

104 學年度大四工工專題摘要

第 25 組	Business Intelligence for pharmacy customer prediction to enhance service quality (題目)	
指導教授	簡禎富教授	
參與學生	(學 號)	(姓 名) 彭家榮
	101034069	
	(學 號)	(姓 名) 陳智文
	101034082	
	(學 號)	(姓 名) 費志康
	101034083	
摘 要		
By the application of data mining techniques, we developed a customer forecasting model to improve pharmacy management including decision making, planning strategy, service quality enhancement and administration in general. The access to information that can provide an insight to customer behavior would represent a huge tool for the pharmacy's executives, therefore this research aims to predict crucial data that can contribute to the pharmacy's enterprise resource planning. Our research is based on clients' predictions with sales analysis, which gives an innovative approach by having customers as point of reference in the forecasting process. The pharmacy POS (Point of Sale) data used for this research comes from 3 months of transactions. Bayesian Network, Deep Learning, specifically Artificial Neural Network Analysis, were utilized to execute significant sales analysis and produce reliable predictions that would become administrative tools, specially with the building of a forecasting model based on customer behavior with weather as the prediction parameter. As a result of the information obtained by this research, recommendations concerning the pharmacy's administration were made, understanding the usefulness of basing the study on the customers. It is expected that the prediction model developed for the pharmacy can be used on different industries, which broadens the future work of this research.		