ABSTRACT

APPLICATION OF DATA MINING IN MARKETING SECTOR FOR APPROXIMATING CRITERIA POTENTIAL OF CONSUMER USING DECISION TREE METHOD AT PD BPR IN REGENCY OF BANDUNG, BATUJAJAR BRANCH OFFICE

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PD BPR in regency of Bandung, Batujajar branch office as one of regional company that move on banking sector keep on effort to develop its strategy in marketing sector in order to customers that have been there could be defended and hopefully could utilize finance service which is bargained by bank side maximally and optimally, it is also as much as possible to do pressing marketing operational cost payment. Fund division of PD BPR in regency of Bandung, Batujajar branch office is one of division that has a duty in banking marketing sector, until now does not have standard method yet in analyze customer data. The used method up till now is classify all of the customers who have paid off their credit installment into marketing target, whereas it is not yet sure that all of the customers would like to interest carry out the credit borrow again. This last assignment try to assist the problem by design an application of data mining which used for approximating criteria of credit customers, whether have potential to carry out the credit borrow or not.

In this last assignment, used research methodology is descriptive analysis, whereas used application design method is waterfall process model. Technique of data mining that is applied to the application is classification, whereas used classification method is decision tree. Algorithm that is used as algorithm decision tree former is algorithm C4.5. Processed data in this last assignment is data of credit customer installment PD BPR in regency of Bandung, Batujajar branch office at June 2009 in the format of Microsoft Excel. Preprocessing would be carried out previously to the data are data integration and transformation, data cleaning, and data reduction so the data are ready to be mining and those processes do not be handled by the system. Result from application mining process is forming data pattern that is rules or prediction rules about criteria of customers who are potential or not to carry out the credit borrow. Development of this data mining application using design methodology object oriented with UML 2.0 as its model language where the tools or used diagrams are use case diagram, activity diagram, sequence diagram, and class diagram, whereas for implementation of its software use constructor softwares, Borland Delphi 7 and MySQL 5.0.45 community-nt. Borland Delphi 7 chosen as constructor software due to providing sufficient facilities and flexible in making of application which is

object oriented whereas MySQL 5.0.45 communit-nt used as constructor software in making database.

After the application has been tested with alpha testing, where used testing method is black box method that is focus to functional requirement of software, obtained conclusion that constructed data mining application has been free from syntax error and functionally release a result that appropriate with expectation. Whereas based on result from beta testing, that is questioner filling to end user or user, constructed data mining application could assist fund division in analyze costumer data and obtained analysis result could give outlook about credit marketing target in the future which in the end hopefully could pressing operational cost of banking marketing some minimal level of.

Keywords: Data mining, Marketing, Prediction, Decision Tree, Algorithm C4.5