

# Website-Based E-Commerce System Design and Build to Increase Online Sales at Funika Furniture

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## Abstract

This study examines how the role of website-based e-commerce used can increase the online sale of the Funika furniture company. Descriptive research is research used by researchers in this study. Researchers describe facts, data and information obtained from literature studies such as books and journals to research results related to the research topic. In this study, it is explained that along with the development of technology and information, people's demands for convenience in all fields are getting bigger. One of them is the ease of making buying and selling transactions. The demands of this society encourage various individuals, groups and companies to innovate better in making it happen. The development of ICT greatly facilitates entrepreneurs to innovate in their efforts to conduct transactions and marketing online, namely through website-based e-commerce. Various advantages and benefits can be felt to the maximum if the application and utilization are made properly. For consumers, this site will greatly facilitate them in shopping and transacting without having to be limited by time and place. Meanwhile, for entrepreneurs and companies such as the furniture company Funika, this can be a great opportunity to develop their business by increasing online sales to increase company revenues and profits.

*Keywords:* e-commerce; website; online selling information.

## 1. Introduction

Advances in technology make the business sector more developed. Many industries use technology to design and implement commerce where people can buy and sell their products or services anywhere. Customers can get what they want without going to the nearest outlet because, with the help of the internet, customers can get what they want without difficulty so that they can get it easily (Gunawan et al., 2021). This is done through electronic commerce (e-commerce). Electronic commerce (e-commerce) has become a priority to gain attention in business areas. E-commerce is an effort to improve business capabilities through client ties (Loh & Hamid, 2021). Along with the progress of the internet, making the virtual world happen. Everyone can relate to other people without any boundaries that can hinder it, for associating all with the digital community (Nasution, Aminy, Ramadani & Yusup, 2019).

From all perspectives of life, the business sector is a zone that is ready to face advances in data technology and telecommunications to develop (Febriyantoro & Arisandi, 2018). Large movements demand that trade provide services and goods quickly to meet customer demands. To overcome this problem, internet media transactions are now emerging that connect producers and customers. Businesses via the internet are better known as E-Commerce (Osak & Pasharibu, 2020). With the existence of E-Commerce, people have the same opportunities and opportunities to compete and succeed in doing business in cyberspace (Kartikasari et al., 2021).

The current marketing trend that is very popular through E-Commerce, E-Commerce has offered various conveniences in ordering and purchasing businesses. (Bhatti et al., 2020). PT Furniture Funika is an industry engaged in the marketing aspect of the furniture, household appliances and various furniture items. This PT has a deficiency in supporting its marketing business methods. The business is still through the conventional as well as through the marketplace. Customers have difficulty finding data regarding the presence of PT. Funika furniture causes the industry to be less known by many people.

E-commerce means buying and selling products and services on the internet. E-commerce can be classified as business-to-business or business-to-customer e-commerce. Business to business E-commerce means two or more companies buying, selling, or exchanging information, products, or services directly between companies or through

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third parties to help match buyers and sellers. Business to the customer means producers and final consumers exchange products and services in exchange for payment. This e-commerce has created a new dimension and attractiveness in buying products and services in today's world through the internet. Consumers will even feel more drawn to touch the item online to understand better its shape, size and value (Agus et al., 2021).

E-commerce has been widely adopted in developed countries to advance information and communication technology. Moreover, in today's world, the e-commerce sector is very important in both developed and developing countries. This significantly impacts the regional and global economy (Ahmadi & Amiri, 2022). According to a recent study report, e-commerce has a beneficial impact on the progress of the country's economy, and this participation will continue to grow. There seems to be no dispute that advancing technology will increase the sales and production of an organization. The growth of e-commerce depends on people's ability to use information and communication technology services (Rahman et al., 2022).

With the problems experienced by the PT industry. Funika Furniture so needed a website (Aparicio et al., 2021). This is very important because the presence of a website can help deliver detailed product and price data to customers. In addition, via the web, you can access the data you need anytime and anywhere (Aparicio et al., 2021; Bhatti et al., 2020). The website can explain how the industry carries out its activities so that it can show the duration of the order and the time it takes to send the delivery to the client to place an order (Krishnamoorthy & Vigram, 2021).

The presence of a website can increase the sales achievements of this industry, so an application program is needed that supports the process of selling and ordering furniture at PT. Funika Furniture. Businesses are currently only going through marketplaces and conventions, so clients have to come to the outlet to be able to buy products. Relying on marketing systems from marketplaces and conventions, it is felt that it is not enough to double the level of marketing with the problems experienced by the PT industry. Funika Furniture, we need a website. This is very important because the presence of a website can help deliver detailed product and price data to consumers

Through e-commerce, the pattern of competition grows. Customer and agent interactions and payments are simplified, making selling more flexible and accessible while extending business hours. Entities adopting e-commerce are expected to gain many benefits, including reduced business fees, automatic product recognition, and providing data in an efficient way between organizations of similar and different manufacturers. Regardless of location, business entities can also expand reserve links and participate in global trade more efficiently and efficiently (Kissiwaa et al., 2021). Additionally, e-commerce has been used by many people as an opportunity for countries to grow in the multilateral trading system. E-commerce can be instrumental in helping develop economies that benefit more from trade (Khan, 2016).

The essence of e-commerce is the use of electronics to improve capabilities in business processes and corporate route businesses. E-commerce is expected to improve client service, competitive advantage, and ease service expansion. Businesses can increase client compliance by using e-commerce to differentiate their offerings and develop better bonds with clients (Wibowo et al., 2020). Businesses use e-commerce to engineer their business to increase direct contact with their clients so that the bond between the client and the business can be improved. Internet and e-commerce can offer new opportunities to satisfy clients, which can increase sales profits. E-commerce improves business operational capabilities so that they can buy and sell their products online (Alsaadi, 2020).

Based on several studies, using e-commerce can increase an industry's online marketing. One of them is the furniture industry. So far, the marketing system that has been running on furniture has not been maximized because product marketing to clients is still manual, namely, customers come directly to the outlet to ask for details of the product they want. This system raises customer dissatisfaction with the service and causes symptoms of a reduction in marketing turnover. With an e-commerce system and web platform, Furniture's online marketing is experiencing rapid growth (Ahmad et al., 2018).

## 2. Method

This research method uses applied research, which begins with a qualitative analysis of the running system (Sugiyono, 2015). The stages of the research carried out were observing the situation of the business sector and the situation using data technology. The second entered the problem recognition step to identify problems at PT Furniture Funika by using the Activity Chart form and making an introduction table for the proposed system requirements. The third stage is preparing the E-Commerce form, and there is also an approach used, namely the Unified Modeling Language (UML). Unified Modeling Language (UML) is a model for systems and software that is a paradigm towards objects. Modelling is used to simplify complex problems so that they are easier to learn and understand. In the fourth step,

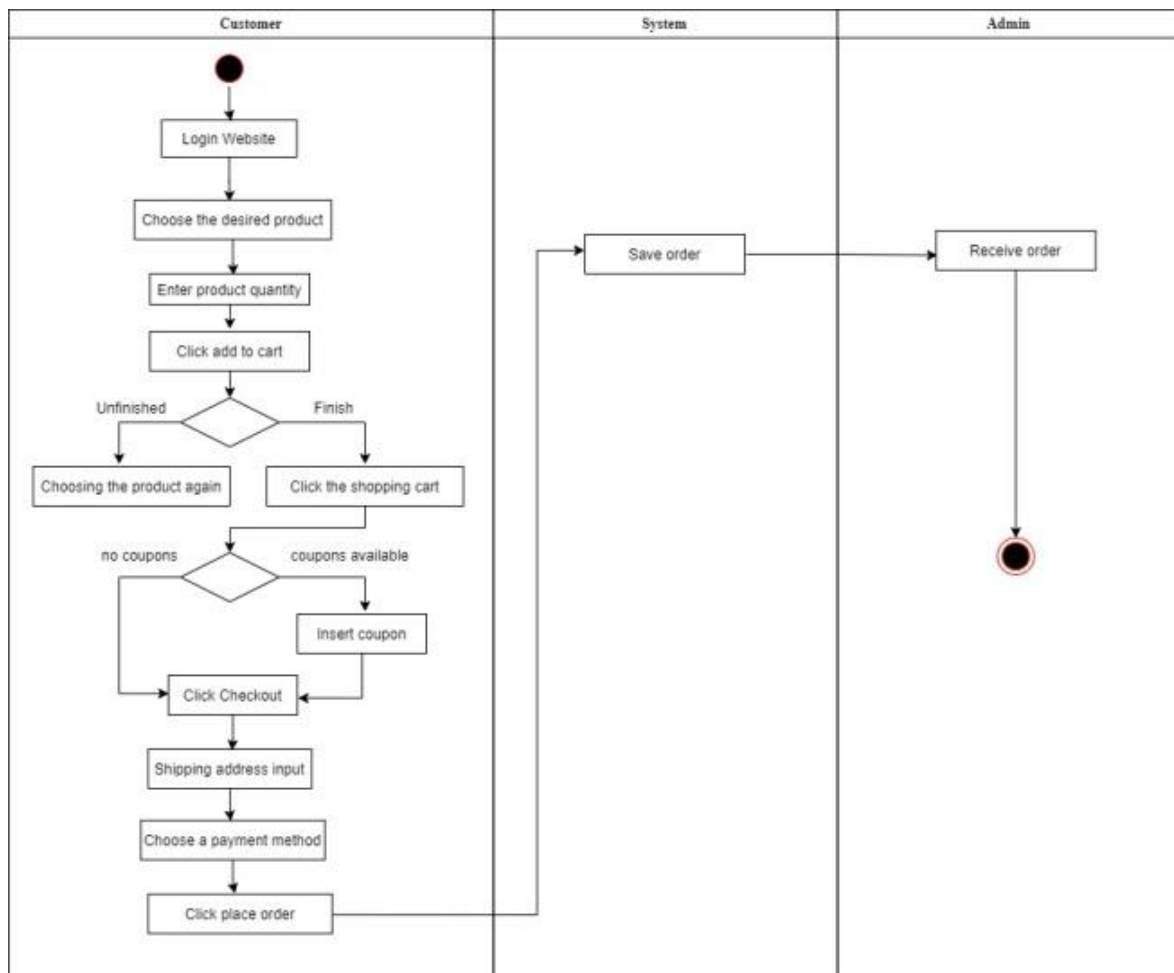
build an E-Commerce website using the WordPress Content Management System. The fifth step is applying the Search Engine Optimization (SEO) method. SEO is a search method that uses keywords or phrases with markers on website pages, and search engines will index these data. The White-Hat SEO approach is carried out with the help of the Yoast Seo plugin, the ninth step of the AARRR Framework strategy application. AARRR Framework is a form used to measure the success of a startup product. AARRR consists of 5 components,

Implementing the AARRR Framework strategy to support sales and product advertisements at Funika Stores. The final step is to assess and draw conclusions from the results of the analysis, preparation and application of the E-Commerce system at PT. Funika Furniture.

### 3. Result and Discussion

#### 3.1. Problem Analysis

Problem analysis is the first step in system analysis. Problems can be defined as something that is desired to be solved. This problem causes the target system can not to be achieved. Problem analysis begins with knowing the business processes in ordering goods and processing payments at Funika Furniture. Analysis of the ordering process can be described in the Activity diagram in Figure 1.



**Figure 1.** Activity Diagram of Item Ordering

Figure 1 is an explanation of the process of ordering goods, and The ordering process is carried out by logging in to the website, then selecting the product you want to buy, then clicking "add to cart" to input the number of products ordered into the cart. If the customer wants to buy another product, then the customer will choose the product again, if finished selecting the product, then the customer enters the coupon code if he has a coupon code, after that clicks

checkout then, the customer will be asked to fill in the full address, then choose a shipping service and payment method then the customer clicks place order to make an order then the system will save, and the admin will receive the order.

Furthermore, there is an analysis of business processes related to the payment process, which can be illustrated by the payment process Activity Diagram in Figure 2 below.

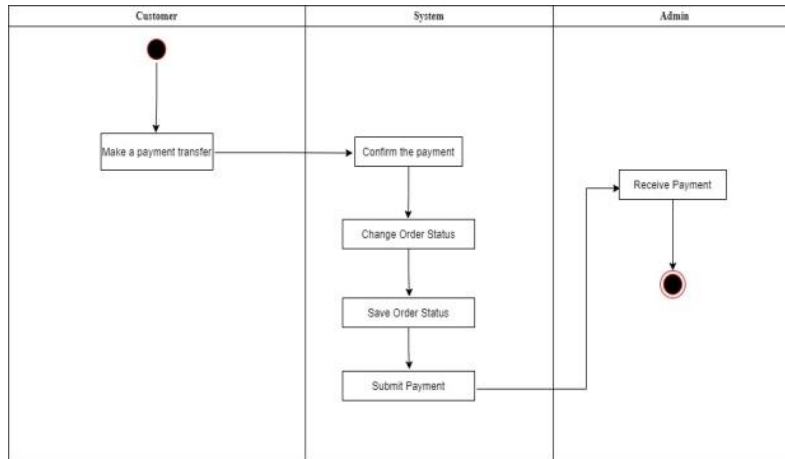


Figure 2. Activity Diagram of Payment Process

In Figure 2 it can be explained that the payment process is carried out after the customer places an order; the customer will be directed to the payment display then the customer makes a payment; when you have made a payment via a virtual account, the system will verify the payment and automatically change the order status in the system, then save the order status.

### 3.2. Modeling the Proposed System Using Usecase Diagram

Based on the proposed business process, the proposed system functionality model can be described using the use case diagram as follows:

#### a. Use Case Diagram Master

Use Case Diagram master containing Admin Input products, product categories, and coupons which can be seen in Figure 3.

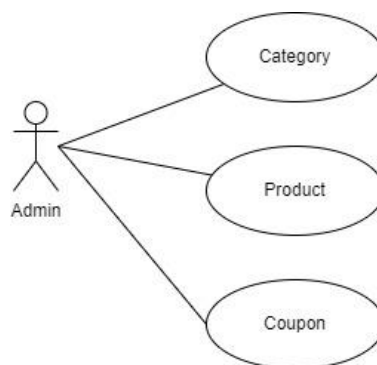


Figure 3. Usecase Diagram Master

#### b. Use Case Diagram Transaction

In the Transaction Use Case Diagram there are customers inputting order entry, payment entry, change status, delivery entry which can be seen in Figure 4.

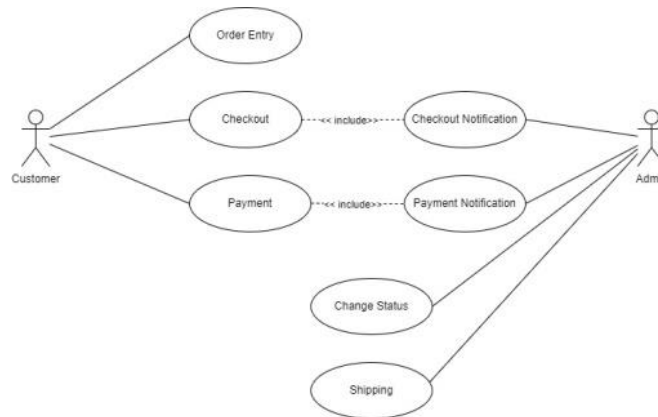


Figure 3. Usecase Diagram of Transaction

c. Use Case Diagram Report

In the Use Case Diagram Report there are several reports that can be taken, namely sales reports, best-selling product reports, customer reports, stock reports which can be seen in Figure 4.



Figure 4. Usecase Diagram Report

3.3. Data Domain Model using Class Diagram

The data domain model needed in the design of a web-based ecommerce system can be seen in Figure 5.

3.4. Menu Display Structure

Simply describe the menu display diagram of the web-based ecommerce system design can be seen in Figure 6.

3.5. Behavior Model Using System Sequence Diagram

The following is a model of interaction between actors and the system that occurs in the order entry process described using a system sequence diagram. The model can be seen in Figure 7.

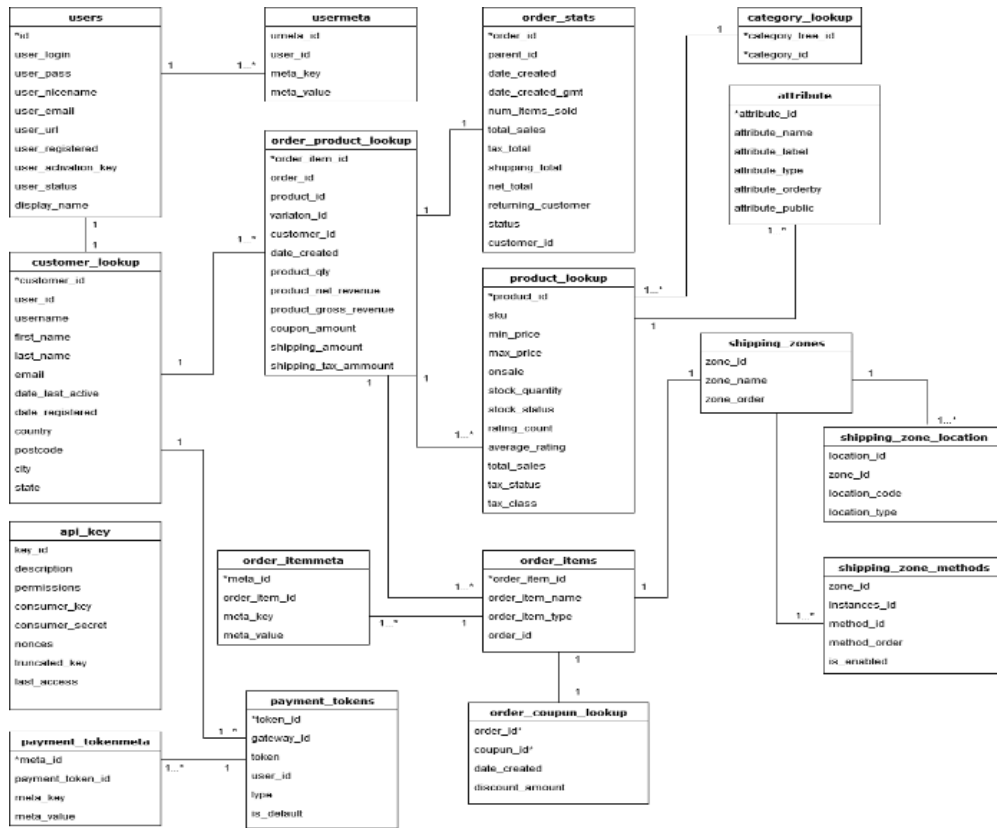


Figure 5. Class Diagram

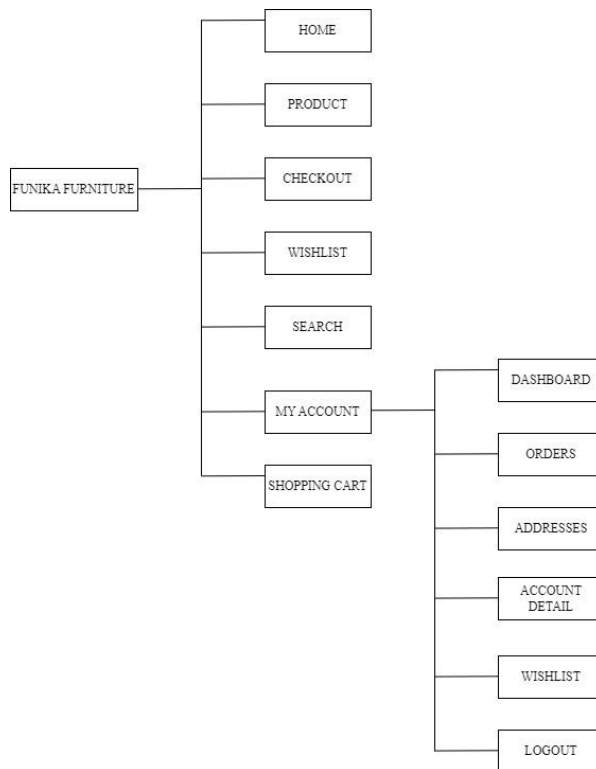


Figure 6. Structure of Menu Display

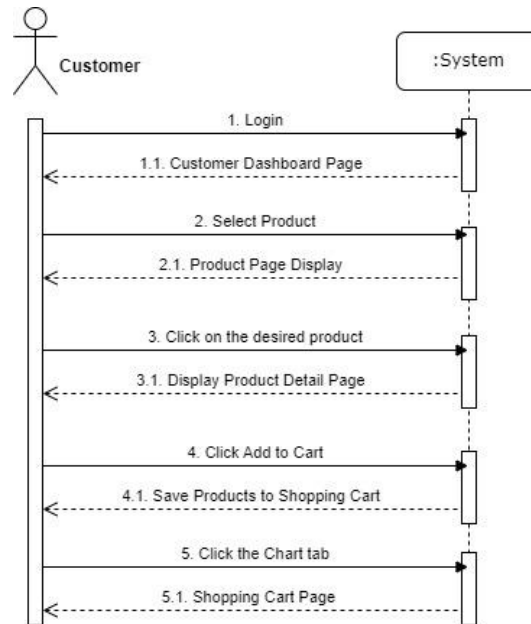


Figure 7. Sequence diagram of Order Transaction Input

### 3.6. System Implementation

The following is a view of the proposed website-based e-commerce business owned by Funika Furniture Company.

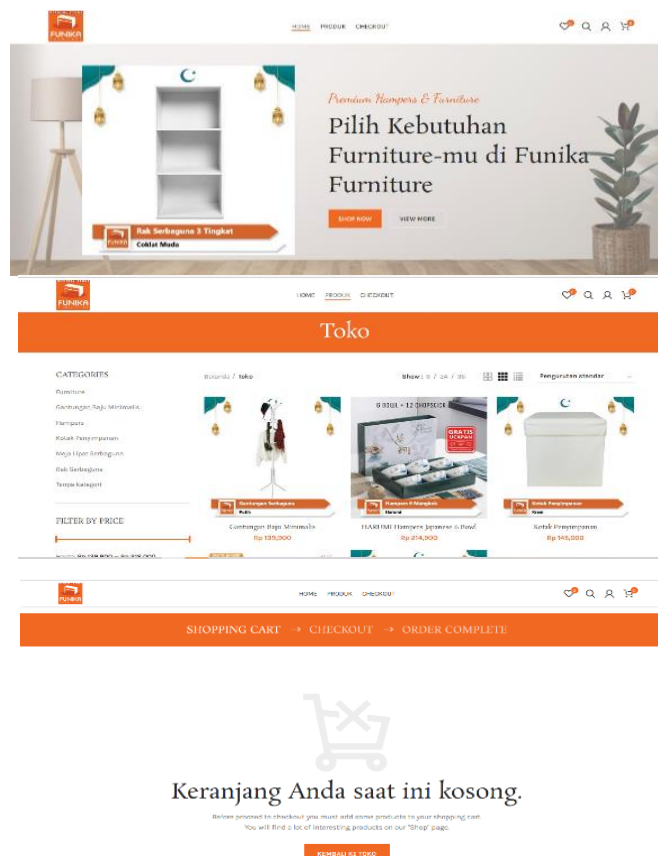
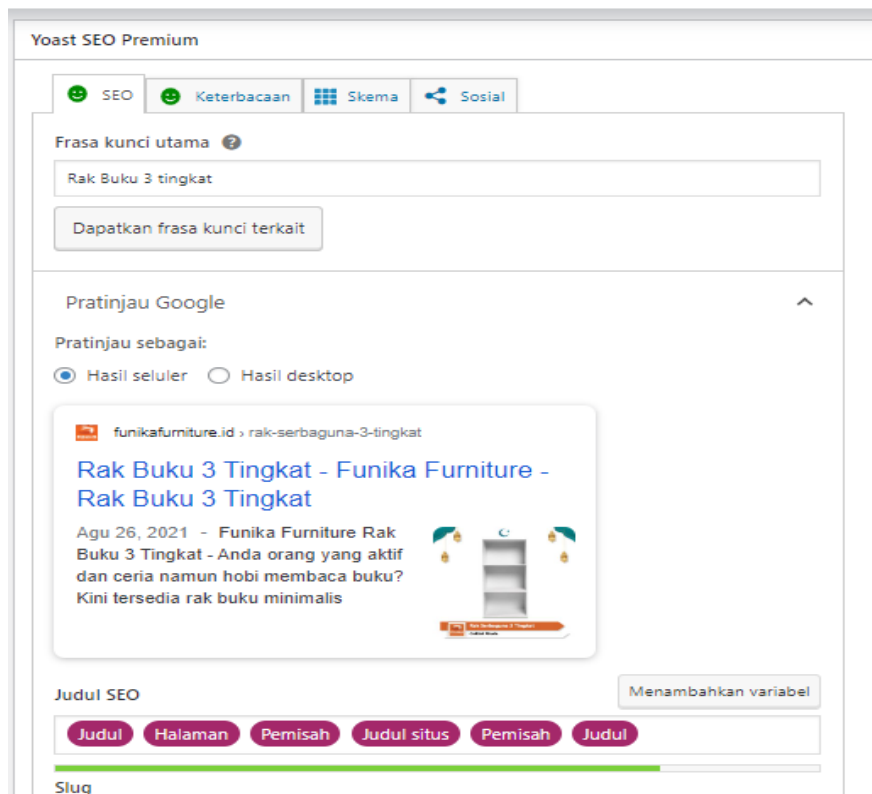


Figure 8. Funika Furniture Company Website-Based E-commerce

As the area of e-commerce is gaining importance in today's business environment, the need for an effective e-commerce strategy along with the strategic management process is increasing. A key element of the successful process of strategic management in e-commerce is to identify the determining factors in e-commerce that affect the entire process. This determination is a prerequisite for the long-term development of e-commerce businesses (Svatosova, 2020). With the latest trends in online shopping and online commerce, the importance of effective strategic management processes in e-commerce is growing. Nevertheless, practical studies show that the importance of strategy in long-term development is underestimated. The prerequisite for a successful e-commerce strategy is an effective strategic management process in e-commerce competitiveness (Tri Hidayat et al., 2020).

### 3.7. Search Engine Optimization (SEO) Implementation

The following are the results of SEO optimization using the help of the Yoast SEO plugin which is carried out on the product page optimization on this product page in addition to filling in the details of the product that will be displayed on the website page, it is also required to complete the fields contained in Yoast SEO, including the main key phrase, SEO title, slug, and meta description. Keywords, SEO Title, Slug, and Meta Description. As shown in Figure 9.



**Figure 9.** Product Page Optimization

### 3.8. The Effect of Website-Based E-Commerce on Increasing Online Sales at Funika Furniture Company

This website proposes to build and develop a reliable website to provide online advertising and sales of furniture products. In other words, the businesses approved by the proposed website will fulfill the knowledge and products of furniture, exchanging information. It has a large number of businesses in its database involving: Software such as software design, multimedia software, software operating system, software maintenance, and software security. In addition, this website is capable of approving such products. The main benefit of building and developing this website is to earn more revenue through online sales services. This will happen by implementing online retail (Hasanah & Latiffani, 2020).

Trust is the basis of online buying and selling transactions. Business transactions between two or more parties will occur when each party trusts the other. Trust is a key factor in online buying and selling. The trust that is formed will

affect consumer buying intentions in online stores. Purchase intention is the desire of consumers to buy certain goods. The development of trade through e-commerce certainly raises new problems, namely the many cases of fraud when shopping online (Puspitarini et al., 2021). However, if the Funika furniture company is able to overcome this, the company will gain consumer confidence to buy its products. This consumer trust can be seen in the reviews and ratings given by consumers. The higher the rating and review given, the greater the consumer confidence in the goods offered by the Funika furniture company. The following are some of the products sold at Funika Furniture Company.



Figure 10. Products of Funika Furniture Company

The rise of electronic commerce brings about several effects and benefits, especially in the perspective of customers. The significant benefits of e-commerce in the eyes of online customers include that consumers can save time because they can easily access online businesses anytime and anywhere, consumers who do not like to engage in social discourse can feel comfortable because these transactions do not require personal interaction with online business providers, consumers can also easily move from one online business site to another without anyone intervening if the business of one online business does not meet their satisfaction, some products that have not been released in the physical market can be purchased online; hence, this gives them wider access to products than before and customers also have wider access to product data from product information reported by the business to online reviews posted from the product or business site itself (Mayasari & Audina, 2020).

In addition, this significant benefit is not only felt by consumers but also for companies that use this e-commerce service. Furthermore, if the company implements and utilizes this website-based e-commerce effectively and efficiently, the results obtained will be optimal. The result in question is the achievement of online sales obtained by the company from this online transaction (Mai & Setiawan, 2020; Zaka & Yunanto, 2021). This increase in online transactions and sales will directly have a positive and significant impact on the revenue and profit of Funika furniture company.

#### 4. Conclusion

E-Commerce has changed people's lifestyles almost completely. This is because the use of e-commerce can save money and time. With the help of e-commerce application development, one can accelerate the pace of the online business that one has. It is one of the most cost-effective ways to do business, as the expansion of e-commerce has reduced the cost of services and product advertising. In addition, there is also no time limit in marketing the products owned. This is what Funika furniture company also does in marketing its products. Through website-based e-commerce, Funika furniture company will get many advantages and benefits from its use. Various things need to be

considered in its utilization, but with the right strategy, the results expected by the company, namely an increase in online sales, can be realized so that it will positively be able to increase company revenue.

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