## APPLICATION OF ADVANCED ENCRYPTION STANDARD (AES) CRYPTOGRAPHY ALGORITHM TECHNIQUES IN THE PROCESS OF SECURING TRANSACTION DATA (Case Study : Rumah Family Shophouse)

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## ABSTRACT

Data security is very important in maintaining the confidentiality of information, especially that which contains sensitive information whose contents must only be known by authorized parties. Ruko Rumah Family is a company that has been operating in the basic food sector since 2018. This company is closely involved in transaction activities between customers and admin. However, in terms of these activities, Ruko Rumah Family still does not have a good security system, so there is a possibility that the data will be known by unauthorized parties. Therefore, this research aims to build a website that can secure transaction data at *Ruko Rumah Family by encryption and decryption using the AES 128 Bit (Rijndael)* algorithm. Based on the research results that have been obtained, we have found a way to secure transaction file data in companies using the AES 128 bit algorithm method, namely by means of files or documents that undergo an encryption process using the AES 128 bit algorithm, the contents of the file will turn into symbols that cannot be read. . Then, when the encryption results go through the decryption process by entering the key used in the encryption process, the file contents will return to normal.

Keywords: Security, Encryption, Decryption, AES 128 bit (Rijndael).