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Digital Technology Capabilities as a Key Driver of Sustainable Digital Transformation of Media Industry in Indonesia

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Abstract-This study examined the relationship of dynamic capability and digital market capabilities, digital leadership capabilities and digital technology capabilities, as well as how might affect digital transformation and engaging audience strategy of print media industries in Indonesia. Data were collected from print media industries in Indonesia. This study applied descriptive and explanatory survey method with unit analysis of print media industries listed as member of Dewan Pers Indonesia (Indonesian Press Council) . The results showed that digital technology capabilities have strong role in influencing sustainable digital transformation in print media industry.

This study extends the literature in the context of strategic management theory by clarifying the role of digital technology capabilities in responding the digital disruption in print media industry. This paper provides practical implication for managerial practices by suggesting that managers should focus on factors that building sustainable digital transformation and engaging audience strategy as well as reinventing their core functions to accelerate digitization.

Keywords: Capability to reconfigure resources/assets, Digital capabilities, Digital leadership capabilities, Digital market capabilities, Engaging audience strategy, Sustainable digital transformation

I. INTRODUCTION

Internet and digitization are competence-destroying and disruptive (Karimi et al., 2015) for print media industries. The print media industries are seen their dominance eroded and fundamentally changing and disrupting their business model (Karimi et al., 2015).

The online readers behavior has affected the newspaper industry and change the focus to digitization, digital platforms, digital transformation, and digital innovation (Gilbert et al., 2012). The rapid usage of digital technology and Internet have acted as catalysts for transformation in newspaper publishers, whose outputs are well suited to circulation via digital platforms (Doyle, 2013).

There are three trends faced by print media industries in Indonesia. First, there has been a drastic decrease in revenues and readership. The print media survey conducted by Nielsen Company in the fourth quarter of 2016 period until the third quarter of 2017 by 17,000 respondents in eleven cities shows that print media has 8% market penetration or about 4.5 million people. The number of digital readers reached 6 million people with 11% penetration. This condition shows that reading habit does not decrease, but switches platform. Print media tend to be consumed by consumers aged 20-49 years (74%), as employee (32%), and majority of readers are from upper class (54%). Ad spending in January-September 2017 amounted to 21 trillion Indonesian rupiahs (IDR), down 13% from January-September 2013 period of IDR25 trillion.

Secondly, print media industries in Indonesia have not structured strategy yet that can be implemented to generate revenue from the online side. Thirdly, on the basis of data provided by the Association of Indonesian Press Companies (*Serikat Perusahaan Pers* / SPS, 2017) between January and September 2013, there were 268 media companies, both newspapers, tabloids, and magazines. But in January-September 2017 there are still 192 print media industries.

These current trends imply that the industries are required to build new business models. This study provides an empirical fact of how digital capabilities have strong role in influencing the performance of sustainable digital transformation. This implies the necessity of building a capability improvement on print media industries in Indonesia to cope with digital disruption.

II. LITERATURE REVIEW AND HYPOTHESIS

Dynamic capabilities are seen as high order organizational capabilities that facilitate the process of learning new domains, creating new asset combinations and building new capabilities to suit market needs (Teece, 1997).

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Helfat (2007) defines dynamic capabilities as "the capacity of an organization to purposefully create, extend, or modify its resource base". Teese, 2007 distinguishes between the role of dynamic capabilities in developing capabilities related to innovation: sensing, seizing, and reconfiguring capabilities. Ellonen (2011) emphasizes that driven by technological capabilities in operating businesses and a changing environment, changes both in operational capability and dynamic capabilities occur. Related to the view of dynamic capabilities, Ellonen (2011) assumes that there will be an interactive mechanism between dynamic capabilities, specifically the capability to reconfigure resources and assets with the development of operational capabilities, especially digital market capabilities.

Operational capabilities are also called the first level capabilities required in running a daily enterprise (Collis, 1994; Danneels, 2002). According to Ellonen (2011) operational capabilities "... generally involves performing an activity, such as manufacturing a particular product, using a collection of routines to execute and coordinate the variety of tasks required to perform the activity". Digital market capabilities and technology capabilities lead to peroduk innovation.

In the context of interactive mechanism between dynamic capabilities and the development of operational capabilities, digital market capabilities are needed to serve both current and potential customers and can be used as the main antecedents of the company's competitiveness and superior performance. According to Valanto (2012) there are four components of digital market capabilities: first, to understand customer needs and actions required to collect and process knowledge about customers. Second, the company needs to satisfy the needs of its customers through the offering of the appropriate product features. Third, focus on customer relationships, which means the ability to identify and serve customers and build customer loyalty. Fourth, communication with customers demands the appropriate channel.

Hypothesis 1: Capability to reconfigure affect digital market capability.

According to Benis (2013) digital business strategy is an important issue for leadership because it will be a fundamental change in the life of the leader, whatever type of institution he leads. Access to abundant information will make things transparent. That means leaders at all levels of the organization will know what happens every minute for twenty-four hours, and nothing is left behind. Information transparency will change the perspective of the leader. The abundance of information in the digital world helps leaders at all levels to better understand the various stakeholder groups that must be considered.

Benis (2013) argues that one of the important thing as an effective leader is adaptive capacity. The term adaptive capacity according to Benis (2013) refers to several characters: resilience, namely returning effectively and rising from adversity or difficulty, openness to something new, willing to sacrifice to try something new, trying hard to get something new, being able to learn from failure or error. The quality of adaptive capacity also includes feeling optimistic about what needs to be done and tried. This does not mean adopting blindly every innovation, but must be sure of the power of digital technology in changing the way to lead and manage.

Hypothesis 2: Capability to reconfigure affect Digital leadership capabilities

According to Danneels (2002), Digital technology capabilities consist of tangible and intangible resources, processes and knowledge such as engineering and manufacturing know-how, efficient manufacturing processes, production facilities, new product development and quality control procedures that produce quality products, managerial and organizational skills, and predictability technological changes in the industry. Increased efficiency in R & D and manufacturing processes, reducing costs and developing consistency in supply and generating competitiveness (Day, 1994). The three main components of digital technology capabilities: first, the ability to design and produce online products with certain features. Second, the production system and know-how, are related to the ability to carry out daily processes related to the maintenance of online product functions. Third, managerial skills are related to capability to define daily work processes and product development.

Hypothesis 3: Capability to reconfigure affect digital technology capabilities

The internet and the development of digital technology have fundamentally changed the world of marketing. Because of the abundance of information and opportunities, customers are no longer passive in accepting the role of recipient of marketing communications. Internet and digital technology change the traditional communication approach and encourage interaction with individual customers quickly, openly and continuously. In the digital age, customer engagement is very important. Even The Marketing Science Institute, according to West (2016), has identified an understanding of how marketing activities emphasize engagement as one of the main priorities of his research between 2014-2016. More and more companies are using social media platforms to connect with their customers by engaging the content so that customers can interact with each other (for example sharing information through Tweets) and encourage company interactions with customers (for example by responding to customer comments or complaints directly and quickly) One discussion in domain marketing is a new approach, namely customer orientation (OC). Its positive performance depends on the development of the use of information technology facilities that offer support for OC approaches for various purposes.

Processes such as data collection, storage, processing, analysis and dissemination are very important. The process is intended to transform data into knowledge that will help top management in making decisions that will influence marketing strategies and policies. In a client-oriented approach, the important role is to identify customer preferences by presenting information on which goods or services should be provided and offered. In this context, analysis of customer profiles is an important process based on data available in the company. Customer behavior according to Mogo (2015) is defined as "a multidimensional concept that includes all decisions on actions taken both on individuals and groups that are directly related to the collection and use of goods and services to fulfill both current and future desires including the decisive decision making process action".

Hypothesis 4: Digital Market capabilities affect sustainable digital transformation

Solis (2016) identified three main elements of digital transformation: understanding digital customer experience, transforming the company's vision and leadership, and building a digital transformation team. He stressed that customers do not see mobile phones as mere channels. For them mobile phones are a lifestyle. Everything in the small screen of a mobile phone is a way of interacting with the world. Digital transformation, according to Westerman et al. (2011) is the use of technology to radically improve performance. Executives in all industries use digital developments such as analysis, mobility, social media and intelligent equipment, and develop the use of traditional technologies to change customer relationships, internal processes, and value propositions. Other executives see how the rapid development of digital technology has damaged various industries knowing that they must pay attention to changes in their industry.

According to Westerman et al. (2011) many experts encourage companies to embark on a journey of digital transformation through digital technology. This is done because companies face pressure from customers, employees and competitors to start or accelerate their digital transformation. Digital transformation that succeeded came not only by implementing new technology but also from transforming the organization by taking advantage of the opportunities provided by the new technology. Most digital transformation initiatives are centered on customer experience, operational processes and business models. Companies change how functions function, redefine how functions interact with each other, and try to uncover various obstacles in the company. Successful digital technology does not occur from the bottom up, but is pushed from above. Focus on "how" and not on "what". Transformation is very successful focusing on how to drive change. Encouraging a transformative vision, related to engagement, management and KPI (Key Performance Indicators) will enable employees to identify "what" is new in accordance with the organization's vision. The digital transformation that succeeded came not from a new organization, but from making efforts to sharpen the organization to take advantage of the strategic assets that it possessed in new ways. Although many companies are in an innovative digital technology environment, many of them still have to go a long way in digital transformation. In this context, leadership plays a very important role. Whether using traditional or new technology, the main key to digital transformation is to sharpen the vision and drive change in how companies must be run. This is the challenge of managers and employees, not just technology.

Hypothesis 5: Digital leadership capabilities affect sustainable digital transformation

According to O'Hea (2011) digital technology has brought changes in various business functions, not only in the marketing function, but also includes business structures, systems, processes, and especially human capabilities that must be used to exploit business opportunities in the digital era. Organizations face difficulties in analyzing opportunities and challenges triggered by the development of the internet and digitalization. Of course this will reduce the value and benefits of investments that have been made in the digital sector. Helping organizations to understand, measure and develop digital capabilities is fundamental in dealing with these difficulties.

For companies, especially companies that have not been digital natives but have found that they must compete in the digital economy, according to O'Hea, (2011) new types of support are needed to help find new competitiveness and new tools that will help utilize digital technology to offer value for his business. Organizational needs to develop digital capabilities and objectives for digital capability assessment will contribute to increasing business value. Every organization that has an internet connection inherently has digital capabilities. There are various ways that organizations use this capability. Organizations that understand these opportunities and learn to measure and develop their digital capabilities will find themselves in a better position to compete in the digital economic era.

According to Westerman (2011), the capability of digital technology has a positive impact on almost all departments within the organization. But to produce the maximum value transformation must be done. The capability of digital technology will help organizations to carry out digital transformation, rethink what is the best value for customers and create a model of operation that produces excellence about what is the latest possibility as competitive differentiation.

Increasing the capabilities of digital technology organizations will add value that results in more effective business processes, opportunities to develop organizational careers, training opportunities and needs, new job creation, and cost reduction, also increasing the level of professionalism, productivity, competitiveness and especially profit.

Hypothesis 6: Digital technology capabilities affect sustainable digital transformation

Vivek (2012) emphasizes that customer engagement is "the intensity of individual participation in the relationship with what the organization offers and / or organizational activities. This shows the nature of the behavioral phenomenon of customer engagement and can be associated with an understanding of the value of co-creation. Brodie (2013) identified three dimensions of customer engagement: cognitive, emotional, and behavioral. Based on the dimensions identified, the level of customer engagement can be determined. According to Bellman (2011), mobile phone applications affect the brand's attitude and will to buy a brand. Kim (2015) emphasizes that a brand that does not meet customer expectations will encourage a "negative brand attitude" which results in a decrease in purchase behavior.

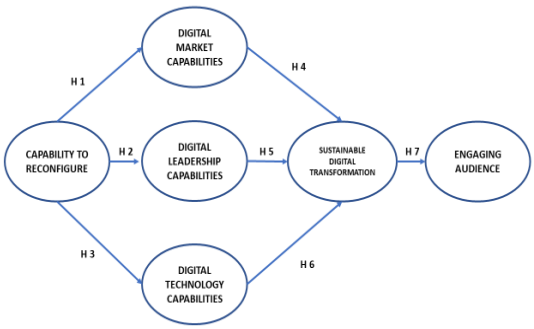
Bellman (2011) analyzes the branded apps and indicates these two application categories: informational and experiential. The contents of an informational application provide a utilitarian or functional experience, and make customers reach their goals more easily (for example to save money, pay for services, get coupons etc.). In contrast, experiential content offers experiential-based incentives (eg games, chat rooms), provides intrinsic excitement and entertainment. According to Bellman (2011) the motive for engaging with mobile application is "relaxing and relieving stress". It is emphasized that hedonic property will contribute to the power of engagement, for example customers will better anticipate the excitement of diverse activities, and thus their expectations will lead to greater engagement. Utilitarian and experience-based motives correlate with the types of functional and hedonic motivation as Kim identified (2013). Functional motivation is seen in aspects of efficiency, ease of use, time saving, while hedonic is seen in fun, pleasure, and pleasure.

According to Zhang (2014), customer sociability occurs through reciprocal interaction in the social environment, which appears as a platform for customers with similar interests, where they recommend and comment on various services. During interactions, customers build their online identities and form networks to achieve social benefits such as social support, friendship and intimacy. According to them, support from other parties is one of the main values obtained through interaction, then the customer feels he gets attention and value from other parties. Sociability also refers to participation, which is related to conditions in which customers provide constructive feedback and helpful advice.

Hypothesis 7: Sustainable digital transformation affect engaging audience strategy.

Research Model

Based on previous empirical studies and the current phenomenon in Indonesia, I develop a theoretical research model :



III. METHODOLOGY

This research used descriptive and explanatory survey method (Ghozali, 2012) with unit analysis was the print media industries in Indonesia as a member of Dewan Pers Indonesia (Indonesian Press Council). Data were collected in a cross-sectional timeframe. The population studied were 41 printed media industries in Indonesia. To obtain representative data, this research uses census technique to all 41 print media industries in Indonesia which is verified factually and administratively by the *Dewan Pers Indonesia.* Respondents of the study were general leaders, or chief editors or business leaders of print media industries in Indonesia. Senior leaders are selected because they have the abilities to evaluate innovation initiatives in improving company performance.

Data was collected by delivering questionnaires either directly or through online to 41 print media industriy leaders in Indonesia. In this study, the indicators used in the questionnaire was based on previous research Scopus indexed, and using a four-point Likert scale. Four scales were used in the questionnaire in this study with the aim of making the respondents have to choose one of the poles, because in the four Likert scale, the "neutral" option is not provided (Dawes, 2008).

The data were then analyzed using Structural Equation Modeling Analysis Partial Least Square (SEM-PLS). According to several scholars (Ghozali, 2012), Partial Least Square (PLS) is a powerful method of analysis because it can be applied to any type of data scale (nominal, ordinal, interval, and ratio) and can be recommended for minimum 30 samples (Ghozali, 2012).

SEM PLS can be used to confirm the theory and be used to explain the relationships between latent variables. After all variables and indicators are defined, the outliers test, missing value, and the validity and reliability tested by the Smart-PLS. Outlier testing is done to see if there is any data deviation, missing value analysis to see if there is missing or incomplete data. Outliers and missing data shows all indicators and dimensions are eligible.

Validity testing was conducted to see how far the indicator can measure a construct, while reliability testing to know the consistency of variables in measuring the latent construct. According to Ghozali (2012) a variable is said to have good validity to the latent construct if: (1) loading factor load (λ) $\geq$ 0.5, (2) T-Statistics> 1.96. The validity of each indicator within the variables is obtained from Smart-PLS results. The evaluation results show that each indicator and dimension used in this study is valid because it meets the required requirements.

Validity Test

Dimension	Loading Factors	T-Statistics	Conclusion
Customer Purchases			
Cpr 1	0.887	19.496	Valid
Cpr 2	0.949	42.755	Valid
Cpr 3	0.945	44.863	Valid
Customer Referrals			
Crf 1	0.896	19.017	Valid
Crf 2	0.912	10.295	Valid
Customer Influence			
Cinf 1	0.759	7.433	Valid
Cinf 2	0.867	3.879	Valid
Cinf 3	0.805	3.111	Valid
Customer Knowledge			
CKn 1	0.801	4.128	Valid
CKn 2	0.898	19.438	Valid
CKn 3	0.894	10.028	Valid
Bulding The foundations Capabilities			
FC 1	0.962	78.578	Valid
FC 2	0.952	42.931	Valid
Reward Structures			
RS 1	0.683	14.058	Valid
RS 2	0.725	20.210	Valid
Measuring and Monitoring			
MM 1	0.557	8.879	Valid
MM 2	0.794	23.371	Valid
MM 3	0.749	14.464	Valid
Customer Information			
CI 1	0.855	68.739	Valid
CI 2	0.838	64.906	Valid
Customer Needs			
CN 1	0.949	52.234	Valid
CN 2	0.943	36.833	Valid
Customer Relations			
CR 1	0.875	19.017	Valid
CR 2	0.833	10.295	Valid
CR 3	0.898	22.546	Valid
Customer Communication			
CC 1	0.911	22.664	Valid
CC 2	0.910	17.310	Valid
Shared Transformative Vision			
STV 1	0.800	23.704	Valid
STV 2	0.798	21.005	Valid
Strong Governance			
SG 1	0.799	19.032	Valid
SG 2	0.773	16.209	Valid
SG 3	0.911	54.045	Valid
Deep Employee Engagement			
DEE 1	0.846	32.130	Valid
DEE 2	0.922	51.884	Valid
Solid Technology Leadership			
STL 1	0.812	22.309	Valid
STL 2	0.847	36.309	Valid
Customer Experience			
CE 1	0.816	16.880	Valid
CE 2	0.870	29.740	Valid
CE 3	0.931	41.796	Valid
Operational Process			
OP 1	0.885	30.829	Valid
OP 2	0.795	20.912	Valid
OP 3	0.793	15.071	Valid
Business Model			
BM 1	0.908	42.046	Valid
BM 2	0.867	15.118	Valid
Realignment Assets			
RA 1	0.790	5.140	Valid
RA 2	0.675	3.754	Valid

Reliability of each research variable is obtained from Smart-PLS result that is Cronbach's Alpha and Composite Reliability. According to Ghozali (2012), the rule of thumb commonly used to assess the reliability of a construct that the value of Composite Reliability must be greater than 0.7, and if above 0.8 means very satisfactory. The results of reliability evaluation shows the value of Composite Reliability meets the required requirements which means reliable. In the Indonesian print media industries, the results of the assessment of the research model indicate that each indicator that measures the dimensions and each dimension that measures each construct has a high correlation which is indicated by the loading factor value above 0.50 and t-count is greater than the value of t Table = 1.96. Similarly, the value of Composite Reliability and Cronbach's Alpha each indicator and dimension that has values above 0.70 so that it can be stated reliable and Average Variance Extracted (AVE) value on each indicator and dimension above 0.50 so it is said to be valid (Ghozali, 2012).

The average variance extracted (AVE) parameter shows all constructs having values above 0.5 (rule of thumb). The value of the AVE strategy constructs involves the customer slightly below the rule of thumb (0.480). However, this construct is a second order compiled by several first order constructs with an AVE value of each above 0.5, so the construct can still be considered valid enough in this research model. Of the two test parameters of the convergence validity, all measurement indicators proved to have a high correlation and are valid to represent its latent variables.

Constructs	PARAMETER		
	AVE	CRONBACH'S ALPHA	COMPOSITE RELIABILITY
Engaging Audience	0.480	0.888	0.909
CPr	0.860	0.919	0.899
CRf	0.817	0.777	0.852
Cinf	0.659	0.742	0.949
CKn	0.749	0.832	0.900
Sustainable Digital Transformation	0.551	0.861	0.894
FC	0.916	0.908	0.956
RS	0.711	0.593	0.883
MM	0.716	0.804	0.831
Digital Market Capabilities	0.648	0.932	0.943
CI	0.925	0.919	0.906
CN	0.894	0.882	0.961
CR	0.755	0.837	0.944
CC	0.829	0.794	0.902
Digital Leadership Capabilities	0.698	0.945	0.954
STV	0.848	0.821	0.950
SG	0.820	0.890	0.932
DEE	0.904	0.894	0.938
STL	0.884	0.869	0.918
Digital Capabilities	0.689	0.934	0.946
CE	0.838	0.903	0.881
OP	0.801	0.875	0.940
BM	0.788	0.733	0.924
Capability to reconfigure resources/assets	0.563	0.804	0.865
RA	0.621	0.694	0.896
CR	0.755	0.837	0.831

The significance test of the strength of causal relationships between constructs is done by Smart-PLS bootstrapping to the research model. Based on the analysis of coefficient values of determination R2 (R-square), it appears that all constructs of endogenous first order variables (main dimensional constructs) have predicted values of strong structural model of exogenous variables. As for the construct of the endogenous variable of second order (variable construct) shows the value of strong and moderate structural relationships, except for the digital variable capability construct that shows the weak R-square value.

R-square of structural model

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	Relationship
Engaging audience	0.255	0.250	0.120	2.127	Weak
CPr	0.749	0.755	0.063	11.866	Strong
CRf	0.575	0.594	0.107	5.390	MODERATE
Cinf	0.596	0.630	0.116	5.153	MODERATE
CKn	0.566	0.569	0.129	4.390	MODERATE
Sustainable Digital Transformation	0.611	0.615	0.106	5.759	MODERATE
FC	0.747	0.754	0.084	8.846	Strong
RS	0.699	0.714	0.073	9.593	Strong
MM	0.708	0.706	0.089	7.958	Strong
Digital Market Capabilities	0.384	0.363	0.160	2.401	Weak
CI	0.775	0.771	0.073	10.639	Strong
CN	0.637	0.624	0.116	5.518	MODERATE
CR	0.877	0.874	0.041	21.284	Strong
CC	0.769	0.756	0.088	8.763	Strong
Digital Leadership Capabilities	0.668	0.643	0.128	5.201	Strong
STV	0.752	0.726	0.119	6.305	Strong
SG	0.841	0.835	0.060	14.007	Strong
DEE	0.868	0.867	0.039	22.501	Strong
STL	0.780	0.777	0.088	8.838	Strong
Digital Capabilities	0.506	0.490	0.141	3.575	MODERATE
CE	0.911	0.906	0.036	25.230	Strong
OP	0.852	0.842	0.058	14.686	Strong
BM	0.754	0.752	0.073	10.305	Strong
Capability to reconfigure resources/assets					Strong
RA	0.832	0.794	0.113	7.390	Strong
CR	0.877	0.874	0.041	21.284	Strong

The analysis of the strength of causal relationships between construct variables in the model is also expressed from the value of path estimation (path coefficient) between construct variables. With the two-tailed test, the strength of the two-construct relationship can be measured by comparing the results of the T-statistic bootstrapping with t-value (according to the level of trust and significance). All relationships between construct dimensions (first order) with their variable construct (higher order) show a very strong relationship with a T-statistic value greater than 1.96 (95% confidence level). An insignificant relationship occurred between the construct of digital leadership capabilities variable and the sustainable digital transformation variable, with the T-statistic value of 0.559, and the digital market capabilities construct with the sustainable digital transformation variable with the T-statistic value of 0.132 (below 1.96 confidence level used in the analysis this). This means that the variables of digital leadership capabilities and digital market capabilities do not have a strong and significant relationship with sustainable digital transformation variables.

Relationship between construct variables

	Path Coefficient	T Statistics (|O/STDEV|)	Relationship
Capability to reconfigure resources/assets -> digital capabilities	0.711	6.526	Significant
Capability to reconfigure resources/assets -> digital leadership capabilities	0.817	9.505	Significant
Capability to reconfigure resources/assets -> digital market capabilities	0.620	4.211	Significant
Capability to reconfigure resources/assets -> RA	0.912	13.282	Significant
Digital market capabilities -> CC	0.877	16.876	Significant
Digital capabilities -> CI	0.880	20.297	Significant
Digital market capabilities -> CN	0.798	10.360	Significant
Digital market capabilities -> CR	0.937	42.038	Significant
Digital market capabilities -> sustainable digital transformation	0.029	0.132	Insignificant
Digital leadership capabilities -> DEE	0.932	44.611	Significant
Digital leadership capabilities -> sustainable digital transformation	0.115	0.559	Insignificant
Digital leadership capabilities -> SG	0.917	27.459	Significant
Digital leadership capabilities -> STL	0.883	16.838	Significant
Digital leadership capabilities -> STV	0.867	11.678	Significant
Digital capabilities -> BM	0.868	20.161	Significant
Digital capabilities -> CE	0.955	49.927	Significant
Digital capabilities -> sustainable digital transformation	0.657	2.632	Significant
Digital capabilities -> OP	0.923	28.498	Significant
Sustainable digital transformation -> FC	0.864	17.260	Significant
Sustainable digital transformation -> MM	0.842	15.319	Significant
Sustainable digital transformation -> RS	0.836	19.013	Significant
Sustainable digital transformation -> engaging audience	0.505	3.814	Significant
Engaging audience -> CKn	0.752	8.178	Significant
Engaging audience -> Cinf	0.772	10.229	Significant
Engaging audience -> Cpr	0.865	22.134	Significant
Engaging audience -> Crf	0.758	10.579	Significant

IV. RESULTS AND DISCUSSIONS

The result show that digital technology capabilities have strong relationship to sustainable digital transformation variable because T-statistics score is 2,632 above T-table. While digital leadership capabilities and digital market capabilities have negative relationships with sustainable digital transformation with T-statistic score 0.559 (below T-table) and 0.132 (below T-table). According to Westerman and McAfee (2014), digital capabilities are a company's ability to utilize digital technology as a medium to change the way to conduct business. This variable consists of: 1) customer experience dimension that is the use of digital technology to understand customer better, market and customer service. 2) Operational Process dimension that is the use of digital technology to do the work in new way, work process, and main job done automatically, to make better operational decisions. 3). Business Models dimensions that is using digital technology to improve performance or add value to products, and launch new business models.

Designing a customer experience should be based on a clear vision of what the company will achieve. Engaged audience digitally expects that the products, services, and information presented must be tailored to the specific needs of the customer (Vivek et al., 2012). All must exactly match the moment that customers see and use whatever platform they use at that time. The more touch points the company have, the more complex the interactions have to take on different channels and the more detailed the needs to be understood.

Digital operations are a combination of people, processes, and related technologies in a unique way to help outrank competitors. According to Casero-Ripollés and Izquierdo-Castillo (2013), transforming digital operations requires data that always available real time. A wave of digital change is coming closer. The competition landscape is moving very fast. Many barriers to entry previously protected have now fallen. Competition is global. So companies have to rethink their customer experience, internal operations, and find new business models.

Finding new business model involves a radical shift on what to sell, how to sell, or how to make money (Casero-Ripollés & Izquierdo-Castillo, 2013).

Finding a business model also involves how to map industry competition and reconfigure the value chain in offering competitive advantage over competitors. Start with how to offer superior value to customers and rethink how this offering make profits. Then exploit through digital technology how to help customers feel this offering is smarter, cheaper and faster. Designing, trying, and implementing new business models is the job of business leaders. All of this are strategic activity. Implementation of new business models requires vision, leadership, and governance.

V. CONCLUSION

Sustainable digital transformation can help printing media industries by enhancing, extending, and redefining their traditional products/services through digital content by reinforcing the value proposition offered to customers. The print media industry in Indonesia is one of the industries experiencing the impact of the digital revolution brought by the power of mobility, social media, digitization, and changes in customer expectations. This encourages the print media industry to enter the consumer-serving industry, create digital content, digitize high-end products / services, and perform digital transformations. Start with how to offer superior value to customers and rethink how this offering make profits. Then exploit through digital technology how to help customers feel this offering is smarter, cheaper and faster.

This study provides implications for the theory of dynamic capabilities by identifying, operating, and measuring the main variables: engaging audience strategy, sustainable digital transformation, digital market capabilities, digital leadership capabilities, digital capabilities, and capability to reconfigure resources / assets. This study is the first to examine the role of the above variables in answering digital disruption in the context of the print media industries in Indonesia.

This study shows that the print media industry will be able to become the dominant player in the future if able to make capability improvement in producing its digital product. Print media industry must be able to respond to digital disruption through change, adaptation, and expansion variables of engaging audience strategy, sustainable digital transformation, digital market capabilities, digital leadership capabilities, digital capabilities, and capability to reconfigure resources / assets. Resources should be allocated to build these capabilities to enter new markets and value networks for their digital products. The print media industry must also discover whether the process of creating digital products is appropriate and whether existing values can be encouraging to reconfigure its capabilities. Print media industries should also audit existing digital capabilities and develop plans to identify weaknesses in developing their digital products. This step will enable print media industry to present the right information to users, with suitable tools and improve business through value-added services.

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