

# The Impact Analysis of Digital Technology, Relational Capability, Innovation Capability, Organizational Learning on Organizational Agility and SME Performance

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**Abstract.** This research aims to analyze the relationship between digital technology capability, relational capability, innovation capability, organizational learning, on organizational agility and agility on financial performance, and innovation performance of small and medium enterprises (SMEs) in the processing industry sector in Java. This research is descriptive and uses a cross-sectional approach to obtain a deeper understanding of the influence between the contextual variables and business performance. This research collected the data from a survey with 206 respondents from SMEs. The data was processed by using the Partial-Least Square Structural Equation Modeling (PLS-SEM). The results of data analysis show that organizational agility mediates the digital technology capability, relational capability, innovation capability, and organizational learning variables on financial performance and innovation performance, specifically in product and process innovation. Organizational agility is critical for enhancing SMEs' performance by helping them to respond quickly to client requests, change production/service provision, make market judgments, and redesign the organization. It is critical to provide resources for digital technology, create complete digital technology competencies, and focus on relational, innovative, and learning capacities. Innovative product creation and process optimization can provide new value for SMEs.

**Keywords:** Agility, Digital Technology, Innovation Capability, Relational Capability, Organizational Learning, Performance, Digital Transformation, SMEs.

## 1 Introduction

In a complicated, uncertain, and competitive organizational environment, firms are compelled to adopt a more discerning approach toward changes to ensure their survival. Organizations are required to possess the ability to adapt and execute novel business strategies to endure and surmount rising obstacles, attain desired performance levels, and gain a competitive edge. The onset of the COVID-19 pandemic in Indonesia in March 2020 resulted in the closure of various sectors, including small and medium-sized enterprises (SMEs) [1]. Based on data from the Bank

of Indonesia, a staggering 87.5 percent of Indonesian micro, small, and medium enterprises (MSMEs) experienced adverse effects from the epidemic in 2021. In countries experiencing rapid growth, like Indonesia, small and medium-sized enterprises (SMEs) have demonstrated their significance as a crucial foundation for advancing the national economy and generating employment possibilities for a majority of the workforce. Indonesia has around 64.2 million small and medium-sized enterprises (SMEs), which account for 61.07 percent of the country's gross domestic product (GDP) [2]. The annual growth of small and medium-sized enterprises (SMEs) in Indonesia suggests that these businesses possess the capacity to make even greater contributions to the country's economy [3].

To have a competitive edge, companies must possess the ability to adapt to changes promptly and efficiently, particularly in a competitive setting characterized by swift technical advancements and digitalization [4][5][6]. Organizational agility is a crucial strategy that enables businesses to gain a competitive edge and successfully navigate problems arising from environmental changes [7][8]. The techniques employed by large-scale and small-scale enterprises vary due to the greater financial and material resources required by SMEs [9]. Organizational agility refers to a company's capacity to effectively respond and adjust to quick, ongoing, and uncertain changes while thriving in a competitive environment characterized by constantly shifting and unpredictable opportunities [4]. Companies must possess organizational agility to compete [10] [5] effectively.

Furthermore, agility is seen as highly significant for a company's innovation and competitive competitiveness [11]. Small and medium-sized enterprises (SMEs) have challenges due to their limited resources, which makes them more susceptible to competition and disruptions in the business environment. Consequently, they must exert considerable effort to adapt to changes in the business environment [12][13]. Therefore, further research on the topic of organizational agility in small and medium-sized enterprises (SMEs) is still required.

According to the Bank of Indonesia's report, a significant number of small and medium-sized enterprises (SMEs) were impacted by the epidemic. Nevertheless, a portion of the population, precisely 12.5 percent, remained unscathed by the economic repercussions of the Covid-19 pandemic. Additionally, a notable 27.6 percent experienced a surge in sales. The surge in sales can be attributed to the ability of SMEs to promote their products through online platforms and expand their range of offerings. These findings suggest that the presence of resources and capabilities, such as digital technology, allows firms to achieve agility, resulting in a beneficial effect on their overall organizational agility [5].

Moreover, the competitiveness of small and medium-sized enterprises (SMEs) can be enhanced by establishing a network of external connections to acquire external resources [14]. Prior studies indicate that small and medium-sized enterprises (SMEs) frequently depend on the ingenuity and inventiveness of their staff members to offset the limited financial means at their disposal [15][16].

Agility is not an inherent trait of organizations but rather a characteristic of the individuals inside them. The agility of an organization is contingent upon the level of agility exhibited by its individuals. Nevertheless, individuals within the organization are also influenced by the organizational environment, including factors such as culture, technology, and organizational structure [17]. The personnel of a corporation are considered a valuable, irreplaceable, and unique source of competitive advantage [18]. Competitive success relies on the ability to motivate personnel to respond to unpredictable market demands quickly and adaptably [19].

Therefore, the acquisition of knowledge and skills within an organization is necessary for its development and continued existence [20]. Hence, the purpose of this study is to examine the correlation between organizational capabilities, including digital technology capability, relational capability, innovation capability, and organizational learning, and organizational agility and performance within the specific context of small and medium-sized enterprises (SMEs) in Indonesia.

## **2 Literature Review**

### **2.1 Resource-Based View (RBV)**

The notion of Resource-Based View (RBV) emphasizes that firm performance is centered around resources, capabilities, and strategic assets, which serve as the key source of competitive advantage for a company or organization to adapt [21]. RBV resources refer to both tangible and intangible assets that are owned by a firm and can be utilized to develop and execute company strategies. Capability refers to the specific aspect of a company's resources that enables it to utilize the advantages provided by other resources effectively. RBV can explain the success and quick development of SMEs [22]. Despite being classified as firms with limited resources, several SMEs possess distinctive attributes that surpass those of their competitors, enabling them to provide superior value for clients more effectively than their larger counterparts [23]. The RBV theory serves as the basis for various characteristics pertaining to resources, such as organizational capabilities encompassing digital technologies, relationships, innovation, and organizational learning.

### **2.2 Dynamic Capability**

Dynamic capability refers to an organization's capacity to effectively integrate, develop, and adapt both its internal and external resources in response to a fast-evolving business landscape [24]. The notion of dynamic capability acknowledges that organizations operating in a dynamic environment must adopt a flexible approach towards their resources and competencies to establish a sustainable competitive advantage [25]. Companies must continuously enhance, adjust, and reorganize their internal and external capacities to accommodate the changing business landscape [6]. According to previous studies, dynamic capability enhances organizational effectiveness, speed, and efficiency in the face of environmental turbulence, leading to improved performance [26]. The number 27. According to the resource-based view (RBV), the organization's resources possess the qualities of being precious, scarce, non-imitable, and non-substitutable and play a crucial role in ensuring the organization's sustainability [21] within the framework of the Resource-Based View (RBV), an organization's resources can be classified as either tangible or intangible, with knowledge being one such resource. Multiple studies have incorporated organizational agility as a component of an organization's dynamic capability.

### **2.3 Digital Technology Capability**

Based on prior research, a company's technological competency refers to its capacity to transform current technology into new technology to manufacture products that align with

market demands [28][29]. Companies must consistently assimilate, duplicate, adjust, and enhance new technologies to develop technological competencies [30]. Two essential digital talents include proficient information management and adaptable IT infrastructure [31]. Proficiency in digital skills should encompass more than just information technology, extending to encompass specific technologies like social media and mobile platforms. Additionally, it should involve analytical abilities to effectively extract value from large datasets, such as employing and harnessing big data [32].

## **2.4 Relational Capability**

Relational talents pertain to an organization's aptitude in using external resources through social relationships, such as networking skills [33]. Relational competence refers to a company's aptitude for cultivating effective communication skills, fostering synergy, and effectively managing mutually advantageous business partnerships [34]. According to another definition, a company's relational aptitude refers to its capacity to establish, sustain, and enhance connections with numerous external partners [35]. The ability to build and maintain relationships is crucial for fostering innovation and creating value for customers [36]. Collaboration enables firms to readily access significant resources that contribute to the organizations' success.

## **2.5 Innovation Capability**

Innovation capability refers to the capacity to generate novel products using advanced technology, as all individuals involved in the organization strive to exploit opportunities present in the external environment [37][38][29]. Companies can enhance their competitive advantage by developing innovation skills [39]. Resourceful staff will have the capacity to generate novel products for the market. This pertains to the assertion [39], which states that the prosperity and competitive prowess of a corporation are contingent upon its capacity to generate novel value and engage in innovation. Companies possessing innovative capabilities have the potential to surpass their competition by achieving greater profitability, superior market value, and the ability to thrive in a bigger market [39].

## **2.6 Organizational Learning**

Continuous acquisition and creation of knowledge is a crucial competency for agile businesses to thrive and endure in a dynamic environment [40]. Organizational learning refers to the acquisition of both implicit and explicit knowledge by an organization through real-life events and interactions among its members [41]. Organizational learning refers to the process by which individuals within an organization acquire shared values and knowledge through their own experiences and the experiences of others [42]. Independent learning enhances job performance and supplements the utilization of recently acquired knowledge and abilities to accomplish organizational objectives [43]. Organizational learning can provide a competitive edge [44] by enhancing comprehension of events, trends, and market fluctuations, enabling the adoption of a more agile framework (compared to competitors) to address difficulties effectively [45][46].

## 2.7 Organizational Agility

Organizational agility refers to an organization's capacity to effectively navigate and adapt to unforeseen changes in the business environment by swiftly and creatively responding to them, using these shifts as opportunities for development and expansion [4]. The definition clarifies that both prompt and creative responses characterize agility. Agile firms can swiftly adjust their strategy and carry out diverse operations in order to respond and adapt effectively to environmental changes and difficulties [47]. An agile company is characterized by its ability to adapt and react swiftly to dynamic market situations [48]. An agile organization is characterized by its ability to promptly respond to change and effectively adapt to the demands of its surroundings, as determined by the conversation. Agility is linked to outstanding corporate performance and the capacity to endure in business situations characterized by instability, uncertainty, complexity, and ambiguity [5]. The number 49. Research has shown that small and medium-sized enterprises (SMEs) that possess organizational agility have seen enhanced financial performance. This is because the capacity to capitalize on possibilities promptly grants agile organizations a competitive edge, resulting in greater profits [50]. The user's text is "[51]." Organizational agility is strongly correlated with innovation performance. Agile organizations are more adept at implementing new ideas into business projects [52]. Moreover, agility plays a crucial role in enabling the successful implementation of new goods, processes, and business models by aiding in the adjustment to emerging markets and technologies [53][54].

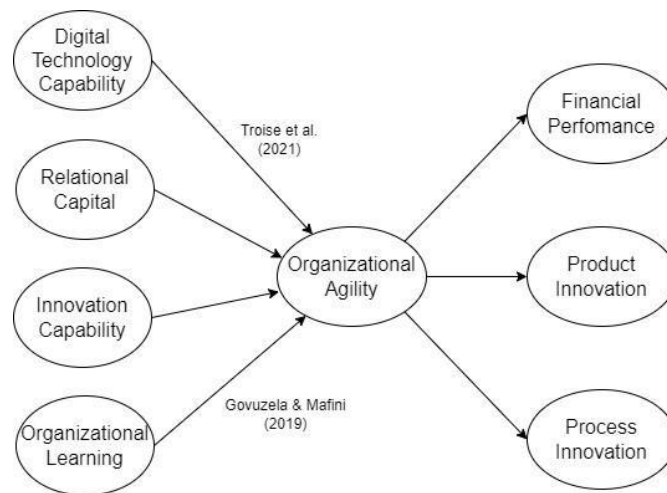
## 2.8 Model and Hypotheses Development

The purpose of this study was to gain a comprehensive understanding of how various research variables, such as digital platform capability, relational capability, innovation capability, and organizational learning, impact agility, financial performance, and innovation performance (specifically, product innovation and process innovation) of small and medium-sized enterprises (SMEs). The model was derived by adapting research findings from sources [55] and [56]. Based on the initial reference model [55], we incorporate three factors that contribute to agility: digital technology capability, relational capability, and innovation capability. We examine how these factors impact financial performance, product innovation, and process innovation. The text elucidates that agility is a key factor in the development of small and medium-sized enterprises (SMEs) and plays a crucial role in this process. Small and medium-sized enterprises (SMEs) should intensify their endeavors in cultivating these aptitudes to establish enduring businesses.

The second reference model is cited in [56]. This study seeks to examine the link mechanism between organizational learning and agility, which has yielded inconsistent findings [56]. This study investigated the correlation between agility and business performance by incorporating elements of agility such as digital technology, collaborative innovation, organizational learning, and internal alignment. The study reveals that small and medium-sized enterprises (SMEs) that possess the ability to generate, sustain, and transmit knowledge inside their organization exhibit remarkable adaptability. The interaction between SMEs and a volatile environment is deemed essential for the survival and success of the former [56].

Therefore, drawing on the studies, we put forward four factors that precede organizational agility. Firstly, the competency of digital technology is assessed based on the availability of technology and the adaptability of the total technology infrastructure. Furthermore, relational competence refers to the ability to establish and sustain relationships with business partners.

Furthermore, the ability to innovate is influenced by both the level of business innovation and the degree of integration of innovation with business activities. Fourthly, organizational learning refers to the acquisition of both implicit and explicit knowledge by an organization through real-world experience and interactions among its members. Given the information provided, we suggest a theoretical framework that concentrates on four factors that precede open access (OA) and three resulting consequences. Figure 1 illustrates the research model.



**Fig 1.** Theoretical Framework

## Hypotheses

### 1. Digital Technology Capability and Organizational Agility

Organizational performance is impacted by digital technology through its influence on organizational agility capabilities [57]. Most of the research indicates that digitization enhances agility [58][59]. However, additional research has discovered a contrasting correlation, in which agility is a determinant that impacts the use of digital technologies [60]. Prior research has demonstrated that both national and industry-level digitization, as well as digitalization at the firm level, have an impact on the agility of small and medium-sized enterprises (SMEs) [61][62]. The integration of digital technology into business has a significant impact on strategy, procedures, and ultimately the performance of small and medium-sized enterprises (SMEs) [63][64]. These capabilities are sometimes referred to by academics as IT capabilities, digital capabilities [65], or digital technology capabilities [66]. Based on the discussion, the following hypothesis is formulated:

H1: Digital technology capability has a positive effect on organizational agility in SMEs.

### 2. Relational Capability and Organizational Agility

Relational aptitude, which refers to the ability to establish and sustain relationships both within and outside an organization, has a significant influence on strategy and market agility [67][68].

Partners' knowledge, facilitated by digital technology, promotes agility [69]. Utilizing digital technology to coordinate with external entities has been shown to positively influence agility at both the operational and strategic levels [70]. SMEs often rely on external resources to make up for their limited internal resources, which is a defining feature [71]. Multiple studies have discovered that small and medium-sized enterprises (SMEs) utilize external networks as a tactic to enhance their agility [72][14]. Developing social connections, handling external communications, and exchanging knowledge have a beneficial influence on the agility of small and medium-sized enterprises (SMEs) at the operational, customer, and strategic levels [68]. Based on the discussion, the following hypothesis is formulated:

H2: Relational capability has a positive effect on organizational agility in SMEs.

### 3. Innovation Capability and Organizational Agility

Multiple studies have emphasized the significance of incorporating new initiatives across the whole organization [73]. While certain research contends that new initiatives have a higher chance of success when they are distinct from the main organization [74], other studies indicate that this is only applicable in circumstances of significant product innovation [5]. Innovation capacity refers to an organization's ability to effectively introduce new elements through innovation, risk-taking, and entrepreneurial orientation. It also involves the ability to integrate these elements into the company [5]. Multiple studies emphasize the challenge faced by small and medium-sized enterprises (SMEs) in cultivating innovative capabilities because of their constrained resources [72]. Nevertheless, small and medium-sized enterprises (SMEs) have the potential to cultivate both ambidexterity and creative capabilities by leveraging external resources [14] or internal human resources [15][16]. Within small and medium-sized enterprises (SMEs) that effectively cultivate creative capacities, there is also an evident capacity to adapt and adjust organizational competences and practices [75]. The article [55] emphasizes that the entrepreneurial orientation and absorptive capacity of small and medium-sized enterprises (SMEs) are essential requirements for agility. The integration of new practices with the existing resources and capabilities inside the company facilitates the development of new products and services, entry into new markets, or the reevaluation of business models [5]. Based on the explanation, the following hypothesis is formulated:

H3: Innovation capability has a positive effect on organizational agility in SMEs.

### 4. Organizational Learning and Organizational Agility

Organizational learning is thought to enhance firms' ability to identify opportunities and consistently pursue innovation in order to establish enduring compatibility with the environment [76]. Organizational learning plays a crucial role in enhancing organizational agility, particularly in business companies inside the United States [77]. A separate study carried out in Jordan discovered that a company's capacity for acquiring knowledge results in enhanced organizational agility [78]. Moreover, a study carried out in UK firms indicated a favorable correlation between organizational agility and organizational learning [79]. Similarly, their research in small manufacturing organizations in the United States [80] reveals a correlation between organizational learning and organizational agility. Based on the discussion, the following hypothesis is formulated:

H4: Organizational learning has a positive effect on organizational agility in SMEs.

#### 5. Organizational Agility and Financial Performance

Prior research demonstrates the beneficial influence of organizational agility on firm performance. The authors of the study [8] assert that agility enhances a company's competitive advantage. Moreover, a study conducted by [81] revealed that the capacity to promptly and adeptly identify and address opportunities and risks has a beneficial impact on organizational performance in volatile contexts. Agility exerts a beneficial impact on financial performance [5]. The financial performance has been observed to have positive impacts in terms of operational [82], strategic [83], and market agility [84]. Multiple research findings indicate that in turbulent environments, agility has a beneficial impact on financial performance [85][83]. Furthermore, agility enables small and medium-sized enterprises (SMEs) to effectively use their knowledge, resulting in enhanced performance [86]. Based on the discussion, the following hypothesis is formulated:

H5: Organizational agility has a positive effect on financial performance in SMEs.

#### 6. Organizational Agility and Innovation Capability

As stated before, agility has a beneficial influence on various elements of performance, particularly in volatile circumstances [5][8][81]. Agility enables the development of new business models, product innovation, and process innovation [87][88][61]. Moreover, a study conducted by [46] has discovered that agility enhances the innovation performance of innovative companies by enabling ambidexterity. In respect to small and medium-sized enterprises (SMEs), a study conducted by [86] discovered a favorable correlation among SMEs in Europe. Additionally, [67] observed that agility promotes gradual learning and innovation inside small businesses. The concept of product and process innovation is differentiated [89][90]. Nevertheless, most of the research fail to consider the influence of organizational agility on the two distinct forms of innovation in small and medium-sized enterprises (SMEs) individually [86]. Based on the discussion the following hypothesis is formulated:

H6: Organizational agility has a positive effect on product innovation in SMEs.

H7: Organizational agility has a positive effect on process innovation in SMEs.

### 3 Methodology

The population under study consists of small and medium-sized enterprises (SMEs) located on the Java Island of Indonesia, with a particular focus on SMEs functioning in the processing industry sector. Therefore, the subject of examination in this study is small and medium-sized enterprises (SMEs). This study employs a non-probability sampling approach, specifically utilizing a purposive sample technique. Researchers disseminated questionnaires through digital platforms and administered online surveys to business owners and managers of small and medium-sized enterprises (SMEs). The questionnaire creation process commenced by establishing a theoretical framework and study environment pertaining to activities within the small and medium-sized enterprise (SME) sector. This study employed a measurement tool that was derived from a six- point Likert scale. The survey participants' responses were quantified



using a standardized scale, which ranged from one (indicating strong disagreement) to six (indicating strong agreement). Initially, we administered a linguistic assessment to a group of five individuals possessing attributes identical to those of the intended participants. Their task was to review the questionnaire and offer their insights. By incorporating this supplementary measure, we were able to refine the questions and improve the clarity and comprehensiveness of the test's language. Subsequently, we proceeded with the primary examination by distributing the questionnaire. The survey data was analyzed using the SEM-PLS approach, specifically utilizing Partial Least Squares Structural Equation Modeling. This approach emphasizes variance analysis and was conducted using the SmartPLS 3.2.9 software.

### **3.1 Operationalization of Variables**

To assess the competence of digital technology (DTC), we have utilized two specific dimensions: IT infrastructure flexibility (IF) and application digital technology (ADT). In line with previous research [91][92][5][93], the initial dimension was assessed using a six-item scale. The second factor was quantified by evaluating the quantity of digital technology employed by the SMEs. More precisely, we requested them to specify the technologies that have been implemented in their firm, namely electronic commerce/marketplace, business intelligence, artificial intelligence, mobile computing, social media, and digital platforms. The measurement of the digital technology variable in the application is done using a binary variable. Assuming the business actor incorporates digital technologies, such as artificial intelligence, business intelligence, e-commerce/marketplace, mobile computing, social networking, and digital platforms, into their firm. Under those circumstances, the respondent is assigned a score of 1, while a score of 0 is given if the business actor does not utilize digital technology. This metric was derived from prior studies [94][5][11].

The categorization of relational capability (RC) was based on the four criteria outlined by [95], while the classification of innovation capability (IC) was derived from the research conducted by [5]. The latter was determined by two factors: firm innovativeness (FI), which was measured using six items adapted from [73], and coupling (COUP), represented by another set of six items. The operationalization of organizational learning (OL) was based on the four items identified in reference [83]. Consistent with previous research [87][96], we assessed Organizational agility (OA) using a composite measure consisting of six questions. The financial performance (FP) was assessed using a scale employed in a previous study, comprising five components [87][97][67]. This decision aligns with previous scholars who advocated for and utilized subjective evaluation to measure the performance of the company [98][99]. According to [87], previous researchers have shown that subjective performance measurements can be used as a reliable substitute for objective performance indicators. The measurement of both product innovation (PROD) and process innovation (PROC) was conducted using the items provided by [90]. PROD was measured using five things, while PROC was measured using four items.

### **3.2 Data analysis and hypotheses testing**

Utilizing the customary method for PLS-SEM [100], we conducted a data analysis employing a two-step procedure: (1) evaluating the accuracy of the outer (measurement) model, and (2) assessing the prediction capability of the inner (structural) model. To assess the accuracy of the outer model, we conducted a test on the dependability of the indicators. Our findings revealed that none of the items had an outer loading below the minimal threshold of 0.6 [100]. All the constructions have demonstrated good reliability, as indicated by their Cronbach Alpha and Composite Reliability [100] scores, which are all over 0.7. The constructs successfully pass the

Convergent validity test, and the Average variance extracted (AVE) consistently exceeds 0.50 [100]. According to the data presented in Table 1, our ultimate model successfully satisfies all the validity checks for the measurement model. To evaluate the accuracy of the Structural Model, we conducted an analysis based on [100]. This involved examining the structural path coefficients, which were determined using bootstrap methodology. Additionally, we verified the predictive strength of the components by assessing the R2 values. The coefficient of determination (R2) for the endogenous constructs is presented in Table 1. Utilizing the values proposed by [100], we observe a weak predictive capability for PROC (0.503) and a strong predictive capability for OA (0.773), along with a moderate predictive capability for the remaining two endogenous variables. All our hypotheses have been substantiated by our investigation. Organizational agility (OA) is significantly influenced by direct-to-consumer (DTC) with a coefficient of 0.218, resource configuration (RC) with a coefficient of 0.136, information capabilities (IC) with a coefficient of 0.132, and organizational learning (OL) with a coefficient of 0.459. Simultaneously, OA has a significant beneficial impact on FP (0.772\*\*\*), PROD (0.760\*\*\*), and PROC (0.709\*\*\*). Table 2 displays the outcomes of hypothesis testing, while the corresponding data are displayed in Figure 2.

**Table 1.** Discriminant Validity

<b>Indicator</b>	<b>DTC</b>	<b>RC</b>	<b>IC</b>	<b>OL</b>	<b>OA</b>	<b>FP</b>	<b>PROD</b>	<b>PROC</b>
IF1	<b>0,898</b>	0,734	0,746	0,722	0,698	0,566	0,561	0,542
IF2	<b>0,915</b>	0,736	0,72	0,76	0,747	0,632	0,596	0,556
IF3	<b>0,925</b>	0,727	0,761	0,725	0,736	0,633	0,643	0,613
IF4	<b>0,85</b>	0,647	0,668	0,653	0,639	0,609	0,584	0,551
IF5	<b>0,875</b>	0,767	0,723	0,758	0,769	0,693	0,67	0,64
ADT-BI	<b>0,754</b>	0,157	0,172	0,124	0,157	0,115	0,153	0,145
ADT-ECOM	<b>0,731</b>	0,055	0,1	0,105	0,078	0,144	0,104	0,137
ADT-PLATDIG	<b>0,636</b>	0,133	0,15	0,127	0,154	0,135	0,087	0,085
RC1	0,747	<b>0,901</b>	0,759	0,743	0,698	0,679	0,642	0,62
RC2	0,74	<b>0,927</b>	0,757	0,703	0,708	0,642	0,659	0,641
RC3	0,771	<b>0,93</b>	0,743	0,74	0,745	0,653	0,63	0,597
RC4	0,731	<b>0,912</b>	0,705	0,686	0,709	0,626	0,626	0,597
FI1	0,566	0,525	<b>0,777</b>	0,513	0,498	0,507	0,522	0,516
FI2	0,592	0,587	<b>0,759</b>	0,594	0,625	0,521	0,53	0,425
FI3	0,696	0,748	<b>0,821</b>	0,675	0,701	0,614	0,645	0,558
FI4	0,721	0,682	<b>0,829</b>	0,638	0,641	0,573	0,623	0,558
FI5	0,763	0,722	<b>0,851</b>	0,717	0,685	0,679	0,666	0,655
COUP	0,475	0,493	<b>1</b>	0,445	0,452	0,47	0,431	0,418
OL1	0,729	0,677	0,687	<b>0,872</b>	0,712	0,721	0,642	0,632
OL2	0,71	0,69	0,701	<b>0,895</b>	0,749	0,736	0,717	0,713
OL3	0,742	0,702	0,7	<b>0,91</b>	0,73	0,738	0,733	0,71
OL4	0,728	0,718	0,655	<b>0,886</b>	0,812	0,724	0,646	0,625

OA1	0,712	0,676	0,631	0,748	<b>0,834</b>	0,666	0,638	0,537
OA2	0,642	0,636	0,632	0,692	<b>0,837</b>	0,632	0,574	0,603
OA3	0,719	0,66	0,683	0,672	<b>0,876</b>	0,641	0,61	0,611
OA4	0,715	0,677	0,656	0,771	<b>0,898</b>	0,707	0,698	0,632
OA5	0,739	0,699	0,765	0,732	<b>0,88</b>	0,671	0,693	0,616
OA6	0,705	0,712	0,663	0,782	<b>0,887</b>	0,702	0,733	0,691
FP1	0,6	0,587	0,592	0,751	0,664	<b>0,824</b>	0,787	0,787
FP2	0,593	0,562	0,591	0,677	0,648	<b>0,874</b>	0,714	0,71
FP3	0,629	0,66	0,63	0,725	0,7	<b>0,919</b>	0,702	0,738
FP4	0,671	0,69	0,726	0,739	0,714	<b>0,903</b>	0,738	0,718
FP5	0,658	0,643	0,664	0,75	0,703	<b>0,925</b>	0,755	0,748
PROD1	0,643	0,609	0,671	0,702	0,7	0,727	<b>0,871</b>	0,741

Indicator	DTC	RC	IC	OL	OA	FP	PROD	PROC
PROD2	0,605	0,622	0,63	0,699	0,68	0,761	<b>0,904</b>	0,847
PROD3	0,64	0,653	0,65	0,746	0,716	0,786	<b>0,909</b>	0,834
PROD4	0,619	0,651	0,682	0,675	0,664	0,733	<b>0,914</b>	0,782
PROD5	0,577	0,58	0,645	0,605	0,636	0,706	<b>0,877</b>	0,799
PROC1	0,592	0,595	0,625	0,682	0,65	0,802	0,835	<b>0,926</b>
PROC2	0,571	0,613	0,59	0,602	0,618	0,686	0,776	<b>0,901</b>
PROC3	0,654	0,646	0,661	0,753	0,685	0,788	0,857	<b>0,935</b>
PROC4	0,61	0,613	0,599	0,729	0,661	0,789	0,829	<b>0,928</b>

**Table 2.** Hypothesis Testing

	Hypothesis	Sample Mean (M)	T-statistics	p-value	Data supports the hypothesis?
<b>H1</b>	Digital Technology Capability → Organizational Agility	0,211	2,55	0,011	Yes
<b>H2</b>	Relational Capability → Organizational Agility	0,134	2,216	0,027	Yes
<b>H3</b>	Innovation Capability → Organizational Agility	0,134	2,016	0,044	Yes
<b>H4</b>	Organizational Learning → Organizational Agility	0,468	5,876	0,000	Yes
<b>H5</b>	Organizational Agility → Financial Performance	0,774	22,791	0,000	Yes
<b>H6</b>	Organizational Agility → Product Innovation	0,763	17,760	0,000	Yes

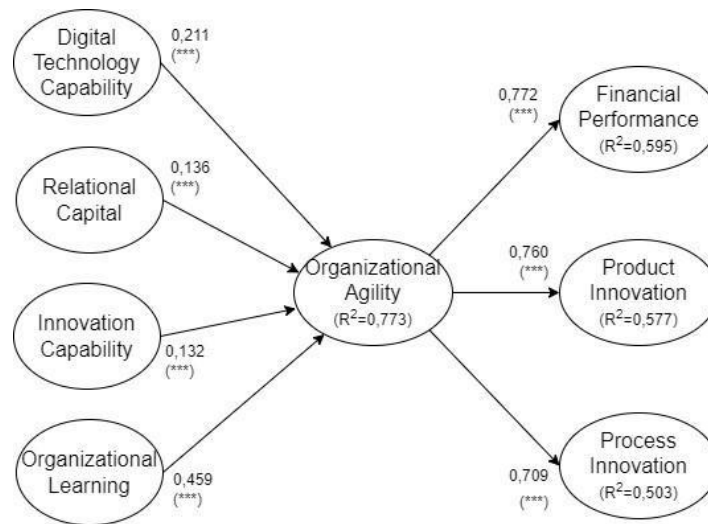


Fig.2 Results of The Model Evaluation

#### 4 Findings and Discussions

The research aims to enhance the existing understanding of the factors that precede and the results that follow Organizational Agility. We have obtained empirical evidence that confirms our theoretical reasoning, and the data have substantiated our hypotheses. The findings of this study indicate that digital technologies, relational capability, innovation capability, and organizational learning are four important factors that contribute to the development of Organizational Agility. These four factors have a favorable impact on Organizational Agility and demonstrate that agility is a trait that arises from a combination of qualities [101]. Small and medium-sized enterprises (SMEs) who possessed greater competencies were able to improve their organizational agility. Based on our analysis of H1 to H7, we have determined that the four skills examined have a beneficial impact on the Organizational Agility of SMEs. This underscores the significance of these capabilities in the development of Organizational Agility for SMEs. These findings validate previous research and demonstrate that the relationships studied in different types of companies also apply to SMEs. The capabilities of digital technologies, relational skills, innovation, and organizational learning are crucial for companies as they can impact their ability to adapt to uncertain environments [5][59].

Additionally, our research emphasizes the significance of organizational agility in influencing a company's success. The results demonstrate a consistent empirical correlation between Organizational Agility and beneficial effects on both financial performance and innovation performance, specifically in terms of product and process innovations. The findings corroborate our hypotheses H5, H6, and H7, illustrating that the implementation of organizational agility

positively impacts the performance of small and medium enterprises (SMEs). Our research validates the importance of Organizational Agility in impacting firm performance, particularly in terms of financial and innovation outcomes. This demonstrates that Organizational Agility not only enables companies to navigate the difficulties of an uncertain and complex world but also helps them achieve superior performance. This study provides further support for previous empirical findings on the relationship between digital technology capability, relational capability, and innovation capability as factors that precede Organizational Agility.

Additionally, it examines the impact of organizational agility on the financial performance and innovation of both products and processes within small and medium-sized enterprises (SMEs). According to the study conducted by [55], digital technology competency, relational capability, and innovation capability have an impact on Organizational Agility, which in turn affects the financial performance and product and process innovation in small and medium-sized enterprises (SMEs) in Europe. Subsequent investigation conducted by [56] demonstrates that organizational learning has a direct impact on both organizational agility and the performance of small and medium-sized enterprises (SMEs).

Furthermore, this study demonstrates that Organizational Agility in the context of Indonesian SMEs has a direct and favorable impact on the financial performance, product innovation, and process innovation of SMEs in the processing industry. Additionally, there is an indirect and positive influence from digital technology capability, relational capability, and organizational learning. These two findings help enhance understanding of the impact of Organizational Agility on organizational performance in the context of small and medium-sized enterprises, particularly in emerging markets. The examined factors reveal the determinants that shape a company's Organizational Agility, specifically the capabilities of small and medium-sized enterprises (SMEs) that impact their ability to achieve agility. This study contributes to the existing research on organizational agility by concentrating on less explored types of companies, namely SMEs, and by introducing a new factor called digital technology capability. This study establishes a connection between this skill and Organizational Agility and discovers a substantial and favorable correlation. The antecedents analyzed in this study contribute to the emerging body of research on capabilities that improve the Organizational Agility of companies.

In our research, we examine the impact of Organizational Agility on three distinct outcomes: financial success, product innovation, and process innovation. This work also has some noteworthy practical consequences. Empirical evidence indicates that the ability to utilize digital technology catalyzes enhancing Organizational Agility. Entrepreneurs and executives of small and medium-sized enterprises (SMEs), especially those in the field of information technology (IT), should recognize the crucial significance of this competence in driving their companies towards enhanced agility. Business actors could promptly address consumer needs, adjust production or service provision to accommodate fluctuating demands, swiftly make decisions in response to market developments, and continually seek opportunities to restructure the organization. Therefore, they should intensify their endeavors to enhance this capacity for fostering Organizational Agility, as indicated by this study's findings. Digital technologies possess significant potential to decrease costs for small and medium-sized enterprises (SMEs) and enhance their contact with stakeholders, as well as enable the adoption of new and adaptable business models [102]. Considering the limited resources available to these organizations [103], these technologies have the potential to contribute to their growth significantly. Therefore, it is crucial to create appropriate competencies to enhance Organizational Agility. The generation of innovative concepts during the product development and process enhancement stages, through

a thorough analysis of the market, enables SMEs to meet consumer demands successfully and efficiently, hence generating new value.

The results also indicate that the ability to build and maintain relationships, the ability to innovate, and the ability to learn inside an organization are effective factors in improving its agility. This reinforces the notion that organizations should cultivate a culture that emphasizes strong relationships, innovation, and continuous learning [55][14][5][56]. Our study emphasizes the importance for SMEs to cultivate these competencies to confront the current demanding scenario that characterizes the unpredictable economic climate and establish long-lasting firms. Increased capabilities have the potential to improve the agility of an organization, which in turn has a direct impact on the firm's innovation and financial performance. Therefore, it is recommended that founders and managers of small and medium-sized enterprises (SMEs) prioritize the factors that contribute to Organizational Agility. By doing so, they may effectively develop the necessary skills and implement targeted modifications to attain exceptional performance [87]. To optimize these abilities and enhance both the effectiveness and swiftness of responses to fluctuations in a volatile and unpredictable environment, small and medium-sized enterprises (SMEs) should adopt targeted initiatives designed to construct these abilities proficiently and triumphantly. SME founders/managers can facilitate the improvement of capabilities by implementing targeted training programs and carefully strategizing the development of these essential skills. This process may take some time [5]. Small and medium-sized enterprises (SMEs) need to prioritize a long-term perspective and emphasize their corporate culture. Specifically, they should transition towards a culture that is centered around digitalization, building relationships, and fostering innovation.

Management teams and corporate executives today may prioritize Organizational Agility and the cultivation of strategic skills. Additionally, our discoveries offer valuable insights for governments, legislators, public institutions, and authorities. These players actively strive to establish advantageous circumstances for the expansion of small and medium-sized enterprises (SMEs) and encourage their progress, paying careful attention to factors that eventually impact the success of these organizations. Hence, comprehending the circumstances that facilitate firms to become more agile and subsequently enhance their performance empowers these entities to establish more efficient strategies to promote and foster practices or cultivate targeted talents. These actors should enhance their efforts to implement targeted initiatives that assist companies in actively utilizing digital technology and encourage companies to adopt innovative practices and foster relationships. Simultaneously, enterprises can reap advantages from the implementation of incentives and tax exemptions to promote and encourage their adoption of digitalization, so motivating them to invest in digital technologies.

## **5 Conclusions**

The results indicate that Digital Technology Capability has a favorable impact on Organizational Agility. Digital Technology Capability in this research refers to the capacity of the current IT infrastructure to effectively support diverse information, system development, and uninterrupted IT operations with minimal effort and time (IT flexibility infrastructure). By employing a flexible IT infrastructure, small and medium-sized enterprises (SMEs) can enhance their organizational agility, enabling them to respond to changes promptly and innovatively in the business environment. This includes spotting market trends, and consumer wants and swiftly adjusting their business systems and procedures. Moreover, Relational Capability exerts a

beneficial impact on Organizational Agility. Relational Capability refers to the aptitude of small and medium enterprises (SMEs) to establish robust connections with both internal and external stakeholders. By possessing these qualities, small and medium-sized enterprises (SMEs) can acquire the necessary resources, enabling them to cooperate and promptly adapt to dynamic market requirements. Innovation Capability and Organizational Learning exert a beneficial impact on Organizational Agility. The adoption of new ideas and encouragement of innovative behavior by small and medium-sized enterprises (SMEs) enhances their innovation capability. This capability allows businesses to execute and adapt innovations in response to changes in the business environment swiftly and effectively. Small and medium-sized enterprises (SMEs) that acquire organizational learning from the practical experiences of individuals inside the organization can enhance their agility by effectively developing and transferring knowledge.

Organizational agility has a beneficial impact on Financial Performance, Product Innovation, and Process Innovation. When SMEs have organizational agility, the operations and business processes carried out prioritize effectiveness and efficiency, which have the effect of adapting to environmental changes so that they can quickly capture market opportunities. Furthermore, agile small and medium-sized enterprises (SMEs) can address customer demands promptly and flexibly and adapt to potential shifts in the business landscape. Given the constraints of limited resources for small and medium-sized enterprises (SMEs), adopting this approach will enhance the organization's capacity to generate ideas and innovate new goods, catering to both new and existing client demands. SMEs can enhance their operational processes with greater effectiveness and innovation by implementing organizational agility in their operations and business processes. Agile firms possess the ability to rapidly innovate and enhance work processes by developing novel methodologies. This enables them to effectively address consumer needs and maintain a competitive edge in a dynamic market.

There are various constraints associated with this study. Each digital technology possesses distinct attributes and can generate diverse outcomes or advantages. Furthermore, there could be moderating factors that come before organizational agility, as well as between organizational agility and SME performance, such as dynamic markets and organizational culture. This study examines several kinds of small and medium-sized enterprises (SMEs), namely those operating in processing industries such as culinary, fashion, crafts, and others. Consequently, the findings of this research cannot be extrapolated to all SME sectors due to the unique features exhibited by each sector. Subsequent research endeavors can focus on these constraints.

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