

# The Role of Product Innovation Capability in Increasing Competitive Advantage

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## Abstract

The aim of this research is to analyze the role of product innovation capabilities on competitive advantage. The population of this research is consumers who shop at the Ada supermarket in the city of Semarang, Indonesia. Samples were taken from 125 respondents who were randomly selected. Data collection by distributing questionnaires to Ada Supermarket customers. The questionnaires were distributed using closed statements with alternative answers according to a Likert scale. 5 alternative answers, 1 (strongly disagree), 2 (disagree), 3 (disagree), 4 (agree) and 5 (strongly agree). The analysis tool uses SEM AMOS version 22. The findings of this research are that there is a positive and significant influence between proactive power, competitor orientation, flexibility of customer tastes on product innovation capabilities. There is a positive and significant influence between proactive power, flexibility of customer tastes and product innovation ability on competitive advantage.

**Keywords:** Proactive power; competitor orientation; flexibility of customer tastes; product innovation capabilities; competitive advantage.

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## INTRODUCTION

Competition is getting tougher, requiring companies to be able to develop and create new values in order to survive by creating creativity (Suryani, 2021). For companies that experience a decline in competitiveness, the company feels they have reached a comfort zone because of past success. At this time, it is felt that the decline in competitiveness is accelerating (Muhyiddin, 2021).

In order for companies to continue to exist in global competition, they must be able to carry out innovation-oriented strategies (Frank *et al.*, 2016). Innovation is very important for companies because most of the company's profits come from the results of innovation (Babkin *et al.*, 2015). Innovation is not only able to create economic efficiency but is also able to improve services and production, both in quality and quantity (Syapsan, 2019). Companies in facing a competitive environment need to find something that will create competitive advantage. Continuous innovation in an organization is a fundamental need to create competitive advantage.

The business environment is experiencing rapid changes and affecting organizations, different client needs and competition, organizations must procure unused innovative capabilities and investigate unused commerce forms in arrange to stay beneficial. New products or processes have become one of the most important issues for companies. Innovation related to creating sustainable markets begins with the introduction of new products and superior processes (Fleith de Medeiros *et al.*, 2022).

Understanding and monitoring competitors is a critical strategy in business. Competitor orientation helps companies develop strategies that are not only responsive to competitors' actions but also exploit competitors' weaknesses to their own advantage (Saebi *et al.*, 2017). Customers' ever-changing tastes require high flexibility from companies to adapt their products and services. This flexibility is critical in maintaining product relevance in a dynamic market.

Linking proactiveness, competitor orientation, and flexibility of customer tastes with product innovation capabilities provides a comprehensive view of the factors

that influence competitive advantage. This allows research to see how these factors work synergistically to support innovation and competitive advantage.

The aim of this research is to develop the concept of product innovation capability for competitive advantage through proactiveness, competitor orientation and flexibility of customer tastes.

## Literature Review and Hypothesis

### Productivity Power

Proactivity is a response to market opportunities and proactive companies become market leaders by exploiting opportunities or exploring resources, looking for opportunities in the market and creating new market niches. Proactivity also requires experimentation and discovery. states that proactiveness is the coordination of knowledge in different forms to transform resources (Lee *et al.*, 2019). Proactivity is the opportunity to see future opportunities with a perspective that involves how to introduce new products or services in competition and act in anticipation of future demand to create, change and shape the environment (Adim & Poi, 2021). Meanwhile, (Kurniawan *et al.*, 2019) proactiveness is manifested in aggressive behavior in competition; pursue profitable business opportunities, namely the ability to take initiative. suggests that in certain situations companies can utilize proactive therapy to increase competitive advantage (Pereira-Moliner, Jorge; Alicante & Font, Xavier; Leeds, 2015).

Business proactivity is measured using five indicators, namely efforts to serve new markets, develop new products, deal with environmental changes, take risks, create new designs.

### Competitor Orientation

Competitor orientation can be expressed through monitoring information about competitors and disseminating this information to all capacities inside the company, for case the item investigate and improvement division or talking about with best administration the qualities of competitors and the methodologies they are creating, both with respect to current activities. presently and future activities. Competitor-oriented companies will always spend most of their time tracking competitors' use of strategies and market share and trying to find various strategies to fight them (Phornlaphatrachakorn & Na-Kalasinthu, 2020). Successful companies always try to identify their competitors as well as they do their consumers (Tien *et al.*, 2019). Analysis and evaluation of competitors will help management to decide where to compete, how to face competitors in each target market. This analysis and evaluation becomes very important, when the intensity of competition is very high. Stages in competitive analysis include: 1) identification of industry structure and characteristics; 2) identification and analysis of strategic groups; 3) competitors' anticipatory actions; 4) evaluation of major competitors; 5) identification and

description of main competitors and 6) identification of new competitors. Understanding in depth the competitive structure will enable the company to properly recognize who its main competitors are. Therefore, company resources can be directed to digging up information related to main competitors.

Competitor orientation is measured through five indicators, namely: (a) response to competitor strategies, (b) extracting information about competitors, (c) response to the presence of new competitors, (d) efforts to inhibit competitors and (e) efforts to build competitive advantage.

### Flexibility to Customer Tastes

Market-oriented companies, the risk of failure will be reduced. The main idea is that customer needs, both current and future, become the center of new product development efforts. Market-oriented companies have very strong performance in developing new products (Singh *et al.*, 2022). Companies that focus on customer needs are in the best position to achieve long-term success compared to companies that do not focus on customer needs. The main goal of a market-oriented company is to create customer retention and satisfaction. Therefore, with the aim of providing customer satisfaction, many companies encourage their sales personnel to have a customer orientation in carrying out their work.

5 indicators of customer orientation that can be used are as follows: Clear customer ideas, Clearly defining the product, customer comments, serving customer needs, understanding customer desires.

### Product Innovation Capability

Product innovation capability is a company's ability to systematically identify market needs, design new products, develop new technology, and commercialize these products (Najafi-Tavani *et al.*, 2018). It covers the entire process from the initial idea to the final product accepted by the market. Product innovation is critical because it allows companies to stay relevant in changing markets, meet evolving customer needs, and differentiate themselves from competitors (Faridatun Nisa & Anisah, 2023). Innovative products often bring significant added value and create new growth opportunities for companies. Product innovation capabilities are a key element that supports companies to remain competitive and relevant in an ever-changing market. Successful innovation requires not only a good idea but also efficient execution and the right strategy to ensure that the new product meets customer needs and preferences.

Indicators of product innovation capability are product line expansion, new product lines, improvements and revisions to existing products, redetermination, new products for the world.

## Competitive Advantage

Competitive advantage is the result of actualizing procedures that utilize different assets claimed by commerce units. Intellectual capital, especially creativity, is a source of competitive advantage (Anggreni *et al.*, 2022). Competitive advantage is the creation of a system that has the advantage to win the competition (Pramudya Ananda, 2022). This is achieved to create value for customers in an efficient and sustainable manner. Competitive advantage makes a major contribution to strategic planning and management. Competitive advantage is the result of actualizing procedures that utilize different assets claimed by commerce units.

Companies that have a competitive advantage continuously have the capacity to get it changes in showcase structure and are able to select viable promoting procedures. Indicators of product competitive advantage are the uniqueness of the company's products which combine artistic value with customer tastes, competitive prices, rarely found, not easily imitated, meaning not easily replaced.

## Hypothesis Development

### The Relationship between Proactivity and Product Innovation Capability

Proactivity is based on the ability of a person or organization to take active and preventive action in facing changes or challenges, rather than just reacting to situations that occur (Diamantidis & Chatzoglou, 2019). Product innovation capability, on the other hand, reflects a person's or organization's ability to create new products or improve existing products. The relationship between proactivity and product innovation capability is: First, proactivity helps in detecting market trends, new customer needs, or changes in technology (Gotteland *et al.*, 2020). By having a deep understanding of these changes, an organization can prepare itself to develop new products or update existing products that are relevant to market needs. Second, creativity in finding solutions to problems or opportunities that arise and the ability to think to see opportunities. Third, proactive organizations tend to have systems and processes that enable them to respond quickly to opportunities or threats. The ability to take action quickly can allow them to release new products faster than their competitors, or to adapt existing products to market changes more efficiently. Fourth, strong proactivity allows organizations to continuously connect with customers and understand their needs, wants and problems. This information can be a source of inspiration for new and relevant product innovations (Najafi-Tavani *et al.*, 2018). Thus, the higher the level of proactivity of an individual or organization, the greater the possibility of having strong product innovation capabilities. Based on the description above of the proposed hypothesis,

H1: Proactivity has a positive and significant influence on product innovation capability

### The Relationship between Competitor Orientation and Product Innovation Capability

Competitor orientation is a strategy or approach used by an organization to direct its attention towards its competitors in a particular industry or market which involves monitoring competitor activities, strategies, strengths and weaknesses to determine appropriate steps in maintaining or improving competitive position (Phornlaphatrachakorn & Na-Kalasinthdu, 2020). The relationship between competitor orientation and product innovation capability can be explained as follows: Competitor orientation can help organizations to identify trends and changes in products or services made by their competitors. By understanding what competitors are doing, organizations can find new gaps or opportunities to develop innovative products or services that can provide a competitive advantage (Faridatun Nisa & Anisah, 2023). Through competitor monitoring, organizations are often encouraged to increase their creativity in creating new solutions or products that can compete effectively. This can encourage organizations to think outside the box and produce innovations that are better or superior to what already exists in the market. By understanding the strategies and steps taken by competitors, organizations can anticipate changes in market demand or in industry competition. This allows organizations to design and develop new products that can meet emerging market needs or overcome challenges they may face from competitors. By continuously monitoring competitors, organizations can ensure that the products or services offered remain relevant and up-to-date with changes in customer needs or market trends. This helps stay at the forefront of the industry and maintain a competitive edge. Therefore, competitor orientation can play an important role in encouraging an organization's product innovation capabilities. The above description of the hypothesis proposed.

H2: Competitor orientation has a positive and significant influence on product innovation capability.

### The Relationship between Flexibility to Customer Tastes and Product Innovation Capability

The relationship between customer taste flexibility and product innovation ability: Customer taste flexibility often reflects changes in market preferences or needs. Organizations that understand and respond quickly to these changes will have a significant competitive advantage (Singh *et al.*, 2022). Product innovation capabilities enable organizations to create or adapt their products to remain relevant to changing customer tastes (Faridatun Nisa & Anisah, 2023). Organizations that are able to anticipate or respond quickly to changing customer tastes can gain a competitive advantage in the market. By bringing new products or updating existing products according to customer preferences, they can attract more consumers and maintain market share. The flexibility of customer tastes can be a source of inspiration for product innovation. When organizations understand that

customer preferences can change, they will be encouraged to continually look for new ways to meet or even exceed customer expectations. This can encourage creativity and innovation in product development (Najafi-Tavani *et al.*, 2018). Organizations that are flexible in adapting products to customer tastes tend to build stronger relationships with customers. When customers see that the product or service being offered actively responds to and meets needs, they tend to be more loyal and may provide valuable feedback that can be used by the organization to continuously improve product innovation. Thus, the flexibility of customer tastes and product innovation capabilities are interrelated and can strengthen each other. Based on the description above, the hypothesis proposed.

H3: The flexibility of customer tastes has a positive and significant influence on product innovation capabilities.

### **The Relationship between Productivity and Competitive Advantage**

Proactive organizations tend to be better able to detect new market opportunities or changing trends before their competitors do (Lee *et al.*, 2019). By taking quick action to exploit these opportunities, they can gain a first-mover advantage that can provide a competitive advantage in the long run. The power of proactivity helps organizations to respond quickly to emerging threats in the business environment, such as regulatory changes, new technologies, or competitor strategies (Adim & Poi, 2021). By taking preventive action or quick adaptation, organizations can minimize negative impacts and even turn the situation into a new opportunity to gain competitive advantage. The ability to move proactively allows organizations to develop new products and services that can meet evolving customer needs or even anticipate unmet needs. By presenting innovative and relevant products, organizations can gain a competitive advantage in terms of product differentiation (Anggreni *et al.*, 2022). Being proactive in improving internal efficiency and productivity can also provide a competitive advantage. Organizations that continually look for ways to improve their operational processes, reduce costs, or improve the quality of their products will have an advantage in terms of cost or quality, which are important factors in market competition. Proactive in addressing customer issues or concerns, organizations can build a strong reputation and high levels of trust among customers and other stakeholders. A good reputation can be a source of competitive advantage because it can differentiate an organization from its competitors and attract brand-conscious customers.

H4: proactiveness has a positive and significant influence on competitive advantage.

### **The Relationship between Product Innovation Capability and Competitive Advantage**

Product innovation capability is the ability of an organization to create new products or improve existing products creatively and effectively (Najafi-Tavani *et al.*,

2018). Competitive advantage refers to the state or position that allows an organization to excel in competition with its competitors in a particular industry or market. Product innovation allows organizations to create unique products and differentiate themselves from competitors. Innovative products can attract customers' attention by offering new features or benefits that are not available in competing products (Faridatun Nisa & Anisah, 2023). Thus, product innovation can help create competitive advantage through product differentiation. Response to Market Needs: The ability to develop new products or innovatively update existing products allows organizations to respond quickly to changes in customer needs or preferences. By producing products that better match what the market wants or needs, organizations can gain an advantage in attracting and retaining market share (Pramudya Ananda, 2022). Increased Product Value: Product innovation can help organizations to increase the value of their products by adding new features, improving quality, or offering more efficient or effective solutions. Products that provide greater added value to customers tend to have a competitive advantage because customers are more likely to choose products that provide greater benefits (Anggreni *et al.*, 2022).

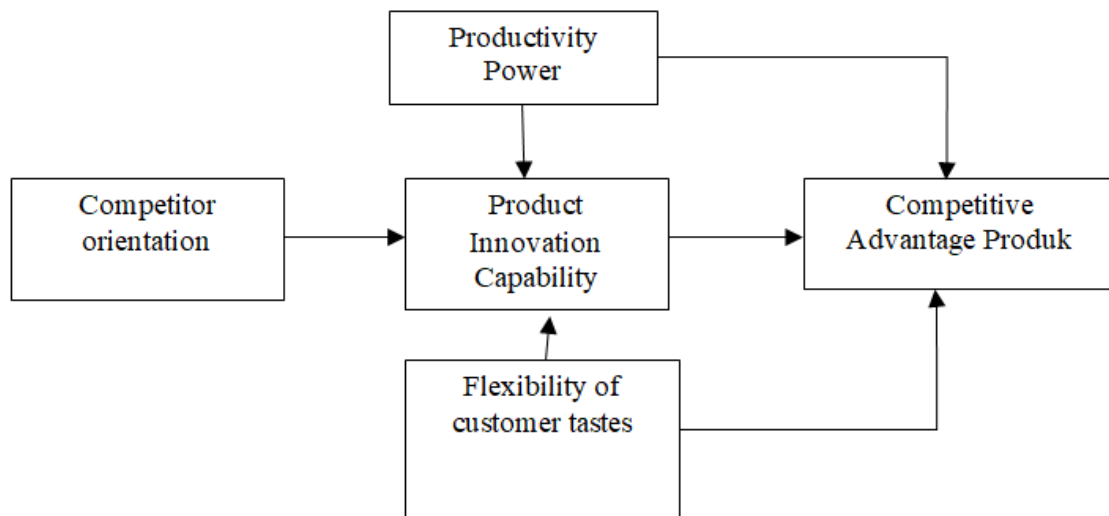
The hypothesis is proposed, H5: product innovation capability has a positive and significant influence on competitive advantage.

### **The Relationship between Flexibility and Customer Tastes with Competitive Advantage**

The flexibility of customer tastes demands that organizations can respond quickly to changing customer preferences or needs. By understanding and adapting their products according to changing customer preferences, organizations can maintain or increase competitive advantage by meeting customer expectations and desires better than their competitors. Organizations that can read and anticipate changes in customer tastes can often take the lead in product innovation. By responding proactively to evolving customer preferences, they can create new products that deliver the solutions customers want before their competitors do. This can provide a first-mover advantage and enable the organization to lead the market. Flexibility in responding to customer needs can help organizations improve the overall customer experience. By offering products and services that better match customer preferences, organizations can create stronger relationships with customers and build high levels of loyalty. Positive customer experience is one of the key factors in achieving competitive advantage. Organizations that are flexible in adapting their products to customer tastes tend to be better able to anticipate market changes and industry trends. By having their fingers on the pulse of the market, they can take proactive steps to maintain or improve their competitive position, which is one of the important aspects of competitive advantage. Hypothesis put forward,

H6: flexibility of customer tastes has a positive and significant influence on competitive advantage.

Based on the literature review and hypothesis development, the following empirical model can be created.



**Figure 1: Empirical Model**

## METHODOLOGY

The research data source is respondents obtained directly from the original source in the form of interviews. The population consists of consumers who visit or shop at the Ada supermarket in the city of Semarang, Indonesia. Samples were taken from 125 respondents who were randomly selected. Data collection by distributing questionnaires to Ada Supermarket customers. The questionnaires were distributed using closed statements with alternative answers according to a Likert scale. 5 alternative answers, 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) and 5 (strongly agree).

The next step is to test validity and reliability. (Suhono, Yayuk Hidayah, Muhyidin Thohir, Regina Prayoga, Riyan Erwin Hidayat, 2021) explains that data is valid, meaning that an instrument can measure what it should measure. Validity test decision making, if:  $R \text{ count} > r \text{ table}$ , then the variable is valid. However, if the tool is used repeatedly to measure the same items in reliability testing, it will produce the same data. Reliability is the level of consistency of data over a certain period of time. Reliability test using the Cronbach Alpha method, the value obtained from this test must be greater than 0.5. The data was then analyzed using the SEM (Structural Equation Modeling) AMOS and SPSS programs for descriptive analysis in the form of averages which were carried out by evaluating the observed variables. The assessment uses the formula (highest

score (5) - lowest score (1) / number of categories (5) So the assessment categories are very low (1.00 -1.80), low (1.81 -2.60), medium ( 2.61 -3.40 ), high (3.41 - 4.20) and very high (4.21 - 5.00 SEM) (Winer, 1991) can be used to test complex research models and analyze variables that are not can be measured directly (unobserved variables) and takes measurement error into account.

(Zhang *et al.*, 2021), one of the covariance-based SEM programs is AMOS covariance which appears a direct relationship between two factors, to be specific X and Y. In case a variable encompasses a positive direct relationship at that point the covariance is positive. On the off chance that the relationship between X and Y is inversely proportional, at that point the covariance is negative. In case there's no relationship between two factors X and Y, at that point the covariance is zero.

Reliability, legitimacy and t test comes about. A variable is said to be dependable on the off chance that Develop Unwavering quality (CR)  $\geq 0.70$  and Fluctuation Extraction (VE)  $\geq 0.50$ . The sensor is said to be substantial on the off chance that the standard stack calculate (SLF) esteem is  $\geq 0.50$ . In the event that the t-value  $> 1.96$  and p-value \*\*\* (0.000)  $< 0.05$  at that point theory is acknowledged. This implies that there's no impact between the two factors.

**Variable operationalization**

Variable operationalization can be seen in table 1 below:

**Table 1: Operationalization of variables**

| Variable                       | Concept Definition   | Indicator   | Source                               |
|--------------------------------|--|---|--------------------------------------|
| Productivity Power             | Proactivity is the opportunity to see future opportunities with a perspective that involves how to present modern items or administrations in competition and act in expectation of future request to form, alter and shape the environment. | <ol style="list-style-type: none"> <li>1. Serving new markets,</li> <li>2. New product development,</li> <li>3. Dealing with environmental changes,</li> <li>4. Taking risks,</li> <li>5. Create a new design</li> </ol>  | (Lumpin des, 1996)                   |
| Competitor Orientation         | Competitor orientation is a strategy an organization uses to direct its attention toward its competitors in a particular industry or market  | <ol style="list-style-type: none"> <li>1. Response to competitor strategies,</li> <li>2. Extracting information about competitors,</li> <li>3. Response to the presence of new competitors,</li> <li>4. Efforts to hinder competitors</li> <li>5. Efforts to build competitive advantage</li> </ol> | (Zhou <i>et al.</i> , 2005).         |
| Flexibility to Customer Tastes | An organization's adaptability is closely related to the level of innovation, risk taking and proactive strategic orientation  | <ol style="list-style-type: none"> <li>1. Customer clear idea,</li> <li>2. Define the product clearly,</li> <li>3. Customer comments,</li> <li>4. Serve customer needs,</li> <li>5. Understand customer desires.</li> </ol>   | Jalilyvand (2017)                    |
| Product Innovation Capability  | Product innovation capability is the ability of an organization to create new products or modify existing products creatively and effectively to meet the needs or desires of a developing market.   | <ol style="list-style-type: none"> <li>1. Expansion of product lines,</li> <li>2. New product line,</li> <li>3. Improvement and revision of existing products,</li> <li>4. Redetermination,</li> <li>5. New product for the world</li> </ol>  | Sousa, <i>et al.</i> , 2012          |
| Competitive advantage          | Competitive advantage is the result of implementing strategies that utilize various resources owned by business units.   | <ol style="list-style-type: none"> <li>1. Uniqueness of the company's products</li> <li>2. Competitive prices,</li> <li>3. Rarely found,</li> <li>4. Not easy to imitate means,</li> <li>5. Not easy to replace</li> </ol>  | Chandra, Soegiono, & Sugiarto (2016) |

Source: Extracted from previous research (2024)

**RESULTS AND DISCUSSION**

**Model Feasibility Test Results**

The model test shows that this model fits the data used in the research at a satisfactory significance

level of 0.100 (> 0.05). The significance level of the Chi-Square model is 89.844, the GFI, AGFI, TLI, CFI and RMSEA indices are within the expected range. The model feasibility test can be seen in Table 2 below. Table 2 Model feasibility test.

**Table 2: Model Feasibility Test**

| Goodness of Fit Index Evaluasi Model | Cut-off Value                         | Analysis Results | Information |
|--------------------------------------|---------------------------------------|------------------|-------------|
| $\chi^2$ – Chi-square Baik           | Hopefully it will be small (<114.839) | 89.844           | Good        |
| Significance Probability             | $\geq 0.05$                           | 0.100            | Good        |
| RMSEA                                | $\leq 0.08$                           | 0.052            | Good        |
| GFI                                  | $\geq 0.90$                           | 0.911            | Good        |
| AGFI Marginal                        | $\geq 0.90$                           | 0.921            | Good        |
| TLI                                  | $\geq 0.95$                           | 0.965            | Good        |
| CFI                                  | $\geq 0.95$                           | 0.972            | Good        |

Source: Primary data processed, 2024

### Construct Validity Test Results

Based on the results of the standardized loading estimate output, the loading values for all indicators are above 0.5 so they meet the requirements for convergence

suitability. Apart from that, all constructs also meet the criteria for  $AVE > 0.5$  and these constructs are said to be reliable because their reliability value is  $\geq 0.7$ .

**Table 3: Construct Validity Test Results**

| Construct                      | AVE  | Construct Reliability |
|--------------------------------|------|-----------------------|
| Productivity Power             | 0.85 | 0.71                  |
| Competitor Orientation         | 0.75 | 0.74                  |
| Flexibility to Customer Tastes | 0.79 | 0.76                  |
| Product Innovation Capability  | 0.73 | 0.80                  |
| Competitive advantage          | 0.75 | 0.73                  |

Source: Primary data processed, 2024

### Structural Equation Test Results

The results of hypothesis testing show that both proactiveness, competitor orientation and flexibility of customer tastes have a significant positive influence on Product Innovation Capability (H1, H2 and H3 are

accepted). Furthermore, proactiveness, competitor orientation and flexibility of customer tastes have a significant positive influence on competitive advantage (H4, H5, 6. Hypothesis test results can be seen in Table 4.

**Table 4: Regression Weights**

|          | Estimation | S.E   | CR.   | P     |
|----------|------------|-------|-------|-------|
| DP - KIP | 0.234      | 0.118 | 6.784 | 0.001 |
| OP - KIP | 0.344      | 0.123 | 5.774 | 0.001 |
| FSP- KIP | 0.324      | 0.134 | 3.784 | 0.000 |
| DP - KB  | 0.211      | 0.112 | 3.974 | 0.000 |
| OP - KB  | 0.322      | 0.178 | 5.072 | 0.004 |
| FSP- KB  | 0.321      | 0.165 | 4.172 | 0.005 |

Source: Primary data processed, 2024

### Hypothesis Testing Results

Proactivity has a positive effect on product innovation ability, which is hypothesis 1. This means that the higher the proactivity, the higher the product innovation ability. Based on the results of data processing, it is known that the C.R (Critical Ratio) value for this influence is 6.784 with P (Probability) of 0.001. These two values show results that meet the requirements, namely above 1.96 for C.R (Critical Ratio) and below 0.05 for the P value (Probability), so it can be concluded that hypothesis 1 of this research is acceptable.

Hypothesis 2 in this research is that competitor orientation has a positive effect on product innovation capability. This hypothesis means that the higher the competitor orientation, the higher the product innovation capability. Based on the results of data processing, it is known that competitor orientation has a significant positive influence on product innovation capabilities. This is indicated by the C.R (Critical Ratio) value of 5.774 with P (Probability) of 0.001. These two values show results that meet the requirements, namely above 1.96 for C.R (Critical Ratio) and below 0.05 for the P value (Probability), so it can be concluded that hypothesis 2 is accepted.

Hypothesis 3, flexibility of customer tastes has a positive effect on product innovation ability. This

means that the higher the flexibility of customer tastes, the higher the ability for product innovation. From the results of data processing, it is found that the flexibility of customer tastes has a positive and significant influence on product innovation capabilities. This is indicated by the C.R (Critical Ratio) value of 3.784 with P (Probability) of 0.000. These two values show results that meet the requirements, namely above 1.96 for C.R (Critical Ratio) and below 0.05 for the P value (Probability), so it can be concluded that hypothesis 3 is accepted.

Hypothesis 4, proactivity has a positive effect on competitive advantage. This means that the higher the proactiveness, the higher the competitive advantage. The results of data processing show that proactivity has a significant positive influence on positive e-WOM. This is shown by the C.R (Critical Ratio) value of 3.974 with P (Probability) of 0.000. This result meets the requirements, namely above 1.96 for C.R and below 0.05 for the P value (Probability), so it can be concluded that hypothesis 4 can be accepted.

Competitor orientation has a positive effect on competitive advantage, which is hypothesis 5 in this research. This hypothesis implies that the higher the competitor orientation, the higher the competitive advantage. Based on the results of data processing, it is known that the causal relationship between the

competitor orientation variable and competitive advantage has a C.R (Critical Ratio) value of 5.072 with a P (Probability) value of 0.004. These two values show results that meet the requirements, namely above 1.96 for C.R (Critical Ratio) and below 0.05 for the P value (Probability), so it can be concluded that hypothesis 5 in this study is acceptable.

The flexibility of customer tastes has a positive effect on competitive advantage, which is hypothesis 6 in this research. This hypothesis implies that the higher the flexibility of customer tastes, the higher the competitive advantage. Based on the results of data processing, it is known that the causal relationship between the customer taste flexibility variable and competitive advantage has a C.R (Critical Ratio) value of 4.172 with a P (Probability) value of 0.004. These two values show results that meet the requirements, namely above 1.96 for C.R (Critical Ratio) and below 0.05 for the P value (Probability), so it can be concluded that hypothesis 5 in this study is acceptable.

## DISCUSSION

The first hypothesis, proactivity has a positive and significant effect on product innovation capability is accepted. This means that by having a proactive attitude, individuals or organizations are more likely to actively seek out new opportunities in the market, such as consumer trends, unmet needs, or newly developing technologies. They do not wait for situations to lead to change, but instead, actively seek opportunities to create new products or improve existing products. Through proactive market monitoring or market research, it can identify new and developing customer needs, which form the basis for innovative product development. The power of proactivity encourages individuals or organizations to think outside the box and create new ideas that are unique and innovative. Not satisfied with the status quo, but always looking for new ways to solve problems or meet customer needs. These proactive initiatives are often the catalyst for greater creativity in new product development. Innovative and different ideas may emerge more frequently and more organically as proactive individuals or organizations actively seek new and effective solutions. The power of proactivity helps individuals or organizations to be braver in taking measurable risks in developing new products, having the courage to try different approaches or implement more radical ideas because they believe that these steps can lead to significant innovation. This proactive attitude makes it possible to overcome limitations and fear of failure, which are often obstacles in the development of innovative products, helping individuals or organizations to adapt more quickly to changes in the external environment, such as changes in market trends, new technologies, or increased competition. Do not wait until these changes threaten business continuity, but instead, be ready and willing to take immediate action to face challenges or take advantage of opportunities that arise. This makes it possible to develop new products that are

relevant and appropriate to these changes, thereby remaining competitive in a rapidly changing market. Thus, the power of proactivity positively influences product innovation capabilities by encouraging individuals or organizations to identify new opportunities, formulate creative ideas, take measured risks, and adapt to change more quickly and effectively. This research is in line with research research by Diamantidis & Chatzoglou, 2019; (Gotteland *et al.*, 2020). This is a strong foundation for developing innovative and competitive products in the market.

The second hypothesis, competitor orientation has a positive and significant effect on product innovation capability is accepted. This can be explained as follows, Effective competitor orientation has a positive and significant impact on product innovation capabilities: focusing on competitors, organizations can actively monitor industry trends, competitors' product strategies, and changes in customer preferences. This makes it possible to understand the direction of market development and detect opportunities or unmet needs that can become the basis for new product innovation. Through competitor analysis, organizations can be inspired to think outside the box and create innovative solutions. By looking at what competitors are doing, they may find gaps in the market or new ideas to improve existing products. Competitor monitoring can spark creativity and innovation in product development. Understanding competitors' strengths and weaknesses, organizations can evaluate where they can compete effectively and where they can create competitive advantage. This helps them in formulating smart product innovation strategies, by exploiting competitors' weaknesses or strengthening their own advantages. Understanding competitors' strategies, organizations can anticipate changes in the market or in competitors' behavior. This allows them to respond quickly by developing new products or updating existing products that can capture new opportunities or address emerging challenges. Monitoring competitor activity, organizations can ensure that their products remain relevant and up-to-date with changes in customer needs or market trends. This allows them to stay at the forefront of the industry and maintain a competitive edge by continuously producing products that meet market expectations. Thus, effective competitor orientation can have a positive and significant impact on product innovation capabilities by providing insight into industry trends, sparking creativity, helping identify strengths and weaknesses, anticipating market changes, and ensuring product relevance. This research is in line with research (Phornlaphatrachakorn & Na-Kalasindhu, 2020); (Faridatun Nisa & Anisah, 2023). This helps organizations to develop innovative and competitive products that meet market needs and provide significant added value.

The third hypothesis, the flexibility of customer tastes has a positive and significant effect on the ability



of product innovation to be accepted. This can be explained as follows, The flexibility of customer tastes has a positive and significant impact on the ability of product innovation to be accepted because: The flexibility of customer tastes reflects changes in customer preferences, needs and expectations. Organizations that are sensitive to these changes can see them as opportunities to develop new products or modify existing products to suit customer desires. By understanding changes in customer tastes, organizations can capture new opportunities for product innovation that is well received by the market. Changes in customer tastes can trigger creativity in product development. Organizations that are flexible in responding to these changes will be encouraged to think outside the box and create innovative solutions that can meet evolving customer wants or needs. The flexibility of customer tastes can be a source of inspiration for new and innovative ideas in product development. The flexibility of customer tastes encourages organizations to become more responsive to market changes. By more quickly adapting their products to changing customer preferences, organizations can gain an edge in meeting evolving market demands. This rapid response can enable organizations to produce products that are more relevant and attractive to customers. Organizations that are flexible in responding to changing customer tastes tend to build stronger relationships with customers. By listening and responding well to customer preferences, organizations can gain greater customer trust and loyalty. These strong relationships can be a good foundation for introducing new products and gaining support from loyal customers. Ensuring Product Relevance: By monitoring changes in customer tastes, organizations can ensure that their products remain relevant and in line with market needs. This helps organizations to stay at the forefront in the industry and maintain a competitive edge by continuously producing products that meet customer expectations. The flexibility of customer tastes allows organizations to continuously adapt and update their products according to dynamic market changes. Thus, the flexibility of customer tastes has a positive and significant impact on the acceptability of product innovation by providing opportunities to identify new ideas, spark creativity, increase responsiveness to the market, build strong relationships with customers, and ensure product relevance. This research is in line with research (Singh *et al.*, 2022); (Faridatun Nisa & Anisah, 2023).

The fourth hypothesis, proactivity has a positive and significant effect on competitive advantage is accepted. This means proactivity in the ability of an individual or organization to take active action and take the initiative in solving problems, overcoming challenges, or creating opportunities. When proactivity is applied well, it can have a positive and significant impact on competitive advantage. The following are some of the ways in which proactivity can influence competitive advantage: The ability to be proactive allows

individuals or organizations to be more responsive to changes in the business or market environment. They can more quickly identify new trends, opportunities, or threats, and take steps to adjust their strategies in a timely manner. This helps them stay relevant and competitive in an ever-changing market. A proactive attitude encourages innovation because proactive individuals or organizations tend to be more open to new ideas and more daring to try new things. They may create new products or services, improve business processes, or find new ways to meet customer needs. These innovations can provide significant competitive advantages, differentiating them from competitors and creating added value for customers. Behaving proactively can also increase operational efficiency and effectiveness. By taking preventative steps to address problems or optimize processes, individuals or organizations can avoid disruptions or failures that could disrupt their performance. This allows them to work more efficiently and allocate resources better, which in turn improves productivity and quality. Behaving proactively can strengthen your reputation and customer trust. When organizations consistently take steps to meet customer needs or address problems before they escalate, this builds a positive image of their reliability and willingness to address problems. This can make customers more likely to choose them over competitors who are less responsive or proactive. Proactive individuals or organizations tend to be more open to learning and development. This research is in line with research (Lee *et al.*, 2019); (Anggreni *et al.*, 2022).

The fifth hypothesis, product innovation ability has a positive and significant effect on competitive advantage is accepted. This can be explained that product innovation capabilities play an important role in creating and maintaining competitive advantage. Product innovation refers to the ability to create new products or improve existing products in ways that generate added value for customers. Here are some ways in which product innovation capabilities have a positive and significant impact on competitive advantage: Innovative products allow companies to differentiate themselves from competitors by offering unique features or benefits that are not available in the rest of the market. Thus, product innovation can help companies to build a strong brand image and gain a competitive advantage in the minds of customers. Successful product innovation often results in products that are more functional, more efficient, or better meet customer needs. By providing added value to customers, product innovation can help companies maintain and expand their market share, as well as increase customer loyalty. Markets are constantly changing, and companies that are able to innovate products can more quickly adapt to trends or changes in customer needs. They can create new products or modify existing products to remain relevant and competitive in a dynamic business environment. Product innovation is not only limited to the features or functions of the product itself, but can also include more efficient

production or distribution processes. By introducing innovation across the value chain, companies can reduce production costs, increase throughput, and increase profits, which in turn can be used to increase their competitiveness. Product innovation often involves the application of new technology or the development of existing technology to create better products, sophisticated or more advanced. Companies that are able to master leading technology in their industry can gain a significant competitive advantage, because technology can be a stepping stone to creating more innovative and market-leading products. Innovative products can provide a major boost to a company's brand image. Customers tend to associate innovation with excellence, reliability, and quality excellence. This research is in line with research (Pramudya Ananda, 2022); (Faridatun Nisa & Anisah, 2023). Thus, companies that consistently produce innovative products can build a strong reputation as industry leaders, increase their brand appeal, and win customer preferences.

The sixth hypothesis, that customer taste flexibility has a positive and significant effect on competitive advantage, is accepted, meaning that customer taste flexibility refers to a company's ability to respond and adapt their products, services or customer experiences according to customers' changing preferences. When companies are able to understand and meet the varying needs and preferences of customers, this can have a positive and significant impact on competitive advantage. Here are some ways in which flexibility in customer tastes can impact competitive advantage: By understanding and responding to changes in customer tastes and preferences, companies can provide products or services that better meet customer expectations. This can increase customer satisfaction levels, which in turn can result in higher customer loyalty and positive recommendations to others. Flexibility in tailoring products or services to customer tastes can help companies differentiate themselves from competitors. When companies are able to offer solutions that better suit customer needs and preferences, this can create unique added value and become a factor that differentiates them in a crowded market. By having products or services that are more flexible and adaptable to various customer preferences, companies can expand their market coverage. They can attract broader and more varied customer segments, including those with different needs or preferences. This can help companies gain a larger market share and increase revenue. A dynamic business environment often requires rapid changes and adjustments from companies. By having the flexibility to adapt products or services to changing customer tastes, companies can remain relevant in the face of emerging market trends and changing customer demands. Flexibility in responding to customer tastes can also drive better innovation. When companies actively listen to and accommodate customer feedback, it can spark new ideas to improve or develop better products or services. These innovations can be a source of significant

competitive advantage in the marketplace. Changes in customer tastes and preferences, as well as in general market trends, can occur quickly. Companies that have the flexibility to adapt to these changes are more likely to survive and thrive in a changing business environment. This research is in line with research (Singh *et al.*, 2022); (Pramudya Ananda, 2022).

## CONCLUSION

Proactiveness, competitor orientation, and flexibility of customer tastes have a significant influence on a company's competitive advantage. This influence occurs through the mediating role of product innovation capabilities. This means that companies that have high proactive power, are able to understand and respond well to market needs, and can adapt to changing customer tastes, tend to have strong product innovation capabilities. This product innovation capability, in turn, helps companies achieve and maintain competitive advantage in the marketplace.

## Research limitations

### Limitations of this research include:

**Research Sample:** Limitations can arise from a limited sample size or being unrepresentative of the larger population. This can affect the generalization of research results.

**Geographic and Industry Context:** Research conducted in a particular geographic context or within a specific industry may not be universally applicable. Differences in culture, regulations, and industry dynamics can influence the relevance of results.

**Variables Not Examined:** There are many other factors that can influence competitive advantage, such as technology, human resources, and management strategies that may not be covered in this research.

**Research Methodology:** Data collection methods, such as surveys or interviews, can have respondent bias or limitations in detecting deeper variables. The data analysis technique used can also affect the validity and reliability of the results.

**Time of Research:** Competitive advantage and product innovation are dynamic phenomena and can change over time. Research conducted at one point in time may not capture long-term changes or emerging trends.

**Variable Measurement:** The accuracy of the measuring tools used to assess proactiveness, market orientation, flexibility of customer tastes, and product innovation ability can influence the accuracy of research results. If the measurement instrument is less valid or reliable, the results could be biased.

### Future research agenda

The future research agenda can be carried out:

Geographic Expansion and Industrialization:

1. Cross-Country Research: Conduct studies in different countries to see how these factors play out in different cultural, economic, and regulatory contexts.
2. Different Industries: Test this model across industries, such as technology, manufacturing, services, and retail to identify differences or similarities in influence patterns.

Additional Variables:

1. Technology and Digitalization: Investigates the role of technology, digital adoption, and digital transformation in mediating the relationship between proactiveness, market orientation, flexibility of customer tastes, and competitive advantage.
2. Managerial Capacity and Leadership: Examining how managerial ability and leadership style influence product innovation and competitive advantage.

Diverse Research Methodologies:

1. Longitudinal Studies: Conduct longitudinal research to track changes and developments in these relationships over time.
2. Qualitative Methods: Supplement quantitative research with in-depth interviews or case studies to gain a deeper understanding of the mechanisms behind the relationships.

Interaction Between Variables:

1. Moderation and Mediation: Investigate additional moderation and mediation variables that can strengthen or weaken the relationship between the main variables in this research.
2. Interaction Between Factors: Explores the interaction between proactiveness, market orientation, and flexibility of customer tastes to understand how the combination of these factors affects innovation and competitive advantage.

Long Term Performance:

1. Sustainability of Innovation: Examines the long-term impact of innovation capabilities on competitive advantage, including sustainability of innovation and adaptation to rapid market changes.
2. Economic and Social Impact: Evaluate how product innovation driven by proactiveness, market orientation, and flexibility of customer tastes contributes to the company's economic growth and broader social impact.

Measuring Instrument Development:

1. Instrument Validation: Develop and validate more accurate measurement instruments to

assess proactiveness, market orientation, flexibility of customer tastes, and product innovation capabilities.

2. Multi-dimensional Measurement: Develop measuring tools that capture various dimensions of each variable to get a more comprehensive picture.

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