

## **ABSTRACT**

*The rapid development of information and communication technology in the modern era requires companies to continue to progress and develop. Information is one thing that is needed, especially in the economic and business world. All parties involved in economic and business activities need information. With the information, the decision-making process can be done quickly and precisely by the objectives. The internet is the result of information and communication technology that can help users in obtaining the required information.*

*The role of the internet is not just to obtain information, the internet can also help businesses in facilitating product sales and expanding marketing reach. One service that can be used to help businesses develop their business is e-commerce. However, there are still many companies in Indonesia that have not used information technology, especially e-commerce in their business activities, one of which is TB. Purnama is engaged in the sale of building material products. TB. Purnama still applies the traditional business model, where sales activities are still carried out conventionally and the marketing process is only through word-of-mouth media.*

*The purpose of this study is to design recommendations for improvements to business models that are happening in TB. Purnama is based on the results of a SWOT analysis using UML (Unified Modeling Language) modeling consisting of use case diagrams, use case scenarios, activity diagrams, sequence diagrams, and class diagrams to strengthen the TB. Purnama business in the future in the face of tighter competition.*

*This study uses a qualitative method. Triangulation is used as a data collection tool. Data is collected through interviews, observations, documentation, and literature studies that can help in solving problems in the ongoing business model. The interview process was conducted with one resource person from TB. Purnama is the owner.*

*The results of this study are recommendations for improving the business model in the form of a prototype e-commerce sales system for building materials. The e-commerce system prototype was designed using the waterfall system development life cycle (SDLC) and UML modeling. The design of the e-commerce user interface is made using an open-source CMS (content management system) from WordPress.*

*Keywords: TB. Purnama Banjarnegara, e-commerce, UML, SWOT, sales system, business model*