



## An Empirical Study of Dynamic Capability: Leveraging The Roles of Virtual Leadership and Relational Capital

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### Abstract

The problems that arise are the lack of co-creation product development, low technology utilization, and organizational difficulties in adapting to market changes. From these problems, this study offers the role of dynamic capability (DC) to be adaptive during market changes by optimizing organizational resources in creating creativity. DC requires the role of virtual leadership (VL) and relational capital (RC) to encourage creative performance (CP). The evidence gap is another problem in the form of contradiction in the research results on the influence of VL on CP, which are still inconclusive. This research empirically tests the role of DC with VL and RC as antecedent variables that can be used as strategies for achieving CP. The sampling technique used was purposive sampling to obtain 180 respondents who are creative industry leaders in Central Java. This study uses the perspective of dynamic capability theory (DCT). The analysis tool is structural equation modeling (SEM), which is processed using AMOS software. The results of this study empirically prove that the role of DC can be fully mediated. This study provides practical contributions for managers to encourage organizational members to improve sensing, learning, integration, and reconfiguration capabilities in using virtual technologies and networked organizations.

**Keywords** *Virtual Leadership, Relational Capital, Dynamic Capability, Creative Performance*

### INTRODUCTION

Today's business organizations continuously need creative ideas to survive turbulence (Puriwat & Hoonsopon, 2021), such as changes in exchange rates, government policies, technology, market tastes, and the COVID-19 pandemic (Akpan & Enemuo, 2021; Ch'ng et al., 2021; Farid & Widjaja, 2021; Yang et al., 2019). If the organization cannot develop creative ideas, the products produced will stagnate and not match market tastes, so the energy expended will be wasted and not converted into profits (Surya et al., 2022). Organizations can gain advantages by developing unique products that require leadership roles, culture, finance, infrastructure, and technology (Khan et al., 2021; Phillips, 2021) as tangible and intangible assets (Ali et al., 2020). These tangible and intangible assets are essential for an organization to quickly adapt to the development of dynamic capability (DC) (Jiang et al., 2019; Vrontis et al., 2020). DC has attracted much interest from researchers (Ghosh et al., 2022; Gupta et al., 2020; Mikalef et al., 2019). DC can encourage organizations to achieve competitive advantage even in a volatile market (Lee & Yoo, 2019). DC enables organizations to anticipate risks, integrate new technologies, study market conditions, and predict new market opportunities (Felin & Powell, 2016). DC will not be successful without the support of human capital within the organization as the primary business-driving asset (Gupta et al., 2020).

One form of human capital is the role of leadership (Khan et al., 2021). The leadership role elaborated with digital technology is virtual leadership (VL) (Hermawan et al., 2020). VL makes it easier for organizations to develop a digital environment through internet technology by

connecting members to understand events, calculate resources, provide supervisory instruction input, encourage problem-solving, and achieve targets (Mehtab et al., 2017). Meeting organizational targets requires leaders' awareness of quality relationships with stakeholders, such as consumers, suppliers, and partners. Quality relationships in Relational Capital (RC) can be improved through communication and trust building. Communication and trust encourage stakeholders to be willing to share their knowledge for organizational development (Ryu et al., 2021). Knowledge can be obtained from stakeholders or the internet network to improve sensing, seizing, and transforming, which refers to DC (Mihardjo et al., 2019; Thambusamy & Bekiroğullari, 2020). Thus, organizations through leadership roles need RC to encourage DC (Farzaneh et al., 2022).

DC has been studied in several sectors, such as the public sector (Mazzucato & Kattel, 2020), the tourism sector (Jiang et al., 2019), the education sector (Tomé & Gromova, 2021), the health sector (Loureiro et al., 2021), and the hotel sector (Reyes-Santiago et al., 2019). However, DC studies are still limited to creative industries. The creative industry will be the originality of this research. Creative industries have the potential to generate wealth and encourage employment by leveraging individual creativity, skills, and talents (BOP Consulting, 2010). The creative industry contributes 7.28% to Indonesia's gross domestic product (Yasyi, 2020). This high achievement has made Indonesia the third country in the world with the most prominent creative industry contribution to the country's economic growth, after the United States and South Korea. In addition, the creative industry in Indonesia continues to experience growth, with an increase in labor absorption of 4.59% per year during 2011–2019 (Kemenparekraf, 2021). This achievement makes the creative industry an exciting field. In addition, creative industries must develop their business by improving business processes through digital technology (Li, 2020).

The role of digital technology is embedded in the vision and mission of an organization, including in the creative industries. Digital technology is used to make things easier that used to be done conventionally, such as architectural design, data mining, advertising scenarios, and managing finances (Abbasi et al., 2017; Chen et al., 2019; Hasan et al., 2020), including managerial achievements such as planning, organizing, actuating, and controlling (Gaol, 2021). Digital technology in its application requires organizational leaders to optimize it by using VL in performing their leadership duties remotely. Tasks carried out remotely via virtual work can have a positive effect, as evidenced by data from Robert Walters (2022), where remote work can increase productivity for 28% of 160 professional workers in Indonesia. The increase in productivity was due to several factors: as much as 80% stated that working hours were more flexible, as many as 64% stated less travel time, and 56% felt comfortable at work. The advantages of a virtual environment for work have caused the national creative industry to integrate and develop a virtual environment to speed up various operational processes in business. This virtual work environment requires a VL role to encourage organizations to be agile in using digital technology.

The problem in this study is a contradictory evidence gap where Chamakiotis et al. (2021) have a vital role in increasing Creative Performance (CP). Meanwhile, the results of conflicting study findings were found by Hermawan et al. (2020), where VL had no significant effect on CP. Implementing digital technology through a leadership role requires investment support, whereas digital technology is passive; therefore, it does not significantly affect CP. This shows that applying VL requires other elements to encourage creativity. Therefore, this study offers the concept of DC to bridge the insignificance gap. In addition, other problems constitute the theory evidence application gap. The contribution of the creative economy to a GDP of 1,200 trillion in 2019 decreased by 0.083% in 2020 (Bekraf, 2020). This decrease in the contribution of the creative economy to GDP indicates that sales results obtained by the creative industry have also decreased,

supported by data where 67% of creative industry players experience a decrease in income (Rachmawati, 2020).

Dynamic Capability Theory (DCT) is the perspective used to build CP. This capability is in line with the paradigm of creative economic needs, which encourages the presence of ideas that are always renewable in the industry (Hermawan & Tripriyo, 2014) as a prerequisite for survival. Hence, the contribution of this paper practically encourages managers in the creative industries to map aspects of DC.

## LITERATURE REVIEW

DC is necessary for the knowledge-based economy era, which can encourage creativity and innovation. Therefore, further research on DC must be conducted. This study adopts DCT to support empirical models involving VL and RC as antecedent variables, CP as consequent variables, and DC as mediating variables (See Figure 1).

### Dynamic Capability Theory

The emerging DCT is based on the resource-based view (RBV) theory. RBV was developed by Wernerfelt (1984), who understood that resources are essential for organizational competitiveness. However, according to Teece et al. (1997), the RBV theory cannot explain the causes and ways to achieve competitive advantage, even though changes occur quickly and unexpectedly. These reasons led Teece et al. (1997) to examine the theory of DC. DCT explains that organizations must integrate, build, and reconfigure their resources for a changing business environment. Besides that, another study by Teece (2007) explains that DC consists of sensing, seizing, and transforming.

DCT can cover all the variables in this study: VL, DC, RC, and CP. VL in DCT acts as a position. Leadership behavior and style play an essential role in encouraging DC. The manner in which leaders send messages can influence the policies and practices implemented by organizational members (Lopez-Cabrales et al., 2017). Meanwhile, information technology, which is also part of VL, is used as a tool or media to obtain information that is distributed and spread quickly. In addition, information technology also plays an essential role for leaders to effectively coordinate each part of the organization (Mikalef & Pateli, 2017). RC, as an external resource, can encourage the role of DC in achieving a competitive advantage. Internal resources do not always meet organizational needs; therefore, external resources are needed to complete them. External resources are obtained by building stakeholder relationships that refer to RC. RC helps the DC process, allowing organizations to capture customer information and conduct new product trials with organizational partners (Hsu & Wang, 2012). In addition, CP is used as a measure so that organizations know how capable they are of achieving a competitive advantage. The goal of DC is to provide a competitive advantage, requiring creativity to create new products, avoid stagnant products, and help reduce costs (Ahmad, 2021).

### Virtual Leadership

A VL is a leader who elaborates on digital technology in managing an organization (Hermawan et al., 2020; Hermawan & Sari, 2020). The application of VL in companies is where leaders hold virtual communication to create social relations, ensure the participation of each individual, and perform various job controls. In addition, leaders can conduct evaluations through electronic discussions or by sending documents (Batrlık et al., 2022).

### Relational Capital

RC is included in Intellectual Capital (Salinas-Ávila et al., 2020). RC is one aspect of forming

quality relationships based on commitment, trust, and respect with stakeholders. Quality relationships have an impact on the company's performance results. Companies can obtain information from external parties to discover market opportunities and create innovations (Jardon, 2018).

### **Creative Performance**

CP is an organizational performance to find creative ideas in making products, methods, and solving organizational problems (Hermawan et al., 2022). Organizations need various unique management techniques to cultivate, measure, and reward existing creativity (Waples & Friedrich, 2011). In addition, organizations can provide support and encouragement for members to solve problems at work in new ways (Mutonyi et al., 2020).

### **Hypotheses Development**

#### *VL and RC*

RC is built through offline interaction and can be built online by joining virtual communities. The existence of vital RC in a community will enable collaborative and reciprocal exchanges (Lee et al., 2021). Leaders can strengthen RC in members through training in building customer relationships in an e-business environment (Namvar et al., 2010).

**H1:** There is a relationship between VL and RC

#### *Influence of VL on CP*

VL requires technological skills and leadership roles to build virtual environments but cannot directly influence CP. To achieve CP, VL requires other capability roles (Hermawan et al., 2021; Hermawan & Sari, 2020).

**H2:** VL has no significant effect on CP

#### *Influence of RC on CP*

RC built with external partners can help companies understand their strengths and ways to contribute to CP (Anh et al., 2019). For example, knowledge from suppliers about business changes to supply can then be used to develop strategies to reduce the impact of disruptions on supplier operations (Wang et al., 2019).

**H3:** RC has a significant effect on CP

#### *Influence of VL on DC*

The leadership needed by companies today is specific leadership that combines leadership capabilities and digital technology as an opportunity to minimize threats in a dynamic business environment. Leaders must develop individual competencies to adapt to managing market uncertainties using DC (Mihardjo et al., 2019).

**H4:** VL significantly affects DC

#### *Influence of RC on DC*

Organizations can obtain knowledge from stakeholders as external sources. This knowledge can be applied to seize new opportunities (López-Sáez et al., 2010). The application of this knowledge requires a DC, which can integrate internal and external resources for organizational

operations. In addition, DC enables organizations to absorb fresh ideas from external organizations in the innovation framework (Qiu et al., 2020).

**H5:** RC significantly affects DC

#### *Influence of DC on CP*

The fast-changing business environment makes organizations need creativity to solve various problems. Organizations have teams within them that share new knowledge inputs. This knowledge can be used to improve CP if integrated (Luan et al., 2016). The ability to integrate this knowledge is included in the DC. In other words, organizations need DC to encourage CP. DC allows organizations to adapt, recognize potential changes, and solve problems with various creative solutions. These capabilities enable organizations to identify opportunities and threats, explore skills, and detect new market opportunities (Hermawan et al., 2022; Lee & Yoo, 2019; Rui et al., 2018).

**H6:** DC has a significant effect on CP

#### *Mediating effect of DC*

Several previous studies found that DC was successful as a mediator (Farzaneh et al., 2022; Soluk et al., 2021). Organizations improving DC can be done internally or externally. Organizations can hold human resource development programs internally, while externally, they can work through strategic cooperation alliances (Lin & Wu, 2014). DC uses human resources as a critical asset to enhance creativity. The skills of organizational members, processes, and products must be developed to find market niches (Joshi & Dhar, 2020). Therefore, this study proposes the following hypothesis:

**H7:** DC mediates the effect of VL on CP

**H8:** DC mediates the effect of RC on CP

## **RESEARCH METHOD**

This study uses a positivism paradigm whose process is objective and independent of the researcher's point of view; therefore, the research results are purely based on data analysis from the respondents. The deductive approach is used so that the formulation process is based on the theory in previous studies (Saunders, 1970).

### **Data collection and sample**

This study uses primary data with an analytical instrument in the form of a questionnaire. Before distributing the questionnaires, the item scale underwent a feasibility test with a pilot study conducted on 30 respondents (Johanson & Brooks, 2010). After the questionnaire passed the feasibility test, it was distributed using the non-self-assessment filling method. The sampling technique used is purposive sampling. Purposive sampling involves distributing questionnaires to respondents with specific criteria. The sample criteria in this study are creative industry owners or managers in Central Java. The selected creative industries must use technology to demonstrate the application of virtual leadership. The number of adequacy samples is 16 (number of indicators)  $7 = 112$  (Hair et al., 2014).

### **Variables Measurement**

This study uses instruments from previous research to measure the constructs in the

empirical model. All item scales were assessed using a 10-point interval scale with the following classification: 1 = “strongly disagree” to 10 = “strongly agree”. Table 1 shows a list of item scales in the construct.

**Table 1.** Measurement Scales

Construct	Items	Indicator
VL (Politis & Politis, 2012)	VL1	Manage by Results, Not Activity
	VL2	Improve Virtual Communication
	VL3	Handling Virtual Meetings and Schedules
	VL4	Provide Virtual Feedback and Support
RC (Namagembe, 2020)	RC1	Capacity to Search for Information
	RC2	Research and Development Agreements
	RC3	Strategic Alliance Creation
	RC4	Cooperation with stakeholders
DC (Singh et al., 2023)	DC1	Sensing Capability
	DC2	Learning Capability
	DC3	Integrating Capability
	DC4	Reconfiguration Capability
CP (Hermawan & Sari, 2020)	CP1	Solve Problem
	CP2	Create a New Product
	CP3	Get creative ideas
	CP4	Low Complaints

## FINDINGS AND DISCUSSION

### Demographic Information

Questionnaires were distributed to 265 prospective respondents with a response rate of 76.98%; thus, 204 respondents were involved. In comparison, the number of respondents after analyzing the outlier data was 180, which still met the sample adequacy requirements. Based on this number, the characteristics of the respondents are obtained, as shown in Table 2.

**Table 2.** Demographic Information

	Total	Percentage
<b>Respondent Identity</b>		
<b>Education</b>		
<= Junior High School	2	1.1%
Senior High School	55	30.6%
Associate’s Degree	33	18.3%
Bachelor’s Degree	81	45%
Master’s Degree	9	5%
<b>Business Identity</b>		
<b>Creative Industry Cluster</b>		
Culinary	54	30%
Fashion	25	13.9%
Craft	24	13.3%
Publishing and Printing	18	10%
Video, Film, and Photography	13	7.2%

	<b>Total</b>	<b>Percentage</b>
Design	10	5.6%
Computer Services and Software	10	5.6%
Event Organizer	10	5.6%
Others (Architecture, Music, Advertising, Performing Arts, Fine Arts, Television and Radio)	16	8.8%
<b>Total</b>	<b>180</b>	<b>100%</b>

Source: Processed Data

### Data Analysis

This study uses the structural equation modeling (SEM) analysis tool with AMOS 22 software. The data analysis procedure with SEM is divided into two stages, namely the confirmatory factor analysis (CFA) test and structural model evaluation.

#### Confirmatory Factor Analysis

The CFA test was conducted on each research construct. The sample used in the data analysis requires the removal of outlier data. The outlier data are known based on the mahalanobis distance information with a value of 0.000 on p1 and p2. The following results of the validity and reliability tests are presented in Table 3, as shown in factor loading and construct reliability (CR).

**Table 3.** Validity and reliability testing

<b>Items</b>	<b>Standardized loadings</b>	<b>CR</b>
VL1	0.673	0.782
VL2	0.622	
VL3	0.805	
VL4	0.643	
RC1	0.630	0.757
RC2	0.624	
RC3	0.744	
RC4	0.644	
DC1	0.756	0.759
DC2	0.633	
DC3	0.640	
DC4	0.621	
CP1	0.607	0.710
CP2	0.607	
CP3	0.635	
CP4	0.617	

Source: Processed Data

Based on the results above, the loading factor value for each indicator met the cut-off of 0.5, so it can be concluded that the data are valid. Meanwhile, the construct reliability value for each variable exceeds 0.7, so the data are reliable (Hair et al., 2014). Table 4 shows the goodness of fit results for each research construct.

**Table 4.** Goodness of Fit for Each Construct

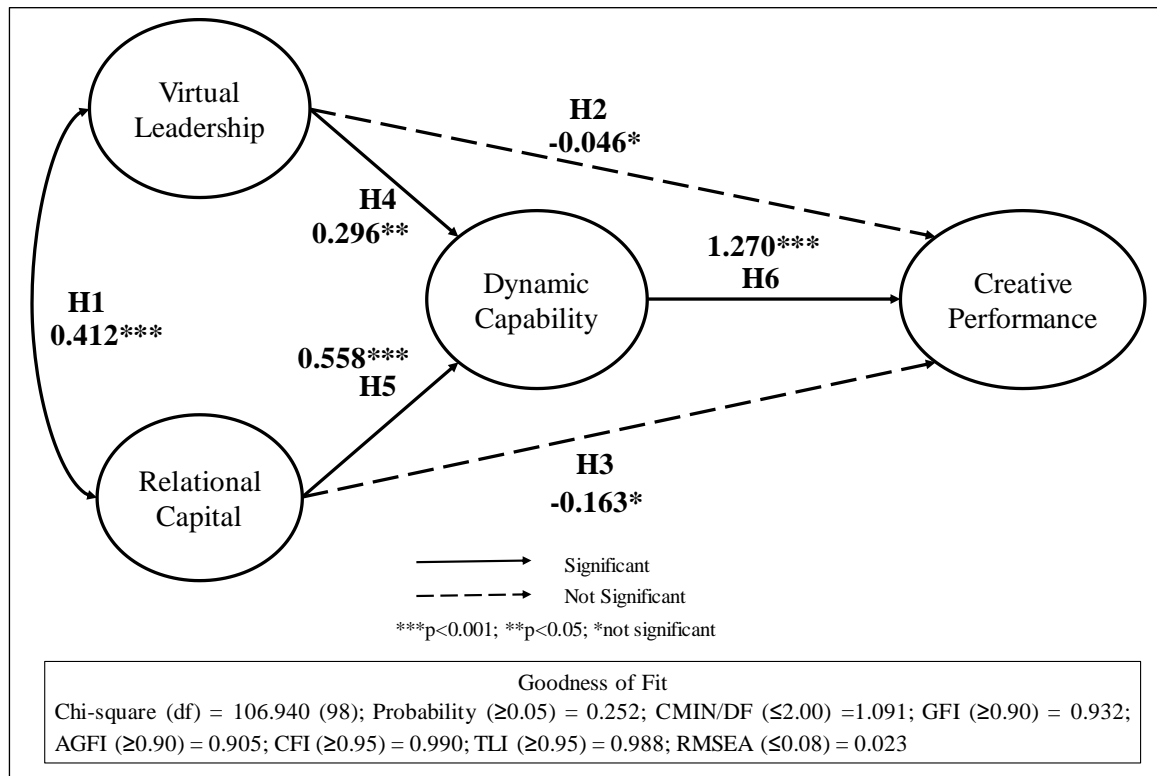
Construct	Chi-square	Prob ≥ 0.05	df	CMIN/DF ≤ 2.00	RMSEA ≤ 0.08	GFI ≥ 0.90	AGFI ≥ 0.90	TLI ≥ 0.95	CFI ≥ 0.95
VL	0.608	0.738	2	0.304	0.000	0.998	0.992	1.023	1.000
RC	3.528	0.171	2	1.764	0.065	0.991	0.954	0.971	0.990
DC	0.874	0.646	2	0.437	0.000	0.998	0.988	1.021	1.000
CP	0.314	0.855	2	0.157	0.000	0.999	0.996	1.044	1.000

Source: Processed Data

Table 4 shows the results of the goodness of fit for each construct that is above the cut-off stated in each goodness of fit criterion. Therefore, the data can be analyzed further by building a structural model.

*Evaluate the Structure Model*

After performing the CFA test, design a structural model and analyze hypotheses. The following is the result of the structural model of AMOS.



**Figure 1.** Result of the Structural Model

Based on the evaluation of the structural model, the results show the goodness of fit, which meets the cut-off value shown in Figure 2. Besides that, the results obtained are **H1, H2, H4, H5, H6, H7, and H8 are accepted** and **H3 is rejected**. These results are explained in more detail in the following table.



**Table 5.** Results of Hypothesis Testing

Hypotheses/Path	Estimate	p-value	Result
H1: VL $\leftrightarrow$ RC	0.412	0.000	Accepted
H2: VL $\rightarrow$ CP	-0.046	0.601	Accepted
H3: RC $\rightarrow$ CP	-0.163	0.201	Rejected
H4: VL $\rightarrow$ DC	0.296	0.003	Accepted
H5: RC $\rightarrow$ DC	0.558	***	Accepted
H6: DC $\rightarrow$ CP	1.270	***	Accepted
Mediating Effect	Direct	Indirect	Mediation Type
H7: VL $\rightarrow$ DC $\rightarrow$ CP	-0.046	0.376	Full Mediation
H8: RC $\rightarrow$ DC $\rightarrow$ CP	-0.163	0.709	Full Mediation

Source: Processed Data

The results in Table 5 show the effects of VL, RC, and DC on CP. Based on the results of the data analysis, VL through DC has an effect of  $\beta=0.376$  on CP, while RC through DC has an effect of  $\beta=0.709$  on CP.

## Discussion

**H1 Accepted.** VL is related to RC. A leader can plan an organization to use technology to expand relationships by joining virtual communities. This virtual community allows organizations to share knowledge with other organizations. Conversely, technology affects a leader in carrying out his functions in management. This agrees with studies by [Comer \(2023\)](#) and [Ramírez-Solis et al. \(2022\)](#), where leaders need to control technological capabilities by encouraging external access to members of the organization to gain insights for solutions to problems.

**H2 Accepted,** VL has no significance on CP. Organizations, especially managers, as the driving force of technology, experience many failures in technology adoption. The failure of this technology adoption depends on several aspects, including technology in the context of leadership. This result aligns with those of previous studies ([Elbaz & Haddoud, 2017](#); [Hermawan et al., 2020, 2021](#); [Hermawan & Sari, 2020](#); [Najmi et al., 2018](#); [Sartono et al., 2021](#)). VL is crucial in achieving CP, but its role cannot be directly influenced.

**H3 Rejected:** RC has no significant effect on CP. Even though organizations perform joint product development with partners, the feedback and resources they have are not enough to convert to creativity. Organizations need more reliable functions to create products that meet customer expectations. This result aligns with the findings of [Aminu and Mahmood \(2015\)](#), which state that RC in intellectual capital cannot directly influence performance. [Pekovic et al. \(2020\)](#) stated that the organization planning cooperation in developing innovative products is complex and requires more specific capabilities. Product development with partners can be lucrative but costly.

**H4 Accepted:** VL has a significant effect on DC. When leaders can manage assets easily through the presence of technology and evaluate on a mobile and real-time basis, the organization will be able to build formulations, configurations, and elements used to facilitate the presence of innovation to reflect on the existence of DC. Studies by [Elidjena and Rukmanac \(2019\)](#) show that DC requires a strong leadership vision to optimize digital opportunities, create organizational sustainability and gain profits. Besides that, VL is needed for organizations to perform continuous learning to adapt to a changing business environment ([Mihardjo & Rukmana, 2018](#); [Salamzadeh et al., 2021](#)).

**H5 Accepted:** RC has a significant effect on DC. An organization has various ways to obtain

information and creative ideas, one of which is through stakeholders. Information obtained from various sources will encourage organizational sense in seizing opportunities. Meanwhile, creative ideas from outside the organization can be integrated with organizational resources to develop products. In addition, relations with partners are essential in research and development. Cooperation partners with specializations that the organization does not own will benefit and accelerate the organization in response to market changes. This result is in harmony with the study by [Hsu and Wang \(2012\)](#) and [Mamédio et al. \(2019\)](#), which states that long-term relationships fostered with partners and consumers can benefit from obtaining information and organizational development to improve performance.

**H6 Accepted:** DC has a significant effect on CP. Sensing capability as an organization's ability to monitor changes that occur in the market allows organizations to find new opportunities. The discovery of new opportunities will stimulate creative ideas for developing new products. However, sensing capability in every organization differs; therefore, organizational leaders must encourage their members to be more observant and active in listening and asking questions ([Santipiriyapon et al., 2020](#)). Learning capability, another aspect of DC, is implemented by processing information into new knowledge to build products and services. This information can be obtained from customers so that the organization can identify opportunities and anticipate errors that can lead to customer complaints. In addition, organizations that use and can integrate various past experiences will be able to answer problems with various creative solutions developed. This experience can be obtained from every organization member who has various knowledge. This aligns with the study ([Luan et al., 2016](#); [Wyer et al., 2010](#)). The hallmark of an organization with reconfiguration capability is being able to respond quickly to market changes.

**H7 Accepted:** DC can mediate VL on CP. The virtual communication space facilitated by the leader encourages its members to share knowledge and ideas. This virtual communication space can be a place for learning and combining knowledge to save on production operations and design creative solutions that suit consumer needs. If an organization can meet consumer needs, it will be able to minimize negative feedback from consumers. These results align with studies by [Nabi et al. \(2023\)](#) and [Najmi et al. \(2018\)](#), which found that leadership requires DC to have complete information and encourage the dissemination of knowledge to build creative thinking for organizational members.

**H8 Accepted,** DC can mediate RC on CP. RC makes stakeholders a resource that organizations can use to mitigate opportunities and risks. These external resources mean that organizations have more and more resources that can be reconfigured when developing creative products. In line with studies by [Abu-Rumman et al. \(2021\)](#) and [Singh et al. \(2023\)](#), a strong organizational network can encourage collaborative learning processes and the exchange of information. This process will increase inter-organizational DC in capturing new opportunities and, in turn, will improve organizational performance, especially in a competitive business environment.

## CONCLUSIONS

The findings of this study confirmed that VL did not significantly affect CP. Organizations can balance internal and external organizational resources through the perspective of DCT applied to creative industries. VL as an internal resource and RC as an external resource successfully mediated their role with DC to achieve CP. VL, RC, and DC can be a strategy for creative industries to increase sales targets. The practical contribution to this study is that managers need to encourage organizational members to take advantage of digital technology by creating virtual groups or holding meetings online. Today's digital technology can also send planning documents or work progress, provide instructions and reports, exchange information and opinions, and so on. Quality

and mutually beneficial relationships must be built with stakeholders. Managers can provide direction for organization members to be sensitive to customer feedback as information and evaluation. In addition, organizations must improve communication with suppliers to obtain important information about producing raw materials. Organizations can also build relationships by joining communities to expand their network.

Organizations should manage their resources using DC. Organizations should increase the sense of every organization member by actively learning, reading, and increasing curiosity. The learning process will increase knowledge so that organizations are rich in knowledge that can be combined or modified to develop creative products according to market needs. Digital technology and external networks provide organizations with diverse resources to reconfigure, especially when facing market demands or changes. Thus, this study can provide solutions for creative industries designing strategies by increasing DC.

### LIMITATIONS AND FURTHER RESEARCH

This study was conducted cross-sectionally, and further studies can test the same model longitudinally. In addition, future research can test the role of the variables in this study on other objects to overcome the limitations of generalization in this study. This study implements the theme of intellectual capital, especially relational capital. However, other aspects of intellectual capital, namely human capital and structural capital, have not been explained in this study; therefore, it becomes an alternative for developing models for future research.

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