of Corporate Social Responsibility and Firm Performance with Moderating Effects of CEO Power and Ownership Structure: A Case Study of the Manufacturing Sector of Pakistan. Sustainability 11: 1–25.
Jensen, M. C., and W. H. Meckling. 1976. Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics 3:305–360.
Kamarudin, K. A., Ariff, A. M., & Jaafar, A. (2020). Investor protection, cross-listing and accounting quality. *Journal of Contemporary Accounting & Economics*, *16*(1), 100179.
Kenny, D. A., Mannetti, L., Pierro, A., Livi, S., & Kashy, D. A. (2002). The statistical analysis of data from small groups. *Journal of personality and social psychology*, *83*(1), 126.
Koubaa, R. R., & Jarboui, A. (2017). Direct and mediated associations among earnings quality, book-tax differences and the audit quality. *Journal of Financial Reporting and Accounting*, *15*(3), 293-316.
Liao, C. H., Tsang, A., Wang, K. T., & Zhu, N. Z. (2022). Corporate governance reforms and cross-listings: International evidence. *Contemporary Accounting Research*, *39*(1), 537-576.
Mansour, N., Gara, E., & Gaha, C. (2014). Getting inside the black box: HR practices and firm performance within the Tunisian financial services industry. Personnel Review, 43(4), 490-514.
Martin, N. (2023). Robust and efficient Breusch-Pagan test-statistic: an application of the beta-score Lagrange multipliers test for non-identically distributed individuals. *arXiv preprint arXiv:2301.07245*.
McWilliams, A., and D. Siegel. 2001. Corporate Social Responsibility: A Theory of the Firm Perspective. The Academy of Management Review 26(1): 117–127.
Miles, S. 2012. Stakeholder: Essentially Contested or Just Confused? Journal of Business Ethics 108(3): 285–298.
Modigliani, F., and M. H. Miller. 1958. The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Revie 48(3): 261–297.
Mondal, A., & Ghosh, S. K. (2014). DETERMINANTS OF INTELLECTUAL CAPITAL DISCLOSURE PRACTICES OF INDIAN COMPANIES. Journal of Commerce & Accounting Research, 3(3).
Nicolò, G., Raimo, N., Polcini, P. T., & Vitolla, F. (2021). Unveiling the link between performance and Intellectual Capital disclosure in the context of Italian Public universities. *Evaluation and Program Planning*, *88*, 101969.
Nimtrakoon, S. (2015). The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN. Journal of intellectual capital, 16(3), 587-618.
Nimtrakoon, S. (2015). The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN. Journal of intellectual capital, 16(3), 587-618.
Nimtrakoon, S., & Tayles, M. (2015). Explaining management accounting practices and strategy in Thailand: A selection approach using cluster analysis. Journal of Accounting in Emerging Economies, 5(3), 269-298.
Nurazi, R., Zoraya, I., & Wiardi, A. H. (2020). The influence of good corporate governance and capital structure on firm value: the mediation role of financial performance. Media Ekonomi dan Manajemen, 35(2), 230-242.
Pratama, B. C., Wibowo, H., & Innayah, M. N. (2019). Intellectual capital and firm performance in ASEAN: The role of research and development. Journal of Accounting and Investment, 20(3), 236-250.

Randa, F. D. A. S., & Solon, S. A. (2012). Pengaruh modal intelektual terhadap nilai perusahaan. Jurnal sistem informasi manajemen dan akuntansi, 10(1), 24-27.
Salvi, A., Vitolla, F., Giakoumelou, A., Raimo, N., & Rubino, M. (2020). Intellectual capital disclosure in integrated reports: The effect on firm value. *Technological Forecasting and Social Change*, *160*, 120228.
Sardo, F., & Serrasqueiro, Z. (2017). A European empirical study of the relationship between firms' intellectual capital, financial performance and market value. Journal of Intellectual Capital, 18(4), 771-788.
Sardo, F., & Serrasqueiro, Z. (2017). A European empirical study of the relationship between firms' intellectual capital, financial performance and market value. Journal of Intellectual Capital, 18(4), 771-788.
Sarpong-Danquah, B., Adusei, M., & Magnus Frimpong, J. (2023). Effect of board gender diversity on the financial performance of microfinance institutions: Does judicial efficiency matter?. *Annals of Public and Cooperative Economics*, *94*(2), 495-518.
Semykina, A., & Wooldridge, J. M. (2010). Estimating panel data models in the presence of endogeneity and selection. Journal of Econometrics, 157(2), 375-380.
Shaw, J. D., Park, T. Y., & Kim, E. (2013). A resource-based perspective on human capital losses, HRM investments, and organizational performance. Strategic management journal, 34(5), 572-589.
Solikhah, B. (2016). An Empirical Study of the Driver Factors of the Intellectual Capital Disclosure. Review of Integrative Business and Economics Research, 5(1), 229.
Stulz, R. M. (1999). Globalization of equity markets and the cost of capital.
Subaida, I., Nurkholis, N., & Mardiati, E. (2018). Effect of intellectual capital and intellectual capital disclosure on firm value. Jurnal Aplikasi Manajemen, 16(1), 125-135.
Sucuahi, W., and J. M. Cambarihan. 2016. Influence of Profitability on the Firm Value of Diversified Companies in the Philippines. Accounting and Finance Research 5(2): 149-153.
Sudibyo, A. A., & Basuki, B. (2017). Intellectual capital disclosure determinants and its effects on the market capitalization: evidence from Indonesian listed companies. In SHS Web of Conferences (Vol. 34, p. 07001). EDP Sciences.
Susanto, Y. K., Pradipta, A., & Handojo, I. (2019). Determinant of Intellectual Capital Disclosure. *International Journal of Business, Economics and Law*, *20*(5), 83-89.
Talha, M., Wang, F., Maia, D., & Marra, G. (2022). Impact of information technology on accounting and finance in the digital health sector. *Journal of Commercial Biotechnology*, *27*(2).
Tejedo-Romero, F., Rodrigues, L. L., & Craig, R. (2017). Women directors and disclosure of intellectual capital information. European Research on Management and Business Economics, 23(3), 123-131.
Tejedo-Romero, F., Rodrigues, L. L., & Craig, R. (2017). Women directors and disclosure of intellectual capital information. European Research on Management and Business Economics, 23(3), 123-131.
Tobin, J. (1969). A general equilibrium approach to monetary theory. Journal of Money, Credit and Banking, 1(1), 15-29.
Uyar, A., & Kılıç, M. (2012). Value relevance of voluntary disclosure: evidence from Turkish firms. Journal of Intellectual Capital, 13(3), 363-376.
Van Vu, H., Tran, T. Q., Van Nguyen, T., & Lim, S. (2018). Corruption, types of corruption and firm financial performance: New evidence from a transitional economy. Journal of Business Ethics, 148, 847-858.
Weber, M., Barth, V., & Hasselmann, K. (2005). A multi-actor dynamic integrated assessment model (MADIAM) of induced technological change and sustainable economic growth. Ecological economics, 54(2-3), 306-327.
Yan, X. (2017). Corporate governance and intellectual capital disclosures in CEOs' statements. Nankai Business Review International, 8(1), 2-21.
Yanto, E. 2018. Effect of Corporate Social Responsibility and Good Corporate Governance on the Value of Company with Profitability as Moderating Variables. Journal of Applied Accounting and Finance 2(1): 36–49.
Yu, E. P. Y., & Van Luu, B. (2021). International variations in ESG disclosure–do cross-listed companies care more?. *International Review of Financial Analysis*, *75*, 101731.