

## Dynamic capabilities for leading industries: proof of export commitment of chocolate products

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### Abstract

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The objective of this research is to create a model of industrial competitive advantage. Sample of respondents in 40 chocolate industries in East Java, Indonesia, using purposive sampling. The Structural Equation Model (SEM) is used in conjunction with the Partial Least Square (PLS) analysis to evaluate the hypothesis that the competitive advantage factor serves as an intervening variable between dynamic capacity factors and corporate performance variables. The dynamic capability variable has a considerable positive influence on the performance variable of the company, which is mediated via the competitive advantage variable. There is still a paucity of studies demonstrating the relationship between dynamic skills and competitive advantage and none that uses competitive advantage factors to mediate the connection between dynamic capabilities and industry performance. Dynamic capabilities may be obtained by boosting technical innovation, product innovation, employee skills, industrial capital and product development, quality, service, new business transformation and industrial export strength to assure outstanding industry performance. This approach can be implemented by nations with comparable resources and support for similar socio-political practices. This article is innovative in that it combines the nine-factor model with the diamond porter model, which is the most recent notion of academics for developing a competitive advantage model for the East Java chocolate sector in Indonesia.

**Keywords:** Dynamic Capabilities; Competitive Advantage; Industry Performance; Nine Factors; Porter Diamond.

### Introduction

The agricultural industry has a crucial position for countries around the world, because it is believed to be closely related to many aspects of national development. The reality is (1) agriculture is the basis of food security (Gebbers, et al., 2010), in keeping with the rising demand for food caused by population expansion and global consumption. (2) Data from the World Bank for 2019 indicate that the average proportion of a country's yearly GDP, contributed by the agriculture

sector exceeds >30% (Chen et al., 2020) building, and transportation industries. The implementation of reducing energy consumption should be without costing the agricultural production, which is closely related to the food security of human beings. Strong decoupling between energy consumption and economic growth indicates the former decreases while the latter grows, which should be pursued by nations. Therefore, as the first research objective, this study analyzed the decoupling statuses between energy consumption and economic growth in the agricultural industry of 89 countries whose

data exist across the period of 2000 to 2016. As a result, only 18 countries have reached strong decoupling. Secondly, this study decomposed agricultural energy consumption in the 89 countries to the effects of a driving factor (i.e., agricultural economic output. (3) the development of the agricultural industry encourages an increase in the level of employment of a country (Kołodziejczak, 2020) assessment of GVA per 1 person employed in the investigated sectors and its changes in the analysed years, and assessment of the scale of surplus employment in agriculture assuming that GVA per 1 person employed in this sector would be equal to the average level reached in the industry and the services sectors. Comparative analysis and the deduction method were used in the study. Correlation coefficients between the level of employment in individual sectors and GVA per 1 person employed in the time series covering the years 2000-2008 were also calculated. A new measure of the "goal" of employment reduction in agriculture has been proposed, related to the measurement of the distance between agriculture and other sectors in terms of GVA generated per 1 employed-the Excess Employment Rate In The Agricultural Sector (EERAS. (4) Agriculture may be a significant influence in eliminating poverty in a country (Cervantes-Godoy & Dewbre, 2010). This can move the country in a beneficial direction, notably toward an expanding national economy.

One of the producers of chocolate, who may contribute to the national economy is East Java. Land in East Java is suitable for growing cocoa. This is a comparative advantage of the East Java province and a resource, which is blessed in sustaining the raw materials supply for the chocolate industry to continue operating. This assertion is consistent with studies done by (Zou et al., 2003). The ongoing growth of the processed cocoa sector will give the potential to export cocoa in a processed form with a higher added value than exports of cocoa in the form of fermented beans (Harya et al., 2019). The government launched policy assistance for the chocolate business in the early 2000s.

The growth of this industrial group, which is becoming more dynamic on a worldwide scale, need the capacity to survive and remain competitive. One of the primary markers of an industry's capacity to thrive and remain competitive is its dynamic capability. Dynamic Capabilities allow a corporation to more accurately match with the market. In order to attain a company's competitive edge, it is frequently required to reallocate resources in order to develop dynamic capabilities that are both efficient and effective and then to employ these skills in an appropriate manner (Drnevich & Kriauciunas 2011; Li & Liu 2014). The capacity of an industry to intellectualize and explain its resources, as well as to learn and adapt to quickly changing contexts, called opera-

tionalize dynamic capabilities (Wang & Ahmed, 2007).

Concerning the dynamic capabilities of the chocolate business, it must be investigated in detail. In 2009, the installed capacity of the domestic chocolate industry hit its lowest point in history, at 54%. This was the most difficult moment in the sector's history. The implementation of the export duty policy has had a significant effect on the growth of the domestic chocolate sector, resulting in an increase in production capacity. (Finance Ministry of Indonesia Republic, 2011). The notion of competitive advantage must be reviewed to see whether this will have a beneficial influence on the growth of the chocolate sector in the next year. Michael E. Porter is among a large number of economists and experts in their own domains, one of which is related competitive advantage. According to Porters (Porter, 1980; Stonehouse & Snowdon, 2007) understand its competitors and its own position, and translate this understanding into a competitive strategy to allow the firm to compete more effectively to strengthen its market position. The introduction reviews a classic approach to strategy formulation, one that comprises a combination of ends and means (policies) There are two fundamental reasons for assessing the competitive advantage of a corporation. The first is the sector's allure, which is demonstrated by the sector's long-term profitability. The second is an examination of the numerous elements that will affect the company's standing in the industry. Porter's argument, refined by (Cho & Hwuy, 2000) through a nine-factor model (*Nine Factors Model*), which begins with Porter's Diamond Model's central query: Why are certain businesses constantly innovative, capable of overcoming challenges and motivated to pursue improvements? The solution is related to the qualities that each country runs for their industry. Based on the background description, a research question emerges on the extent to which dynamic skills support the chocolate industry's competitive advantage for its continued existence. In order to establish if competitive advantage activities may raise industry performance, it is assumed that if the chocolate industry can attain dynamic capabilities and determine competitive advantage effectively, this would result in higher industry performance.

## 2. Literature Review

### 2.1. Competitive Strategy Concept

Competitive strategy is the science of strategic management. Several experts have succeeded in writing books that discuss this competitive strategy, including Porter (1991), Hunger and Wheelen (2012) and David (2017) that principally state that competitive strategy is an attempt to find and improve a profitable competitive position in an industry (the fundamental arena, where competition takes place), or

certain market segments. Competitive strategy addresses the problem of how companies and their units can compete in businesses and industries to achieve competitive advantage. Referring to the statement above, it can be concluded that competitive strategy is a series of integrated and coordinated actions that are used as the main basis for thinking in making strategies to gain competitive advantage carried out by a company in winning a market, which is its target market by providing competitive advantages, analyzing competitors and implementing an effective competitive strategy.

## **2.2. Porter's Diamond Model**

(Porter, 1990 & 1991), explained that an industry in an area excels not from its own success, but from group success with the existence of linkages between companies and supporting institutions. In industrial clusters, the companies involved are not only large and medium companies, but also small companies. Porter introduces the theory of a company's competitive ability which is classified in Porter's Diamond Model as follows:

### **a. Condition Factors**

The resources owned by a company is a production factor that is very important to compete. Factor conditions, or input factors in Porter's analysis are variables that already exist and are owned by an industrial cluster. There are five groups in the resource factor. First, human resources, which include the number of workers, managerial capabilities and skills possessed, work ethics and applicable wage levels. Second, capital resources, which include the amount and costs, sources of capital, accessibility to financing, as well as the condition of financial institutions and banking. In addition, regulations, such as financial regulations, monetary regulations and fiscal regulations are also needed. The third is natural resources, which include cost, accessibility, quality and size. Natural resources must also include the availability of water, minerals, energy, weather and climate conditions, geographical area, topographical conditions as well as agricultural, fishery and marine resources, plantations, forestry and other resources. Fourth, science and technology resources are resources that include the availability of market knowledge, technical knowledge, scientific knowledge that supports the production of goods and services. The fifth is infrastructure resources consisting of the availability of types, quality and cost of using infrastructure.

### **b. Request Conditions**

Demand conditions are a determining factor for industrial competitiveness, especially the quality of domestic demand. The quality of domestic demand is a learning tool for domestic companies to compete in the global market. There are three factors of demand conditions that affect industrial

competitiveness. The first is for the composition of domestic demand. The second is the amount of demand and the pattern of domestic growth affect the level of domestic competition mainly due to the number of free buyers, the growth rate of domestic demand and the emergence of new requests and earlier saturation of demand, the third is foreign buyers will boost the competitiveness of the national industry, because they can bring these products abroad.

### **c. Related Industries and Supporting Industries**

The existence of related industries and supporting industries will affect competitiveness in the case of upstream industries being able to supply inputs to the main industries at lower prices, better quality, fast service, timely delivery and quantities according to industry needs. Likewise, with the downstream industry, which uses the main industrial products as raw materials. If the downstream industry is globally competitive, it can attract the upstream industry to become competitive too. The benefits of related and supporting industries will increase efficiency and synergies within clusters as well as productivity which can create competitiveness.

### **d. Competition, Company Structure and Strategy**

The level of competition for companies will encourage competition and innovation. Domestic competition encourages companies to develop new products, improve existing products, reduce prices and costs, develop new technologies and improve quality and service. In this case, the company's strategy is needed to motivate companies, or industries to always improve the quality of the products they produce and always look for new innovations. The structure of a company, or industry can determine competitiveness by making improvements and innovations.

### **e. Role of Government**

The government's role will influence the factors that determine the level of competitiveness. The government acts as a facilitator, so that companies and industries increase their competitiveness. Governments can affect global competitiveness through regulations and policies that weaken or strengthen these determinants of competitiveness. The government can also facilitate an industrial environment that is able to improve the condition of the competitiveness factor so that it can be used efficiently and actively.

### **f. The Role of Chance**

The role of opportunity is beyond the control of both companies and governments to influence competitiveness. Things like luck play a role of chance, like pure new discoveries, constant company costs due to changing oil prices or currency depreciation. Besides that, it can also occur due to an increase in demand for industrial products that is greater than the supply, or political conditions that favor competitiveness.

**2.3. Porter’s Five-Forces Model**

The five forces framework applies across all industries for the simple reason that it encompasses the relationships that are fundamental to all trades: between buyers and sellers, between sellers and suppliers, between business competitors, and between demand and supply (Magretta, 2012). It is useful for analyzing and classifying factors, Porter’s Five-Forces Model was developed by Michael Porter of Harvard Business School (Grant, 1997). According to Porter, the intensity of competition is related to the following factors (Hunger & Wheelen, 2012), which are the first is the number of competitors. Competitors are very diverse or unequal in size and strength. If competitors vary widely, there is plenty of room for a company to try new strategies that other companies will then copy. The second is the industry growth rate. A fast growing industry usually provides a number of opportunities for many companies to grow in it. All the same, when the industry grows slowly, there are companies that cannot continue to grow their sales unless they take over the sales of competitors. The third is product characteristics. If the products are fundamentally the same, then the product is a commodity. The fourth is the amount of fixed costs. If the firm’s fixed costs are high, the firm should cut prices below total cost to at least cover its fixed costs. The fifth is capacity. If the only way a company can use to increase volume is to increase capacity by building a new factory, then this can

be fulfilled if the new factory’s full capacity is able to keep unit prices as low as possible. The sixth is the high barrier to exit. Exit barriers keep firms from leaving the industry. The barrier can be a special asset or management loyalty to the existing business. The seventh is the diversity of competitors. Competitors often have multiple company territories, strategies, and cultures. They also have very different ideas about how to compete, and because of this they often cut corners and don’t know the challenges that exist in each different position.

**3. Research Method**

A sample of 40 companies operating in Pasuruan, Sidoarjo, Gresik and Surabaya City in the chocolate sector served as the basis for location choice. The marketing and production managers in the chocolate sector are the chosen samples. The Nine Factor and Diamond Factor competitive advantage theories are mentioned in the research. The thesis of this work is as follows:

- H1: Competitive Advantage is positively impacted by dynamic capability.
- H2: Industrial Performance is positively impacted by competitive advantage.
- H3: Strategic Competitiveness mediates Dynamic Effects of Industrial Performance Capabilities.

**Table 1. Outer Model Equation**

Variable Type	Outer Model Equation	
Exogenous Latent Variables: Dynamic Capabilities (KD)(X)	$KD 1 = \hat{\lambda} KD1 (KD) + \delta_1$ $KD 2 = \hat{\lambda} KD2 (KD) + \delta_2$	$KD 3 = \hat{\lambda} KD3 (KD) + \delta_3$ $KD 4 = \hat{\lambda} KD4 (KD) + \delta_4$
Endogenous Latent Variables: Industry Performance (KI) (Y)	$KI 1 = \hat{\lambda} KI1 (KI) + \epsilon_1$ $KI 2 = \hat{\lambda} KI2 (KI) + \epsilon_2$	$KI 3 = \hat{\lambda} KI3 (KI) + \epsilon_3$ $KI 4 = \hat{\lambda} KI4 (KI) + \epsilon_4$
Endogenous Latent Variables: Competitive Advantage (KB)(Z)	$KB 1 = \hat{\lambda} KB1 (KB) + \epsilon_1$ $KB 2 = \hat{\lambda} KB2 (KB) + \epsilon_2$ $KB 3 = \hat{\lambda} KB3 (KB) + \epsilon_3$ $KB 4 = \hat{\lambda} KB4 (KB) + \epsilon_4$	$KB 5 = \hat{\lambda} KB5 (KB) + \epsilon_5$ $KB 6 = \hat{\lambda} KB6 (KB) + \epsilon_6$ $KB 7 = \hat{\lambda} KB7 (KB) + \epsilon_7$

Information: KD1...KD4 = indicators of exogenous latent variables (dynamic capability)  
 KI1...KI4 = endogenous variable indicators (industry performance)  
 KB1...KB4 = endogenous variable indicators (competitive advantage)  
 $\Delta i$  = exogenous variable measurement error rate i  
 $\epsilon i \hat{\lambda}$  = endogenous variable measurement error rate i  
 $\hat{\lambda}$  = factor loading on each indicator

The following is the research’s inner model equation:

$KB = \beta_1 KD + \zeta$   
 $KI = \beta_2 KD + \beta_3 KB + \zeta$

Information: KB = endogenous latent variables (competitive advantage)  
 KI = endogenous latent variables (industry performance)  
 KD = Dynamic Capability construct  
 $\beta_1$  = Dynamic Capability coefficient  
 $\beta_2$  = Coefficient of Competitive Advantage  
 $\beta_3$  = Firm Performance Coefficient  
 $\zeta$  = measurement error

This research utilizes the SEM approach to examine the relationship between the measured variables, precisely as follows:

### 4. Result and Discussion

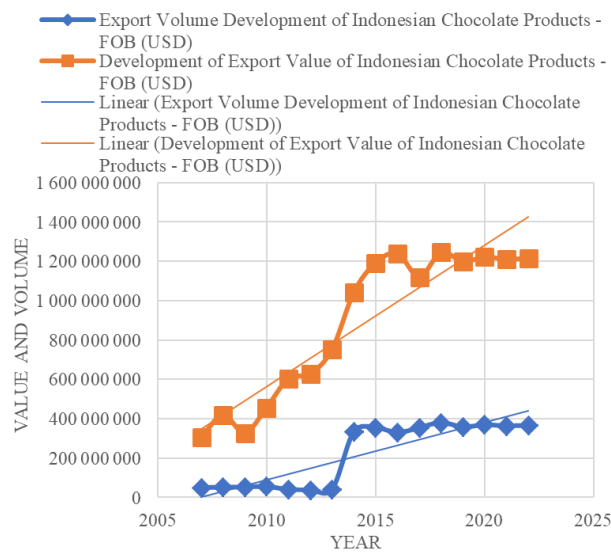
Data on the Food and Beverage Industry were issued by the Central Bureau of Statistics for East Java Province for 2020 based on constant pricing by field of business (billion rupiah) of 182,156.35 and the following year saw a growth of 190,726.33. This shows that over time the existence of the processing industry in East Java has developed after post-Covid-19. The processing industry sector plays an important role as a source of income and community survival, absorption of employment and a source of income for regions or regions. Exports in November 2021 totalled US \$ 2,179,417.08 million, an increase of 6.05 percent to \$ 2,047,594.53 million. This is fully felt by the chocolate sector in East Java, which annually experiences an increase in exports of chocolate goods.



**Fig. 1. Development of East Java and Indonesia Chocolate Export Products**

Source: Indonesia Central Bureau of Statistic, 2022

The development of the export value of chocolate goods continues to exhibit an annual upward trend. In 2019, both the export volume of national chocolate products-358,481,000 kg/USD with just an export value of 1,198,734,000 kg/USD and the export volume of East Java chocolate products-declined at the same time, totalling 11,245,638 kg/USD with an export value of 45,806,558 kg/USD. This fall was driven by the effects of the Covid 19 Pandemic, which rocked the



**Fig. 2**

world during the last two years, causing distribution networks to be restricted and export prohibitions to be implemented everywhere. Nevertheless, this effect did not last long and the following year the East Java chocolate industry saw an increase in the volume and export value of chocolate products. The ability to revitalize the chocolate industry was demonstrated by the results of the analysis, which demonstrated that the industry has the capacity to optimize innovation with a respectable outer loading factor value of 0.922%. This is backed by empirical studies (Jacome et al. 2021) Where in adopting an innovation strategy that reorganizes the organization's resources and skills.

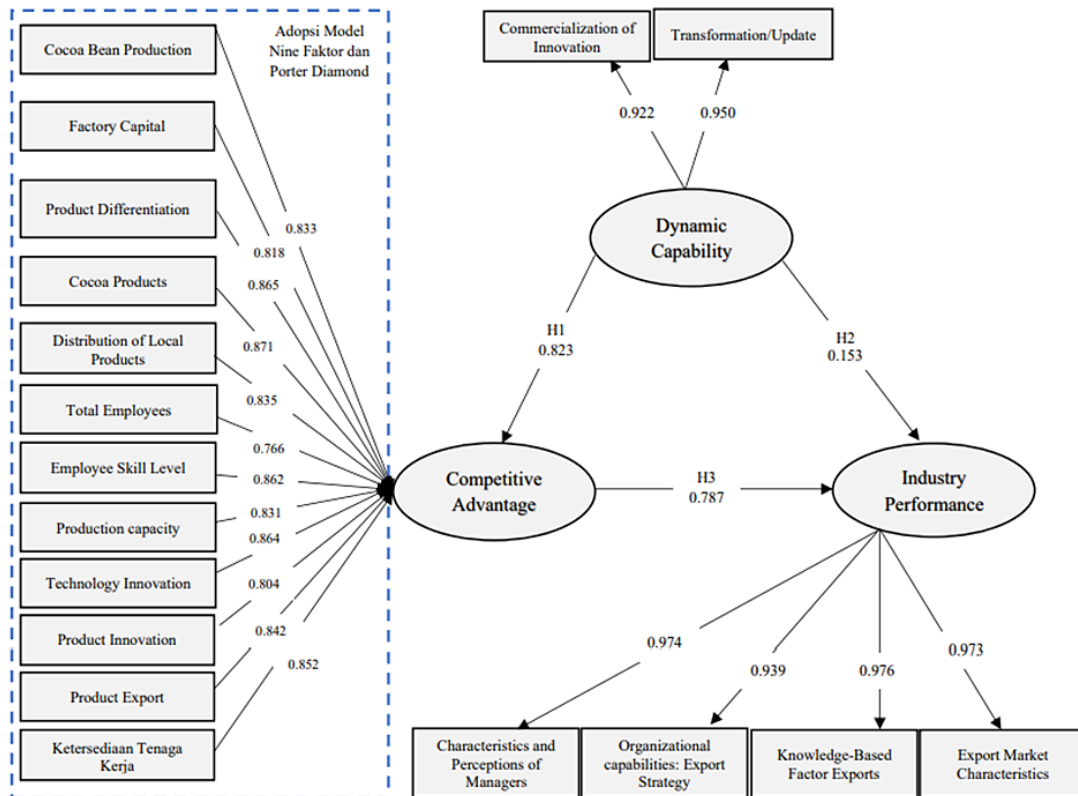
East Java has a tremendous possibility to expand the chocolate sector further. The availability of cocoa beans is reflected by an outer loading factor of 0.833, indicating that it is suitable for use as an indicator to represent conditional or resource factor on the dimensions of competitive advantage. Wealth of raw materials for cocoa beans might be the key capital in growing chocolate manufacturing at the intermediate level. The majority of cocoa plantations that provide the cacao beans to the chocolate industry are smallholder estates. Geographically, the province of East Java possesses cocoa-suitable terrain, as well as agroclimatic characteristics in terms of height, rainfall and soil type that considerably promote the productivity of the plantation sector and many of them are widely cultivated in the province's cocoa-center districts. This industry includes several small and medium-sized businesses.

Existing research on dynamic capacities and company performance is insufficient to explain why businesses contin-

ue to struggle to adapt to a quickly changing business environment. In this research, the most recent version of dynamic capacity categorization and the most widely recognized and measured capabilities are utilized (Teece, 2018) because it permits operationalization and consequently measures the dynamic capacities of the organization in a more methodical manner. As indicated previously, Teece suggests splitting the perceiving abilities into the abilities of organizing and capturing values under this group to more accurately reflect the two distinct cognitive processes and talents. Organizing capabilities include integrating and rearranging relevant assets and motivating employees to participate in the innovation process, whereas value capturing ability focuses on business model innovation and derives monetary and non-monetary benefits from innovation, or commercializes innovation. Given the importance of dynamic capabilities and competitive advantage to a company’s performance, it is necessary to examine the link between these three elements in further detail. Based on the test results using version 3.0 of Partial Least Square for Windows.

**Outer Loading Value Test**

Figure 2 below depicts the results of determining the Outer Loading Value (convergent validity). This indicates that every proxy has an outer loading factor larger than 0.5. Two (two) indicators with commercialization proxies (X3) from industrial innovation and transformation indicate the dynamic capacity variable (X4), The findings of the research indicate that the outer loading factor values of 0.922 and 0.950 are suitable for use as indicators of the dynamic capacity (X) variable. In the meanwhile, the outer loading factor value shows that the sensing proxy value (X1) should be a significant indicator and provides the context for managers to consider the commercialization of innovations generated by recognizing the internal environment and external chocolate industry and pick opportunities (X2) by changing to the needs of local and overseas client demands and other factors that may impact the growth of the chocolate business., However, these two indicators have a negligible effect of (-0.010), hence they cannot be utilized as indicators to reflect the Dynamic Capacity (X) variable and must be omitted from the model. It has been determined that these two in-



**Fig. 3. Structural model and path coefficient.**

Note: \*\*\*p-value < 0.01

dicators are not applicable to the chocolate sector in East Java. This is different from the results of previous empirical research that was investigated by oleh (Kuo et al., 2010; Rodriguez et al., 2005; Teece 2018; Teece et al., 2016) Dynamic capabilities as a source of sustained competitive advantage through the examination of the direct impacts of dynamic capabilities and entrepreneurial attitude on export performance, where the four indicators have a substantial influence.

Four indicators, including a proxy for managerial traits (0.974), a proxy for each industry’s capacity to export chocolate goods (0.939) and a proxy for export knowledge held by the sector to increase product marketing proficiency, represent the industry performance variable (Y) (0.976), a proxy for the features of the export market targeted by the chocolate industry for exporting its products (0.973) The value of the outer loading factor shows that the proxy value is utilized as an indication of the variable Company Performance (Y). The variable Competitive advantage (Z) is expressed by 12 indicators with a proxy for cocoa bean production (0.833) which is plentiful every year as a raw supply for the chocolate industry in East Java and its environs so that it is able to fulfil export demand every year. East Java Province is a supplier of cocoa beans for Indonesia’s exports, the proxy for factory capital (0.818) is highly influential as the primary source of industrial operational activities and various policy supports in Indonesia are highly supportive of industrial development through the contribution of financial and banking institutions that would provide access to industrial operational needs such as promotion costs, production expenses, labour costs and other operational costs for the chocolate sector; chocolate product differentiation proxy (0.865) indicating how the chocolate industry is ideally positioned to attract customers. cocoa product proxy (0.871), local product distribution proxy (0.835), number of employee’s proxy (0.766), employee skill level proxy (0.862), production capacity proxy (0.831), technological innovation proxy (0.864), product innovation proxy (0.804), product export proxy (0.842), a proxy for

the availability of labour (0.852, which is able to reflect the variable Competitive advantage (Z). While the value of the outer loading factor with five indicators demonstrates that industrial competitiveness is represented by a proxy value (0.532), protection policy proxy (0.147), political, economic and national conditions proxy (-0.041), number of business actors’ proxy (-0.559), timely delivery proxy (0.500) smaller than 0.5 which is valid to reflect the competitive advantage variable (Z) so must be removed from the model.

**Testing Discriminant Validity**

On the basis of cross-loading measurements, the discriminant validity of the measurement model is evaluated under the assumption that the 5 (five) indicators of industrial competition, protection policy, national political-economic conditions, number of busters and timely delivery are to be eliminated from the model. Each latent variable already possesses considerable discriminant validity, although the gauges of certain latent variables are substantially associated with other components.

All variables have discriminant validity values above 0.50. From these results, it can be concluded that all variables are valid and can provide confidence. Each variable has a composite reliability value that exceeds 0.70. From these results, it can be deduced that all variables in the research are trustworthy and usable.

**Model Structural Evaluation**

The association between all variables in this study was determined using Structural Model or Inner Model testing. Inner Model measurement is carried out to determine the level of influence of the relationship between variables, as well as the level of influence of the relationship of all variables in the system being built. The value of R<sup>2</sup> was employed in Inner Model measures to examine the relationship between the study’s variables.

**Table 2. Calculation Results (AVE)**

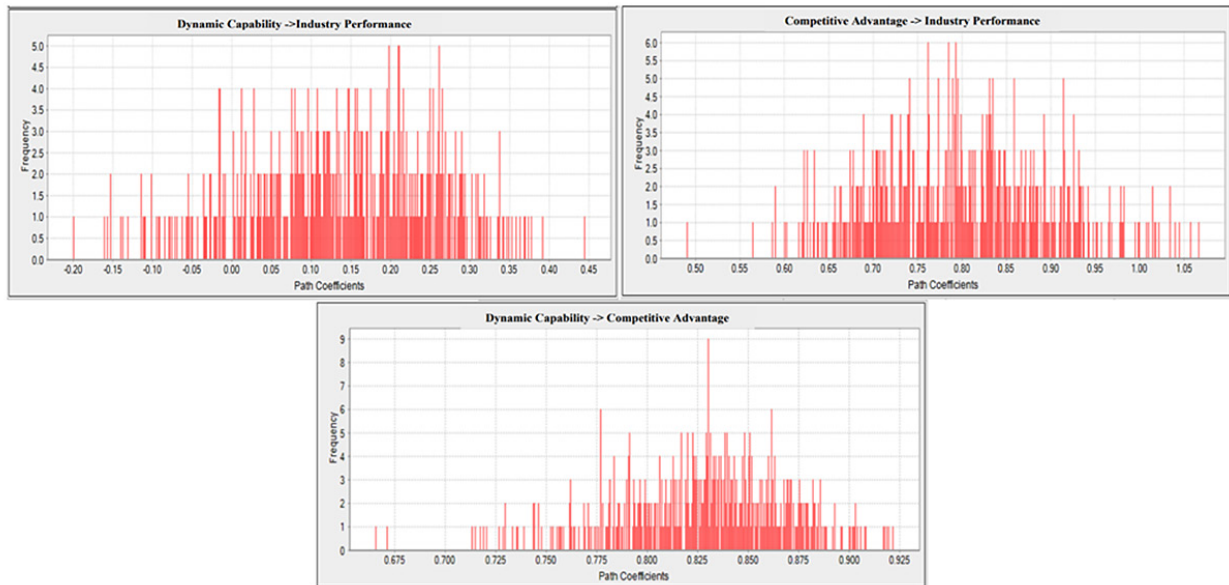
Variabel	AVE	Cronbach’s Alpha	Composite Reliability
Dynamic (X)	0.876	0.860	0.934
Industrial Collaboration (Y)	0.933	0.976	0.982
Competitive Advantage (Z)	0.701	0.962	0.966

**Table 3. Evaluation Findings (R<sup>2</sup>)**

Variabel	R Square	R Square Adjusted
Dynamic Capability (X)	–	–
Industry Performance (Y)	0.842	0.833
Competitive Advantage (Z)	0.678	0.669

**Table 4. Bootstrap Measurement Results**

Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics ( O/STDEV )	P Values
Dynamic Capability (X) -> Industry Performance	0.153	0.147	0.111	1.383	0.167
Dynamic Capability (X) -> Competitive Advantage (Z)	0.823	0.830	0.041	19.913	0.000
Competitive Advantage (Z) -> Industry Performance (Y)	0.787	0.793	0.093	8.499	0.000

**Fig. 4. Path Coefficients Histogram**

Based on Table 3, it is evident that the findings of R-squares are 0.678 (67.8%) to Competitive advantage (Z), or that the remaining 0.322, or (32.2%) are impacted by other variables outside the research and Industrial Performance (Y) is valued at 0.842 (84.2%), or 0.158 (15.8%) is affected by factors beyond the study's scope of research. If the Godness of Inner Model (GIM) value is  $> 0$ , the model has predictive relevance; otherwise, it has negative regression. In this research, the GIM value was 0.050876, or  $> 0$ , So that it may be stated that the model has predictive relevance or that the built structural model can be utilized to explain the research framework.

The calculated value of the path coefficient between constructs must have a value that is statistically significant. The relevance of the association may be determined using *Bootstrap* or *Jackknifing*. The outcome is a t-count or *T-Statistic* number that is then compared to *T-Table*. The predicted value of the route coefficient is significant if the *t-count*  $> T\text{-Table}$  (1.96), at the  $\alpha$  5% level of significance. In addition, it is possible to test hypotheses by examining the probability value. If the *P-Value* is  $< 0.05$ , the hypothesis is accepted and

if *P-Value*  $> 0.05$ , the hypothesis is not significant. This is done to reinforce the hypotheses in hypothesis testing by offering alternative hypothesis testing (Hair, et al., 2021). There are four tests of the link between variables in this study. Each test's findings are provided as follows:

The impact of dynamic capacity on corporate performance is shown to have a positive coefficient (standardized coefficient) of 0.153 and a positive *T-Statistic* of 1.383  $< T\text{-Table}$  (1.96) with a *P-Value* of 0.167  $> 0.05$  based on the test findings in table 4 and figure 4 above. Consequently, the variable association is deemed unimportant or disregarded and it is determined that dynamic capacity has no meaningful influence on industrial performance. The association between the variable and competitive advantage is recognized as significant or valid when the influence of dynamic capacity on competitive advantage has a positive coefficient (standardized coefficient) value of 0.823 and a *T-Statistic* of 19.913  $> T\text{-Table}$  (1.96), with a *P-Value* value of 0.000  $< 0.05$ . This suggests that the influence of dynamic capacity on competitive advantage has been demonstrated to be positive and substantial.



**Table 5. Results of Measurement of Mediation Relations**

Variable	Original Sample	Sample Mean	Standard Deviation	T Statistics ((O/STDEV))	P Values
Dinamic Capability (X) -> Competitive Advantage (Z) -> Industrial Performance (Y)	0.648	0.652	0.084	7.721	<b>0.000</b>

The effect of competitive advantage on corporate performance exhibits a positive coefficient (standardized coefficient) of 0.787 and a *T-Statistic* of 8.499 > *T-Table* (1.96), with a *P-Value* of 0.000 < 0.05; hence, the variable association is deemed significant or acceptable. This can be interpreted that the effect of competitive advantage on industrial performance is proven to have a positive and significant effect. The following are the results of the interpretation of the mediation relationship test:

The ability of competitive advantage to resolve an indirect relationship between dynamic capabilities and company performance is demonstrated. With a positive direction of influence, a positive coefficient (standardized coefficient) of 0.613, a *T-Statistic* of 7.490 > *T-Table* (1.96) and a *P-Value* of 0.00 < 0.05, the relationship between indirect variables is deemed significant or accepted. This research is supported by a number of empirical articles that experimentally investigate the connection between dynamic capacities, open innovation and company profitability. However, only a few of research study the link between the three ideas directly (Chen & Chang, 2013). there are fewer articles that discuss this issue in more conceptual depth (Peteraf et al., 2010; Gupta & Chauhan, 2021; Teece, 2016 & 2018; Wang & Ahmed, 2007). Schilke et al., (2018) implemented dynamic capabilities like alliance management and new product development Strategic performance and financial success were operationalized in terms of profits before interest and taxes (EBIT), return on investment (ROI) and return on sales (ROS). (Drnevich and Kriauciunas 2011) operationalized them as IT utilization performance and enterprise level (profitability). The author concludes that the main characteristic of dynamic capabilities is to ensure the efficient adaptation of enterprises to a volatile, uncertain, complex and ambiguous environment. (Kennerley & Neely, 2002) definition of innovation capability as the potential to originate new ideas, discover market possibilities and deploy marketable inventions by utilizing industry resources and competencies supports the result of this research. In order for chocolate goods to succeed on the global market and as a specialty, the chocolate industry must pay special attention to its dynamic capability and performance. The test outcomes are listed in Table 5. All remaining constructs were tested for mediation effects. This demonstrates that

dynamic skills have a high indirect causal link with industrial performance.

Our research demonstrates that assessing the influence of dynamic skills on the regional chocolate industry's performance is crucial for using the correct idea of competitive advantage. Researchers suggest sharing the ability to control the use of resources, capital, product innovation and technology as well as business models, recruiting partners to strengthen access to capital, the stability of exports of chocolate goods as a marketing competence is dependent on employee abilities to structure industrial assets and appropriately integrate industry-owned assets. This research would provide valuable information for coordination between business actors or the chocolate industry and the sustainability of the East Java regional chocolate industry, based on the premise that the rate of development of each industry is unquestionably different based on the business environment conditions in a region or country.

## 5. Conclusion

This research is based on Michael Porter's nine criteria of competitive advantage and the Porter's diamond model (Cho & Hw, 2000) with an emphasis on the notion of competitive advantage paired with dynamic capabilities and the expectation of enhancing industry performance. Due to a lack of national and regional policy coordination, a lack of awareness of the capacities of supply chain players and an inadequate choice of technology and projected industrial scale, the chocolate sector has not attained its intended level of growth. For the chocolate sector to remain competitive, it is possible to present a realistic perspective on what is anticipated as well as the optimal approach.

Instability in the supply of raw materials reduces the production capability of the East Java chocolate industry and may possibly threaten the national chocolate industry's existence, this is due to the decline in cocoa bean yield caused by aged cocoa trees that are not being replaced. This had a negative effect on cocoa bean productivity as an industrial raw material source. If this problem is not remedied soon, it could lead to a significant rise in cocoa bean imports and unstable cocoa bean flow between regions. However, this can gradually be overcome in areas of cocoa production centres

in various districts in East Java and other provinces in Indonesia. The number of business actors, political and economic conditions, industrial competition, protection policies and timely delivery were found to be indicators that had no bearing on this case study, so the chocolate industry, which holds a competitive advantage, will undoubtedly be able to endure in any circumstances, such as a global crisis, Strong industries will be able to anticipate and avoid all failure risks and will even be able to survive when procontracted protection measures do not favour industrial growth.

It is necessary to reinforce sources of industrial capital, create local product distribution and trade structures and fortify the upstream side, namely the rational production of cocoa beans among diverse chocolate businesses, in order to rectify the company's deteriorating condition. Product innovation and technological innovation are the application of the fourth (four) diamond porter factor, namely corporate structure and strategy and the ninth (nine) diamond porter component, opportunity and opportunity. Therefore, decision-makers and policymakers must take an integrated strategy to bolster the successful transformation of the exporting business for processed products. This research provides the opportunity to comprehend the measurement of industry dynamic capacities to interact amongst components driving industry development via the capacity to choose and capture chances and make strategic decisions, this will assist policymakers in coordinating industrial sustainability and regional economic development by enhancing marketing capacities for surviving in an uncertain business environment and political economy.

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