ABSTRACT

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APPLICATION CREDIT SCORING WITH LOGISTIC REGRESSION STUDY CASE: BANK XYZ

(xiii + 137 pages: 41 figures, 33 tables, 3 appendices)

With the existence of high risk that may occur in relate to credit approval, Bank XYZ pays serious attention in managing this risk issue. In this light, the bank credit analysts evaluate the credit feasibility of the applicant based on their personal judgment prior to approval. In practice, this judgment is done by senior officers. Nevertheless, this judgment is not too accurate and also time consuming.

To find low risk customers, i.e. customers with high ability to pay back, utilizing a better method than personal judgment, such as statistical techniques, are common among credit analysts. This final project concerns with the development of a stand-alone desktop application that primarily functions as a tool for the credit analysts in scoring creditor's profile. This application, which is developed following Rapid Application Development principles, applies logistic regression method. The product of this application is a specific credit scoring model for the Bank XYZ. To enable interaction between user and the system, the GUI of this application is developed in MS Visual Basic .NET. To obtain powerful large data processing, the application is powered by SAS as its statistic engine which is linked to MS SQL Server 2008. The detail of the scoring system is modeled with UML 2.0.

From a series of tests conducted, the credit scoring model produced by the application has been examined to potentially lower the credit risk. Based on the existing model, Bank XYZ can select better low-risk customers than the traditional method. It is expected that the risk of credit can be minimized until 75%.

References: 11 (1990-2012)