## ABSTRACT

## RECOMMENDATION SYSTEM *SOFTWARE* SELECTION BASED ON CONTENT-BASED FILTERING ( CASE STUDY : PT. XYZ )

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Technology companies in Indonesia are currently competing fiercely to switch from conventional business systems to digital business systems. Because with software, companies can run business processes more quickly, efficiently, and can process business data more accurately. When looking to move into software, companies need to decide which software is right. For this reason, a recommendation system is needed to help companies make software selection decisions. In this study, the authors created a recommendation system software. The system that the author created is a system that uses content-based filtering with the TF-IDF weighting method and the cosine similarity algorithm. As a reference, the authors also use data from PT XYZ. The system is created using the Python programming language with the flask framework so that the resulting system is web page-based. The results of the recommendation system using the content-based filtering method provide the best order of advice according to PT. XYZ by comparing three criteria which include module description, business category and type of industry with outputs in the form of four criteria namely company name, business category, type of business and software module used. Based on the results of these tests, the system can provide recommendations based on the similarity of each software description and produce a precision value of 77%. Then the system is tested using the black box method with two actions, one as a user and one as an administrator and results are obtained which can indicate that the system is working normally and according to its function. The existence of a recommendation system using content-based filtering implemented on the website can be a recommendation for PT. XYZ clients to identify the right software and of course this is a distinct advantage for PT. XYZ to increase sales of its software products.

**Keywords**: Content-Based Filtering, Cosine similarity, Recomendation, Recommendation System, Software, Website.