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Does Digital Leadership Impact Directly or Indirectly on Dynamic Capability: Case on Indonesia Telecommunication Industry in Digital Transformation?

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Abstract

Telecommunication sectors are the area where the digital disruption has taken significant influence to the incumbent firms. The market become more competitive and dynamic, hence, it will be required the incumbent firms to transform to have a dynamic capability. In digital era, The development of dynamic capability is driven from the role of digital leader. According to digital disruption view, the activities process derived from the customer and market orientation, and due to the nature of digital become global the alliance capability is important to study. Due to the important role of digital leadership and limitation study on the effect digital leadership in developing dynamic capability, this study will assess the effective path analysis of the role digital leadership in developing dynamic capabilities. Does the digital leadership has direct influence to dynamic capability, or indirect influence through market orientation capabilities or alliance capabilities?. The study was conducted on 88 respondents who are senior level from Indonesia telecommunication companies. The statistical data analysis used Smart-PLS application. The result explained that digital leadership impacts directly and indirectly through mediation variable of market orientation.. While the mediation role of alliance capability has shown not significant influence in relationship between dynamic capability and digital leadership.. This finding has implication on strategic initiative in dealing dynamic capability, where the digital leadership shall focus on market orientation to create the optimal value to face the current and future business challenges.

Keywords: Digital leadership; Dynamic capability; Market orientation; Alliances capabilities.



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1. Introduction

Phenomenon of technology disruptive has challenged for incumbent firm to adapt to the changing and dynamical of market due to new business model brought by new entrances (Christensen, 1997). The incumbents did not have the inertia to adapt the changing of environment and market based on the customer mainstreams (Christensen and Bower, 1996). The innovation and management leader attentions focus on the innovation on exploit the existing asset and less focus the market. Hence the institutional are required to transform to have dynamic capability to renew business model innovation after disruptions (Chesbrough and Rosenbloom, 2002; Zott et al., 2011). Dynamic capability is defined as a holistic approach of the firm ability to integrate, build and reconfigure their resources and competence to address the changing of market environments' (Teece et al., 1997). The capability to reconfigure will create innovation and change the paradigm of management firm. This capability hereinafter referred to as a transformation.

The transformation is essential to have better response and enabling business agility to optimize business performance. In industry 4.0 where digital technology based on internet and cloud become more dominant, the incumbent firm have to embark to digital transformation. Digital transformation mostly uses an innovation of business model supported with the digital technology and applied in all aspects of human society (Stolterman and Fors, 2004). Digital transformation is mostly started through digitization that dealing with technological innovation (Kagermann, 2015). The case of book retail like borders in book industry is example of digital transformation from physical books to e-books (Liu, 2012). The case of market orientation and the changing of customer and social network due to Internet technology social has been discussed and become a main driver of incumbent to refocus the strategy (Berman, 2012). Digital transformation requires the capability to do collaboration and form alliance strategy (Belk, 2013; Berman, 2012) However, by the role of leader and human capital has significant influence in driving the digital transformation, especially in term of decision-making process (Kohli R. and Johnson, 2011; Liu, 2012).

Study done by International Business Machine among 50 CEO in the world reveal to capture value from the new technologies, incumbents need to have dynamic capability by increasing external knowledge access through focus on market orientation and developing alliances capability (IBM Institute for Business Value, 2012). The leader vision especially in bringing digital leadership vision is important to set up the direction and guidance for long term in optimizing and reconfiguring new paradigm of transformation. The digital leadership has been introduced as the combining of culture and competence of leader in bringing new architype in exploring the benefit of use digital technology (Rudito and Sinaga, 2017; Wasono and Furinto, 2018). The study of Indonesia telecommunication market is interested to explore since Indonesia is the early stage of digital era (Das et al., 2016) but in term of innovation growth, Indonesia is part of a country that has high growth of innovation during last couple years (IMD, 2017). There was gap between Indonesia nation competitiveness and digital infrastructure competitiveness. The ranking of digital infrastructure was lack behind compare to Nation competitiveness (IMD, 2017). It is required acceleration of Indonesia firm in digital transformation to support nation competitiveness. Hence exploring the model digital transformation for incumbent firm in Indonesia are essential to be explored in development of dynamic capability focus on the role of digital leadership.

In this paper, we intend to provide an empirical result on digital transformation for the role of digital leadership in development of dynamic capability. We will discuss the following questions:

- Does the digital leadership impact directly or indirectly through market orientation or alliance capability on dynamic capability for Indonesia telecommunication industry in digital Transformation?
- How does the effective path to transforms to form dynamic Capability?

This paper is organized as follows: the literature review will be discussed in Section 2, thus section 3 describes the research methodology. The results, Discussion and implications of proposed digital transformations models are presenting in section 4 and Section 5 respectively. Finally, section 6 will explain the conclusion and provides further future study.

2. Literature Review

2.1. Dynamic Capability (DC)

DC theory addresses the issues associate with the inertia, routines activities and rigidities of strategic firm resources and competences. It has been discussed and studies extensively since started published in science literature (Teece *et al.*, 1990). DC defined as the firm's ability to integrate, build, renew and reconfigure resources and competencies either internal or external to adapt with the changing of environments (Teece *et al.*, 1997). The study of DC was forming the use of DC as a process of organization learning to create new market by integrating, reconfiguring, gaining and releasing resources (Eisenhardt and Martin, 2000).

This DC concept is aligned with the need of incumbent firm to have agility in adapting change of market and environment in disruptive market. In organization theory the dynamic capability is the organization capability to have the ability for learning and change. On response to learning and change, the incumbent firm can build innovation capability by alignment of exploration and exploitation (O'Reilly and Tushman, 2008), discontinuous change (Martin and Eisenhardt, 2004) and on radical innovation capabilities (O'Connor *et al.*, 2008). The intangible of knowledge and learning is part of distinct management capability that enable the organization to have adaptive capability by building on the stock of existing knowledge in new domains (Cattani, 2008). The leadership and strategic vision are important to ensure the alignment, integration and interaction between top-management cognition in building strategic decision-making and for reconfiguring the firm resources base (Martin, 2010).

Based on the literature above, this paper will use dimension of adaptive capability, innovation capability, management capability and strategic capability.

2.2. Digital Leadership

In Digital transformation, the role of leader is a central to driving fast decision-making process and propelling the change (Kohli R. and Johnson, 2011; Liu, 2012). Digital leadership is combination of leadership style of transformation leadership and the uses of digital technology. Digital Leadership is defined as the combination of culture and competence of leader in optimizing the use of digital technology to create value to the firms (Rudito and Sinaga, 2017).

It has the leadership characteristics as follow: technology leadership, digital visioning and digital execution (Rudito and Sinaga, 2017). Another study found that There are 5 characteristics: creative leader, though leader, global visionary leader, inquisitive leader and profound leader (Zhu, 2015). Since the competition become tight and hyper and complex dynamic of ecosystem due VUCA (volatility, uncertainty, complexity and ambiguity) factors, hence the leader is required to be creative and always thinking innovative through in build capability or collaboration (Sandel, 2013). The Global Visionary Leader is required to provide direction and to become an orchestra in transforming the digital business transformation. the digital technology based on internet and cloud drive the knowledge base, hence the leader has to have ability Inquisitive learning and has profound ability in knowledge and understand in depth in learning and change.

In disruptive era, the role of digital leadership has impact in driving the innovation and (Wasono and Furinto, 2018). Hence based on the literature review, the dimension use for this study are creative, deep knowledge, Global vision and collaboration, thinker, inquisitive.

2.3. Market Orientation

The market orientation has been studied extensively as the framework concept of the ability of firm to create value to the firm by focusing on customer, competitors, and coordination across function (Narver and Slater, 1990). The market orientation concept consists of behavior and cultural approach (Gaur et al., 2011)(. In behavior approach, market orientation is defined as activities focus on increasing customer satisfaction (Kohli A. K. and Jaworski, 1990), and in cultural approach, it defines as values and believe of the firm to put customer as first orientation (Narver and Slater, 1990).

In disruption era, the market orientation, especially customer orientation is critical in sustaining the business, the use of analytical application is required to customize and personalize service to match with customers (Berman,

2012). The analytical data can provide intelligent generation of customer profile and also has intelligent dissemination based on customer profiling hence the company has ability to learn and responsive to the environment and market change (Protcko and Utz, 2014).

This study uses the dimension as Intelligence generation, Intelligence dissemination, and Responsiveness align with study done by Protcko and Utz (2014) in response to disruptive era and digital transformation.

2.4. Alliance Capability

The new entrants employing new disruptive models tends to represent a threat and induces incumbents to respond rapidly, through "alliances and acquisitions" to speed up the process and minimize the gap with competitors. Study of the fail incumbent can be identified due to two caused: (1) Not proper resources allocation of incumbent firms, and (2) late anticipate the changing environments. Hence, incumbent firms need to form alliance capability and collaboration to match with emergence of entrants (Belk, 2013; Berman, 2012).

The alliance capability can be developed through vertical and horizontal relation (Cravens *et al.*, 2013). Vertical relation is defined as external relation with suppliers and customers relation where both or more parties form the alliance collaboration to create value. The relation type widely scopes from transactional relation up to alliance relation form the equity partnership. Horizontal relation is associated with internal and network or lateral relation. Internal relation is interrelated among business units and individuals. The lateral relation is linked to network connection among other firms to create the similar objectives.

Hence according to literature review the dimension constructs of Alliance Capability consists of customer alliance, supplier alliance, internal alliance and lateral alliance.

2.5. Hypothesis Development and Research Model

The relation of digital leadership and alliances capability and dynamic capability has been found in study on the non-linearity pattern of alliance capability (Khorakian and Salehi, 2015; Schweitzer, 2013). The impact of leadership to market orientation and customer was discussed in previous study as well (Petrick *et al.*, 1999). In disruptive the relation of digital leadership to dynamic capability in Indonesia market is studied by Wasono and Furinto (2018). Based on this, the hypothesis is formulated as following:

Hypothesis 1: Digital leadership has direct impact to dynamic capability, alliance capability in the Indonesian telecommunication industry.

Khorakian and Salehi (2015) showed the mediation role of partnership on relationship of leadership and dynamic capability as well as the role of intervening of Market orientation (Dmour et al., 2012). According to these studies, the hypothesis is formulated as the following:

Hypothesis 2: Digital Leadership has indirect impact on Dynamic capability by mediating variable of market orientation in the Indonesian telecommunication industry.

Hypothesis 3: Digital Leadership has indirect impact on Dynamic capability by mediating variable of Alliance capability in the Indonesian telecommunication industry.

Hence, Figure 1 below demonstrates the current research model.

Figure-1. Research Model

3. Methodology

This study uses a quantitative research design. The units of analysis in this study are telecommunication firms in Indonesia with the management of these firms as the observed unit. The sampling method used is purposive sampling. The questioner study has done from November 2017-January 2018. According to Hair *et al.* (2014) the recommended sample size is 52 respondents for the model with an endogenous construct has 2 arrows directed, 0.05

significance level, 80% statistical power and minimum R2 = 0.25. The sample size is made up of 88 respondent higher than the recommended sample. The sample has 75% of as General manager and manager and the rest 25% is VP and Board leader.. 88% respondents are men and 12% are women. 83% respondents come from network provider, while 17% from service providers.. Data were collected via self-assessment through an online questionnaire and distributed through messenger, WhatsApp, Telegram and email. Since there is a limitation of data sample, the statistical a tool of analysis is SmartPLS.

4. Result

4.1. Evaluation of Measurement (Outer Model)

The analysis of the outer model specifies the relationship between latent variables and their indicators. Tests performed on outer models include:

- Convergent Validity. The value of convergent validity is the value of loading factor on the latent variable with its indicators. The expected value is above 0.7.
- Discriminant Validity is a value of cross loading factor that is useful to assess whether the constructs have adequate discriminant by comparing the loading value on the intended construct is greater than the loading value with other constructs.
- Composite Reliability. Data that has composite reliability over 0.7 considered as highly reliable.
- Average Variance Extracted (AVE), expected to be more than 0.5.
- Cronbach Alpha. Reliability test reinforced with Cronbach Alpha. The result is expected to have value of more than 0.6 for all constructs.

Table -1. Construct Validity and Reliability Test

	Cronbach's Alpha	rho_A	Composite Reliability	AVE	Result			
Digital leadership								
Creative	0.872	0.875	0.912	0.723	Valid			
Deep Knowledge	0.913	0.916	0.939	0.794	Valid			
Global Vision and Collaboration	0.931	0.933	0.951	0.830	Valid			
Thinker	0.915	0.915	0.946	0.854	Valid			
Inquisitive	0.945	0.946	0.960	0.858	Valid			
Market Orientation								
Intelligent Generation	0.876	0.879	0.907	0.619	Valid			
Intelligent Dissemination	0.791	0.821	0.866	0.622	Valid			
Responsiveness	0.920	0.927	0.935	0.646	Valid			
Alliance Capabilities	Alliance Capabilities							
Internal Alliance	0.948	0.949	0.975	0.951	Valid			
Customer Alliance	0.857	0.859	0.933	0.875	Valid			
Supplier Alliance	0.908	0.912	0.943	0.845	Valid			
Lateral Alliance	0.922	0.925	0.945	0.812	Valid			
Dynamic Capabilities								
Adaptive Capabilities	0.917	0.918	0.948	0.858	Valid			
Innovation Capability	0.817	0.826	0.892		Valid			
Management Capabilities	0.915	0.922	0.940	0.797	Valid			
Strategic Capability	0.851	0.865	0.900	0.694	Valid			

Table 1 above shows that AVE value> 0.5, Cronbach Alpha> 0.6 and composite reliability> 0.7, which indicates that research variables have good reliability for all variables and dimensions.

Table-2. Discriminant Validity

Dimensions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Adaptive Capabilities	0.926															
Customer Alliance	0.710	0.935														
Deep Knowledge	0.581	0.784	0.891													
Global Vision &																
Collaboration	0.537	0.729	0.878	0.911												
Innovation Capability	0.765	0.732	0.684	0.607	0.857											
Inquisitive	0.602	0.710	0.794	0.895	0.609	0.927										
Intelligent																
Dissemination	0.684	0.734	0.644	0.588	0.700	0.597	0.789									
Intelligent Generation	0.795	0.699	0.595	0.608	0.749	0.668	0.702	0.786								
Internal Alliance	0.559	0.826	0.727	0.666	0.625	0.678	0.684	0.584	0.975							
Lateral Alliance	0.696	0.763	0.697	0.614	0.694	0.671	0.689	0.661	0.721	0.901						
Management																
Capabilities	0.779	0.808	0.801	0.729	0.789	0.754	0.747	0.746	0.749	0.709	0.893					
Responsiveness	0.790	0.796	0.667	0.615	0.788	0.649	0.831	0.839	0.696	0.685	0.859	0.804				
Strategic Capability	0.869	0.771	0.649	0.597	0.812	0.650	0.691	0.788	0.654	0.708	0.832	0.845	0.833			
Supplier Alliance	0.590	0.759	0.799	0.728	0.660	0.725	0.627	0.581	0.779	0.770	0.696	0.665	0.637	0.919		
Thinker	0.529	0.659	0.838	0.925	0.588	0.880	0.564	0.584	0.652	0.577	0.736	0.599	0.607	0.734	0.924	
creative	0.808	0.797	0.729	0.665	0.811	0.661	0.697	0.739	0.624	0.734	0.815	0.782	0.774	0.691	0.628	0.850

Discriminant validity is shown in Table 2 with the diagonal bold numbers indicating the square root of AVE. This shows that all dimensions have good discriminant validity.

The value of convergent validity is the value of the loading factor of outer path analysis where t-value> 1.96 and p-value < 0.05. This means that each indicator is valid

Table-3. Outer Path Analysis

		Standard Deviation	T Statistics	P Values	Result
AC1 <- Adaptive Capabilities	0.952	0.012	80.626	0.000	Valid
AC2 <- Adaptive Capabilities	0.923	0.020	46.717	0.000	Valid
AC3 <- Adaptive Capabilities	0.903	0.028	32.289	0.000	Valid
IC1 <- Innovation Capability		0.025	35.495	0.000	Valid
IC2 <- Innovation Capability	0.894	0.021	41.862	0.000	Valid
IC3 <- Innovation Capability	0.780	0.059	13.134	0.000	Valid
ID1 <- Intelligent Dissemination	0.596	0.091	6.553	0.000	Valid
ID3 <- Intelligent Dissemination	0.886	0.029	30.424	0.000	Valid
ID4 <- Intelligent Dissemination	0.798	0.048	16.716	0.000	Valid
IG1 <- Intelligent Generation	0.771	0.047	16.303	0.000	Valid
IG2 <- Intelligent Generation	0.746	0.059	12.713	0.000	Valid
IG3 <- Intelligent Generation	0.841	0.031	27.157	0.000	Valid
IG4 <- Intelligent Generation	0.756	0.044	17.117	0.000	Valid
IG5 <- Intelligent Generation	0.801	0.053	15.103	0.000	Valid
IG6 <- Intelligent Generation	0.799	0.039	20.310	0.000	Valid
IT1 <- Inquisitive	0.917	0.020	45.761	0.000	Valid
IT2 <- Inquisitive	0.940	0.018	51.452	0.000	Valid
IT3 <- Inquisitive	0.903	0.022	41.634	0.000	Valid
IT4 <- Inquisitive	0.946	0.016	60.111	0.000	Valid
K1 <- creative	0.756	0.040	18.843	0.000	Valid
K2 <- creative	0.910	0.020	45.009	0.000	Valid
K3 <- creative	0.864	0.042	20.365	0.000	Valid
K4 <- creative	0.864	0.048	18.022	0.000	Valid
KC1 <- Customer Alliance	0.939	0.014	69.270	0.000	Valid
KC2 <- Customer Alliance	0.932	0.017	54.643	0.000	Valid
KI1 <- Internal Alliance	0.974	0.008	116.969	0.000	Valid
KI2 <- Internal Alliance	0.976	0.007	136.270	0.000	Valid
KL1 <- Lateral Alliance	0.863	0.047	18.350	0.000	Valid
KL2 <- Lateral Alliance	0.930	0.015	63.043	0.000	Valid
KL3 <- Lateral Alliance	0.885	0.027	32.732	0.000	Valid
KL4 <- Lateral Alliance	0.924	0.015	61.064	0.000	Valid
KS1 <- Supplier Alliance	0.931	0.017	54.462	0.000	Valid
KS2 <- Supplier Alliance	0.935	0.019	48.761	0.000	Valid

KS3 <- Supplier Alliance	0.892	0.034	26.090	0.000	Valid
MC1 <- Management Capabilities		0.018	51.247	0.000	Valid
MC2 <- Management Capabilities	0.862	0.033	25.971	0.000	Valid
MC3 <- Management Capabilities	0.881	0.031	28.236	0.000	Valid
MC4 <- Management Capabilities	0.909	0.020	44.517	0.000	Valid
P1 <- Thinker	0.916	0.018	50.219	0.000	Valid
P2 <- Thinker	0.930	0.015	61.855	0.000	Valid
P3 <- Thinker	0.927	0.019	48.787	0.000	Valid
PM1 <- Deep Knowledge	0.844	0.036	23.407	0.000	Valid
PM2 <- Deep Knowledge	0.901	0.025	35.344	0.000	Valid
PM3 <- Deep Knowledge	0.913	0.018	50.121	0.000	Valid
PM4 <- Deep Knowledge	0.905	0.023	40.131	0.000	Valid
R1 <- Responsiveness	0.768	0.051	14.970	0.000	Valid
R2 <- Responsiveness	0.873	0.038	23.187	0.000	Valid
R3 <- Responsiveness	0.698	0.073	9.519	0.000	Valid
R4 <- Responsiveness	0.899	0.024	36.787	0.000	Valid
R5 <- Responsiveness	0.870	0.034	25.578	0.000	Valid
R6 <- Responsiveness	0.777	0.063	12.394	0.000	Valid
R7 <- Responsiveness	0.831	0.049	16.838	0.000	Valid
R8 <- Responsiveness	0.687	0.092	7.442	0.000	Valid
SC1 <- Strategic Capability	0.879	0.022	39.681	0.000	Valid
SC2 <- Strategic Capability	0.902	0.024	38.221	0.000	Valid
SC3 <- Strategic Capability	0.771	0.050	15.270	0.000	Valid
SC4 <- Strategic Capability		0.062	12.355	0.000	Valid
VG1 <- Global Vision and Collaboration	0.925	0.021	44.591	0.000	Valid
VG2 <- Global Vision and Collaboration	0.921	0.019	48.985	0.000	Valid
VG3 <- Global Vision and Collaboration			16.749	0.000	Valid
VG4 <- Global Vision and Collaboration	0.918	0.017	52.758	0.000	Valid

Table 4 shows that all constructs have a path coefficient score with t-statistics >1.96 and p-value = 0.000 <0.05, which means that all constructs have significant effects on their respective dimensions.

4.2. Structural Model (Inner Model)

Based on the blindfolding score results, Q2 was obtained for alliance capabilities = 0.461, market orientation = 0.285, and dynamic capability = 0.510. If Q2 >0, it indicates that the structural model has adequate predictive relevance. Hence, the model is robust and hypothesis testing can be done. The complete finding can be shown in Figure 2.

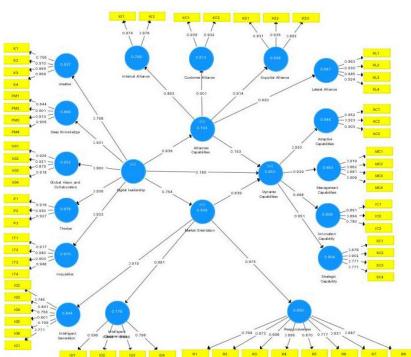


Figure-2. Complete Path Diagram of Research Model

4.3. Hypothesis Testing

The hypothesis testing can be accomplished through partial Test and simultaneous test to know the impact of respective Variable and dimension. The result of hypothesis testing can be shown in Table 4.

Table -4. Testing of Hypothesis **Partial Test**

	Path	Standard Deviation	T Statistics	P Values	Result				
Digital leadership -> Alliance Capabilities	0.839	0.034	24.752	0.000	Supported				
Digital leadership -> Dynamic Capabilities	0.189	0.090	2.099	0.036	Supported				
Digital leadership -> Market Orientation	0.754	0.044	17.147	0.000	Supported				
Alliance Capabilities -> Dynamic Capabilities	0.153	0.092	1.655	0.098	Not Supported				
Market Orientation -> Dynamic Capabilities	0.639	0.073	8.718	0.000	Supported				

^{*} significant at α =0.05 (T statistics > 1.96)

Simultaneous Test

	Path	Standard Deviation	T Statistics	P Values	Result
Digital leadership -> Alliance Capabilities -> Dynamic Capabilities	0.128	0.078	1.649	0.099	Not Supported
Digital leadership -> Market Orientation -> Dynamic Capabilities	0.482	0.061	7.946	0.000	Supported

^{*} significant at α =0.05 (T statistics > 1.96)

Table 4 shows that within the degree of confidence of 95% (α =0.05), where T>1.96 and p<0.05, there is supportive influence of digital leadership on alliance capability, digital leadership on dynamic capability, digital leadership on market orientation and market orientation on dynamic capability, whereas alliance capability has no direct effect on dynamic capability. On simultaneous test, it shown that digital leadership indirect impact on dynamic capability mediated by market orientation and not indirect effect on dynamic capability if intervened by alliances capability

The direct effect test shows that the relationship between digital leadership and dynamic capability has a path coefficient score of 0.189 with t-statistics = 2.099 and p-value = 0.036<0.05. This means that H0 is rejected and H1 is accepted. This proves that digital leadership has a significant impact on dynamic capability. The second assessment is the relationship between digital leadership and alliance capability has a path coefficient score of 0.839 with t-statistics = 24.752 and p-value = 0.000. This means that H0 is rejected and H1 is accepted. This proves that digital leadership has a significant impact on alliance capability. The assessment on relationship digital leadership on market orientation has shown has a path coefficient score of 0.754 with t-statistics = 17.147 and p-value = 0.000. This means that H0 is rejected and H1 is accepted. This proves that digital leadership has a significant impact on market orientation. While the relation between alliance capability with dynamic capability has a path coefficient score of 0.153 with t-statistics = 1.655 and p-value = 0.098>0.05. This means that H0 is accepted while H2 is rejected. There is also no significant impact of alliance capability on dynamic capability. Lastly, the relationship between market orientation and dynamic capability has a path coefficient score of 0.639 with t-statistics = 8.718 and p-value = 0.000. This means that H0 is rejected and H1 is accepted. This also proves that market orientation has a supportive impact on dynamic capability.

The indirect effect test shows that the mediating role of market orientation has a path coefficient score=0,482 with t-statistics = 7.946 and p-value = 0.000. This means that H0 is rejected and H1 is accepted. This proves that market orientation has supportive impact as mediating role on relationship between dynamic capability and digital leadership. While, the mediating role of alliance capability has a path coefficient score of 0.128 with t-statistics = 1.649 and p-value = 0.099>0.05. This means that H0 is accepted while H2 is rejected. There is also no significant impact of alliance capability in mediating role on relationship between dynamic capability and alliance capability.

5. Discussion and Implication

The results are aligned with the study on disruption technology and innovation conducted by Christensen (1997), Markides (2006), and Khorakian and Salehi (2015) where the incumbent firm should adapt the changing of customer and market to sustain and driving digital transformation. digital leadership has a direct and indirect to dynamic capability mediated by market orientation. Global vision and collaboration bring significant value to digital leadership followed by inquisitive, deep knowledge and thinker. This finding supports Rudito and Sinaga (2017) and Wasono and Furinto (2018), who found that digital leadership supporting innovation capability in disruptive era. This finding brings the implication for incumbent firms to use digital leadership to establish dynamic capability through direct and indirect mediated by market orientation. While, the mediating role of alliance capability is not impact on relationship between dynamic capability and digital leadership.

Market orientation is formulated by dominant responsiveness followed by intelligent generation and intelligent dissemination capability. These findings indicate that in term of market orientation, the culture and behaviour of the management and firms that adaptive to the change and responsive to the market create the value to customer and

firms themselves. This finding align with the study before done by, Protcko and Utz (2014) and Narver and Slater (1990).

The dynamic capability is dominant influenced by strategic capability, followed by management capability, adaptive capability and innovation capability. It means that the long-term view of management and firm in anticipating the market dynamic is important for incumbent firms. This is indicating that the long-term view through transformation is taken priority for incumbent firm in facing disruptive era.

The alliances capability as mediating role was not supporting in relationship of dynamic capability and digital leadership. This finding shown the important in development of internal capability rather than the alliance strategy. Based on resources-based view that provide the distinctive organization capability is important through providing internal resources that valuable, rare, imperfectly imitable, and on-substitutable capabilities (Barney, 1991). Incumbent firms are required to develop the core competence to compete with new entrance in disruptive era.

6. Implication

The findings reveal the antecedents of digital transformation. According to the result finding, We configure the model of digital transformation for Indonesia incumbent firms base on a framework study conducted by Mader (2012) as shown in figure 3.

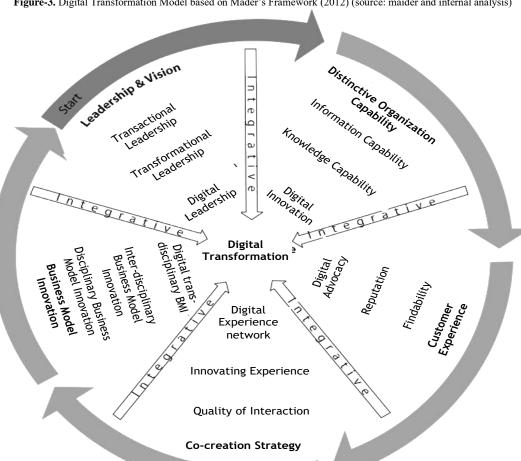


Figure-3. Digital Transformation Model based on Mader's Framework (2012) (source: maider and internal analysis)

Digital transformation is started from digital leadership and vision to bring the digital transformation for all activities and process. This digital leadership will drive the distinctive organization capability since it has 2 face which are digital innovation and effective cost reduction. The market orientation could drive customer experience since with distinctive capabilities it could create personalize to customer. After getting the customer experience the customer is the major partner in building product and service together called by co-creation. Crowdsourcing with customer could provide long-term and long tail partnership. By the end of the day the culture innovation in creating business model will become the new paradigm of incumbent firms in facing digital transformation.

7. Conclusion, Limitation and Further Study

7.1. Conclusion

Based on the results of hypotheses testing, it can be concluded that digital leadership has direct and indirect impact to dynamic capability, where the market orientation has a mediating role on relationship between dynamic capability and digital leadership. The alliance capability was not a mediating role in the relationship of dynamic capability and digital leadership.

7.2. Limitation and Further Study

This study has limitation in term of time and sample, hence further study can be explored using a more extended sampling, industry and with consideration of markets outside of Indonesia. A longitudinal research design should also be done to assure the digital transformation model.

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