

The Mediating Effect Strategy for Digital and Green Innovation on Integrated Governance, Risk, Compliance (GRC) Towards Firm Value

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ABSTRACT: The purpose of this study is to explore the impact of digital mediation and green innovation strategy on Governance, Risk, Compliance and firm value, as well as to assess the level of digital and green innovation strategy on Governance. digital and green innovation strategy in governance are important principles that can contribute to business process activities and ability to manage, and both are important aspects of increasing firm value. True or false statements are used to define variables. A 5-point Likert scale was used to measure each variable. The data obtained from 152 respondents were analyzed using Ordinary Least Square. The respondents' GRC rate was 49.4 percent, according to the findings. The result is an indirect effect, which is digital mediation and green innovation strategy on Governance, Risk, Compliance and firm value which has a significant influence.

KEYWORDS: IFL, Islamic Finance, Financial Satisfaction, Behavioral Intention to Invest

I. INTRODUCTION

The evolution of e-government is one of the most significant trends in public sector management [1][2]; however, no extensive research has been conducted on this topic. E-government has been in place in Indonesia since 2001, thanks to Presidential Directive No. 6/2001. E-government in Indonesia has implemented some forms of e-government systems, the majority of which are electronic systems used for internal processes (G2G - Government to Government)[3] Furthermore, many local governments, departments, and government agencies have created websites to interact with their constituents (G2C - Government to Citizens and G2B - Government to Businesses).

Another type of e-government that is

common in Indonesia is government-to-business e-government at State Electrical Corporate Ltd., or 'PT PLN' (State Electricity Company). The phenomenon of information technology in business has begun to infiltrate government agencies such as State Electrical Corporate Ltd. ('PT PLN') (State Electricity Company). As a BUMN, you must follow the principles of Good Corporate Governance (GCG)[4][5][6], also known as corporate management, in all aspects of business and at all corporate levels.

Disruptions in the increasingly complex and turbulent business environment have resulted in Changes in an increasingly complex and turbulent business environment have resulted in increased business risk exposure. As a result, the Financial Services Authority (OJK) is being very aggressive in emphasizing the importance of companies implementing good Governance, Risk Management, and Compliance practices (GRC). The goal of implementing GRC is to reduce costs while improving control effectiveness through operational excellence. Without integrating GRC, the company will be unable to provide optimal added value (create values) in higher business risk exposure. As a result, the Financial Services Authority (OJK) is being very aggressive in emphasizing the importance of companies implementing good Governance, Risk Management, and Compliance practices (GRC)[7].

The purpose in this study is to conduct more research. This study's contribution includes the following: (1) theoretically, the research contributes to the Technology Acceptance Model theory by using strategic innovative digital as a

factor that mediates the relationship between integrated GRC (Government, Risk,

Compliance) with firm value.; (2) empirically, this study extends previous research that is still exploratory by conducting research with a causal model of the effect of innovative digital mediation strategies on the relationship of integrated GRC.(3) previous research on E Government focused solely on user perceptions, which were micro-effects (user perception, ICT (human interaction with technology), this study focuses on a macro-effect, namely the impact of technology on the firm value of State Electricity Company..

Based on the previously stated context, the research problem can be stated as follows: Do digital and green innovative strategies mediate the relationship between integrated GRC and firm value? Explore the impacts of digital mediation and green innovative strategies on the relationship between integrated GRC and firm value

HYPOTHESES DEVELOPMENT

The goal of implementing GRC is to reduce costs while improving control effectiveness through operational excellence. The company will be unable to function without integrating GRC.

According to[8], market needs are a process driver in encouraging innovation, and customer feedback is an activity to encourage service innovation. Employee innovation, on the other hand, is an important source of innovation ideas. As a result, the interaction of several companies, as well as the involvement of customers, employees, and suppliers in the innovation process, becomes critical.

As shown by[5], the factors that determine a company's success are continuous innovation in functional strategies and capabilities related to R&D, marketing, and production, as well as strategic collaborative relationships developed between upstream and downstream companies in a highly competitive and dynamic process. and businesses must adapt their business models in response to industry competition and product life cycles on a continuous basis[9].

H1: GRC has a positive effect on digital and green innovation strategy

According to[10][11], there is a significant positive relationship between financial performance and innovation, competitive strategy, and

management knowledge. [12]the framework for developing innovation management in theory and practice can have an impact on company performance.

[13]conclude that, from the standpoint of technological innovation, new understanding and potential are discovered in relation to the company's value.

As such[14], when there is uncertainty in the business environment due to technological issues, innovative service strategies are implemented through strategic aggressiveness and the required response from the company's capabilities in line with the organization, and the company's performance is expected to be optimal.

H2: Digital and green innovation strategy has a positive effect on firm value

Following[15], there are several financial and strategic variables that influence the risk management and governance growth of MSMEs.

In the information technology industry, [16],[6]discovered a link between external factors such as environment risk and company profitability.

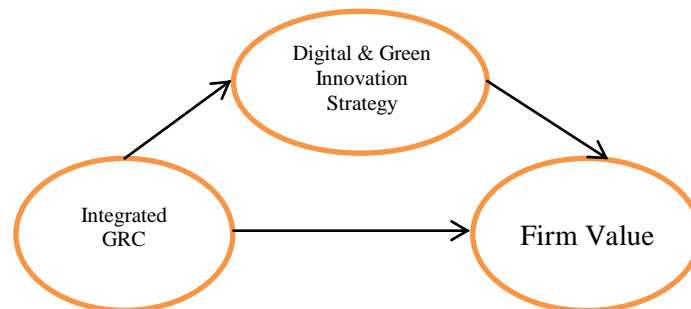
According to[17],[9] the Nigerian political environment has a significant negative impact on business performance.

H3: GRC has a positive effect on firm value

This study indicates innovation management, which encompasses organizational capital management, intellectual capital management, and information capital management. Companies that innovate gain a large customer base, competitive prices, a high level of service, high quality and innovation services offered, the availability of their own innovation developments, and highly skilled employees[18].

According to, this study attempts to focus on several elements that have a positive relationship with company performance, such as resource management, organizational culture, knowledge management, and organizational innovation[19].

H4: Digital and green innovation strategy mediates the effect of GRC on firm value



Picture 1: Research Model

II. METHOD

Sample, design, and participants

This research was conducted by surveying Vendors State Electricity Company In Malang City, 152 respondents with various backgrounds were surveyed using quantitative methods. In May 2020, data was collected using an online questionnaire and a purposive sampling method, with respondents who have a experience becomes vendors and manage e procurement independently. The OLS Regression Test was used to analyze the collected data.

Measures

The measurement items used in this study were adapted from previous research and modified to GRC[20]. The instrument used was adopted

from previous study. The instrument was arranged to measure respondents perceptions using a likert scale of 1-5. Scale 1 indicates strongly disagree, scale 2 disagree, scale 3 is neutral, scale 4 agree, and scale 5 indicates strongly agree.

The GRC item refers to research, which included 5 question items like "GRC method," "GRC refers to uncertainty risk, so it is prohibited in business environment," and "interest-free compliance methods.". The Digital and Green Innovation Strategy item from the consists of green product/service innovation, digital process business innovation and position innovation[21],[3]. In addition to Firm Value as an dependent variable have indicator variabels questions about entreprise value and free cash flow.

Table 1. Descriptive Statistics

Constructs	Mean	Standard deviation	Category
Government Risk Compliance (GRC)	4.01	0.552	Agree
Digital & Green Innovation Startegy (DG)	3.63	0.681	Agree
Firm Value (FV)	3.73	0.674	Agree

Notes: (1) interval = (highest score-lowest score / number of scores)
 Interval = (5-1)/5 = 0.8
 (2) criteria of the range respondents answers: 1.00 < a < 1.79: Strongly Disagree; 1.80 < a < 2.59: Disagree; 2.60 < a < 3.39: Neutral; 3.40 < a < 4.19: Agree; 4.20 < a < 5.00: Strongly Agree

From the results of table 1, it can be seen that the average score of respondents answers for the variables of Government, Risk, Compliance (GRC), Digital and Green Innovation Strategy (DG) and Firm Value (FV) is in the high category (agree). The value of the standar deviation of three variables is the range of 0.55 – 0.68 which

relatively small. This value means that the diversity of respondents answers is at a low level. The average score of respondents answer for GRC variable is 4.01 (agree). This value means that vendors have trust effect about GRC implementation . The average score of respondents answers for DG variable is 3.63 (agree). This

means digital and green innovation are the basis for carrying out the activities of State Electrical Corporate Ltd in digital era. While the average score of respondents answers for the firm value

variable is 3.73 (agree). This value means that firm value is proactive in dealing with GRC that may occur.

Table 2. Convergent Validity Test

	Cronbach's alpha	Composite reliability	AVE
Government Risk Compliance (GRC)	0.876	0.912	0.634
Digital & Green Innovation Startegy (DG)	0.911	0.942	0.676
Firm Value	0.815	0.906	0.588

Hair et.al (2020) say there two ways to measure contrast reliability, first by using Cronbach's alpha and composite reliability values. The rule of thumb for both, criteria should be > 0.7. According to them, Cronbach's alpha is used as a more conservative item measure and estimates the

scale reliability of some items.

Incontrast to Cronbach's alpha, composite reliability pays more attention to the realibility of each item that is different from the indicator variable.

Table 3. Discriminat Validity Test

Table 3Discriminant Validity			
	Government Risk Compliance (GRC)	Digital & Green Innovation Startegy (DG)	Firm Value
Government Risk Compliance (GRC)	0.814 ^(dv)		
Digital & Green Innovation Startegy (DG)	0.200**	0.742 ^(dv)	
Firm Value	0.254***	0.706***	0.788 ^(dv)
*** p < 0.001; **p < 0.05			

In addition, table 3 also shows that GRC is positively and significantly correlated with digital and green innovation strategy ($r = 0.200$; < 0.05),. GRC is also an important variable in relation to increasing Firm Value ($r = 0.254$; < 0.001). Futhermore, digital and green innovation strategy correlated with firm value ($r = 0.706$; < 0.001).

III. RESULT

The results of this study are mostly in accordance with what was hypothesized. In this study, the first hypothesis shows that GRC companies will be able to improve their digital and green innovation strategy. This supports research (Abu Seman et al., 2019) which states that the importance of implementing GRC is to increase innovation in companies.

	Hypothesis	Regression Coefficient	T Value	P Value	Description
H1	GRC -- DG	0.716	10.93	0.000	Significantly Positive
H2	DG -- FV	0.035	1.97	0.048	Significantly Positive
H3	GRC --FV	-0.01	-0.37	0.0695	Not Significant
H4	GRC –DG -- FV	0.023	1.99	0.047	Significantly Positive

Thus, the decision to implement GRC for state electricity companies will greatly support the success of the digital and green innovation strategy. The second hypothesis shows that there is a relationship between digital and green innovation strategy and firm value. This is in line with (Zhang, Rong & Ji, 2019) that the application of a digital and green innovation strategy can increase sales growth and higher net profit thereby increasing firm value. Through the implementation of GRC, the company can withstand the pressure of competitors and can increase sales which will have an impact on the company's performance. The third hypothesis shows that there is no relationship between GRC and firm value. In line with the opinion (Kirchoff, Tate & Mollenkopf, 2016), in implementing GRC, companies need a lot of motivation in increasing reputation, efficiency, effectiveness, differentiation, and revenue growth.

The results of the fourth hypothesis test show that digital mediation and green innovation strategies have an indirect impact on the relationship between GRC and firm value. This means that the implementation of GRC (governance, risk management, compliance) encourages an increase in strategic innovation, both in terms of creating green products and digital processes. So this achievement will indirectly increase firm value.

The results of this hypothesis test emphasize the effect of GRC on digital and green innovation strategy, which shows the t-test result of 10.93 among other variables, the influence of the GRC variable on digital and green innovation is the most influential.

IV. DISCUSION

This study examines direct and indirect relationships. The direct relationship examines the relationship between GRC and firm value. While the indirect relationship examines the digital and green innovation strategy as a mediating variable

for the relationship between GRC and firm value. The results of this study are mostly in accordance with what was hypothesized. In this study, the first hypothesis shows that state electricity companies that implement GRC through the eprocurement process will be able to improve their digital and green innovation strategy. This supports research (Abu Seman et al., 2019) which states that the importance of implementing GRC is to improve innovation strategy.

In addition, this study also shows the indirect influence between GRC and firm value through digital mediation and green innovation strategy. In this case, digital and green innovation strategy can mediate the relationship between GRC and firm value. This finding was also confirmed by other researchers, one of which is (Chiou et al., 2011). This assumes that increasing the implementation of GRC has the potential to improve the digital and green innovation strategy and at the same time create better firm value. Environmental issues make companies pay more attention to the green innovation strategy where in buying raw materials from suppliers they must be environmentally friendly and adopt green innovation to improve company performance. The findings of this study are expected to provide important knowledge for companies registered in the PROPER program in Indonesia as well as practitioners in improving company performance through GRC management and digital and green innovation strategies. Furthermore, this paper broadens the horizons of digital and green innovation strategy in Indonesia as a developing country.

V. CONCLUSSION

Is it difficult for integrated GRC to be implemented for state electricity companies? If you look at previous research on how to implement integrated GRC for corporations, then the use of four integrated elements namely people, process,

environment and technology where the four elements are formulated to cover the strategic process of orientation of the state electricity company, the business processes developed and how to evaluate and monitor various processes. the risks faced by the state electricity company, this research will bridge the implementation process by synchronizing it with the core business and entity culture of the state electricity company. Meanwhile, the scope of the integrated GRC in this study covers the risk management of the state electricity company which consists of risk management policies, risk management standards and procedures as well as documents and reporting.

This study has a limitation, that is the sample used was small, so that further research can be carried out with a larger sample and is not only limited vendors but also stakeholders. Factors that affect the digital and green innovation strategy are not Integrated GRC can also be linked to performance appraisal, in line with research, integrated is linked to performance appraisal in the form of an integrated approach to the GRC aspect, automated internal control and entity value added approaches. the basis for implementing integrated GRC by adopting a lifecycle and enterprise value, the result is the adoption of a lifecycle consisting of chartering, project, shakedown phases.

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