Editors: Ford Lumban Gaol, Jiri Strouhal

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# Information Systems Strategic Planning
# on Bank Merger
# (Case Study at Bank U)

ALVIN EGA SATRIA
IDRIS GAUTAMA SO
Management Information Systems
BinusUniversity
Jl. KebonJeruk Raya No. 27, Kemanggisan/Palmerah, Jakarta
INDONESIA
egafx@brandalls.net   http://www.brandalls.net/egafx/
igautama@binus.edu   http://idrisgautamaso.com

Abstract: Based on Indonesia Central Bank regulation banks that owned by same parties should be merged into one bank, otherwise only one bank can be owed by a certain party/person. This paper is to review the merger process done in Bank U in the trade finance area and then comparing strategic planning done in the merger process with the theoretical framework in available publications. The subject company should be able to see how it managed the merger process within the trade finance scope, and also learn on alternative solutions for future references. Methods used to collect data were interview, observation, and literature study. Analysis of the company is emphasized on the information systems area, mainly on business process, and data conversions. Results of the analysis were conducted based on theories and literature studies mainly regarding merger, trade finance, and strategic planning.

Key-Words: Information systems, strategy, merger analysis, planning, trade finance, data conversion

## 1 Introduction

Banks have been evolving from having just basic functions such as loan and saving, to a more sophisticated and complex ones like investments and foreign exchange. The world of modern banking is considered one example of business area where information technology (IT) advancement is essential.

In modern banking, it could be assumed that one of the most important functions is trade finance;it is one of the banking services for wholesale segment. Wholesale banking services are different to retail services such as loan and savings, which involve bigger amount in terms of transactions value compared to that of retail services, although the number of transactions is generally lower.

Commercial banks with ability to do foreign exchange transactions are capable of providing trade finance services. In Indonesia, banks have to get the "bank devisa" status by the central bank (Bank Indonesia) in order to do trade financing, yet big banks in Indonesia have already capable for trade financing.

UI is the first Indonesian–Singaporean joint–venture bank to establish its operation in Indonesia, started operating since March 16, 1990. UI is 99% owned by the UGroup from Singapore. Meanwhile, UGroup also owns 99% of shares in PT. Bank B, which later in that time, it was renamed to PT. Bank UB (UB). With the Bank Indonesia issuing single presence policy, U Group is obliged to merge UI and UB into one entity.

Bank Indonesia Regulation number 8/16/PBI/2006 expects multiple banks with single controlling shareholder to merge into one bank, also known as Single Presence Policy [3]; one of the controlling shareholders that are obliged to merge their banks is the U Group.

UI has to merge into UB;the regulation states that the ownership structure adjustment is required to be completed by no later than the end of December 2010. The merger process has been done during March to June 2010, which, besides the legal processes, both parties were dealing with their information systems. In their trade financing activities, both banks used trade finance information systems from different vendors. UI and UB were using information systems suites namely FTS and XMB, respectively.

### 1.1. Corporate Profiles: U Group

U Group provides a wide range of financial services through its global network of branches, offices, subsidiaries and associates. U Group is a market leader in Singapore in certain products. U Group is

rated among the world's top banks by Moody's Investors Service, receiving B for financial strength, and Aa1 and Prime–1 for long–term and short–term bank deposits respectively.

## 1.2. Corporate Profiles: Bank B

The public listed bank of Bank B has come through the Asian economic crisis of the late 1990s in fine form. With a rising assets base and stable financial base, Bank B has achieved Class A certification from the Bank of Indonesia and has successfully converted into a publicly listed bank. One of Indonesia's top 20 banks, Bank B has traditionally focused on the trade finance segment, targeting especially small and mid–sized businesses. The retail distribution market is also a primary target of the group. Bank B offers a full range of retail and commercial banking services. In 2007, Bank B is owned 61.1% by U Group and was renamed to Bank UB.

## 2 Problem Formulation

During the merger process, there are many information systems–related aspects to take into account in regard with attaining the best results, and the most predictable step is to choose the system that will be used to serve the surviving entity (Bank UB) whether it might preserve one of the old systems, or possibly be choosing a brand new system. The rests could be determining key success factors, taking care of system changeover, dealing with additional costs, managing changes of necessity in hardware resources and user effort, and most importantly, doing data conversions.

Choosing a system to be used after merging process is an important thing to pay attention at. There are many aspects here to be considered, such as costs related to software (include maintenance fee and other additional costs,) capabilities analysis, and more other important aspects; all to ensure the best outcome of the merger.

## 2.1. IT Failure Rate Is High

A survey by KPMG LLP, Canada shows that of 176 analyzed questionnaire, 61% reported details on a failed IT project. The four most important reasons for project success are: user involvement, executive management support, clear requirement statements, proper planning. A software project has a dramatically higher chance of success if these four factors are performed properly [2].

Creating a good information system strategic planning will certainly help IT projects to succeed. Trade finance transactions contribute a big amount to the bank (source: UI Annual Report 2008) therefore failure in the division merger will most likely result in a material loss to the whole bank. A good planning on information systems will result in better process and outcome.

## 3 Problem Solution

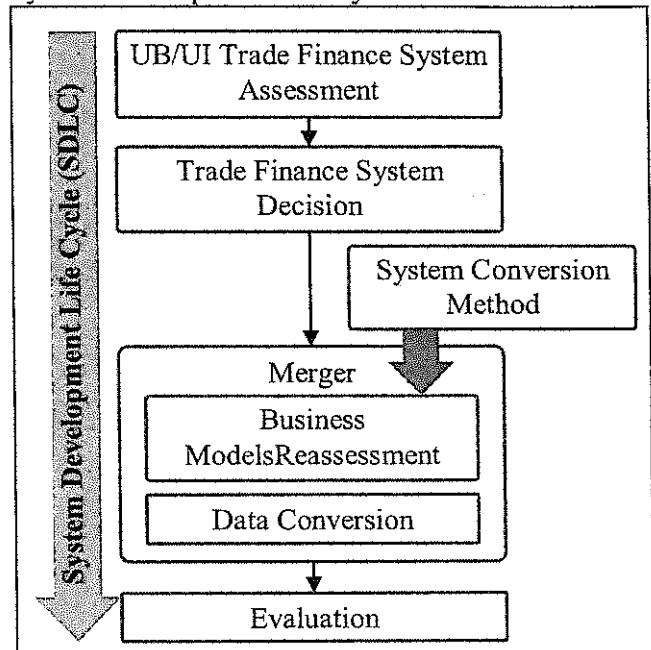To analyze the case, a methodology derived from System Development Life Cycle below is used:



Fig.1 Case Analysis Methodology

The process of SDLC is known as 1) Analysis, 2) Design, 3) Implementation, 4) Testing, and 5) Evaluation. In this case analysis, the analysis phase is to assess the existing systems used in UI and UB. The next phase is to synchronize the trade finance business model from both banks to make one new, combined trade finance business model. Implementation phase is where the data conversion takes place. After implementation, the bank has to test the system to make sure the requirements are met. After the test, the new system is supposed to run on daily basis; then evaluation is necessary to ensure the running system goes sustainable.

## 3.1. UI/UB Trade Finance Assessment

This is one of the first steps in order to proceed on information system merger, before deciding what will be the new system to run on the new entity. The company must have adequate data concerning current conditions of each merger participant. The

data will help in making decision of what system is going to be built.

The system used in UI is the FTS, a trade finance solution from Singapore, headquartered in China. The software support has been long terminated and until the time of merger it was maintained by the internal IT division of the bank.

Bank UB on the other side used the XMB trade finance information system. The XMB is still supported by the vendor, which is also headquartered in China.

## 3.2. Trade Finance System Decision

In deciding what kind of trade finance information system to be built, company would need to consider many aspects. The first is about costs, different systems have different cost figures. Certain vendor will provide user just the right configuration of costs. The second is capability; this is definitive factor for the company to study. A better system (universally) doesn't guarantee a right capability for the company. The third is sustainability considerations. A good vendor generally provides a benefit of system sustainability. Taking into account trade finance business model assessment, the company will have to discuss what features needed in a system for the company to maintain its system sustainability well.

The XMB system has a sole distributor in the country, which also provides consultancy services. Without further considerations, UI and UB merger team decided to go with XMB, as it is still supported, powerful, and sustainable. The systems of UI and UB eventually had to be synchronized. The merger resulted in the use of XMB systems originally used by UB. Users of FTS from UI had to explore the new system of XMB. One of the most interesting features of XMB is its future-proof foundation, which contributes significance to the sustainability assessment. Despite of XMB's expensive price tag, the system has proven its capability in trade finance area. XMB allows the users to produce documents, do SWIFT messaging, calculate charges, produce reports, and produce accounting entries to general ledger.

## 3.3. Merger Preparation

Trade Finance Division of UI and UB have planned for the information system merger 6 months before the merger implementation. The plan discussed mainly regarding managerial aspects.

In merging an informationsystem, one of the first steps to do is deciding the system conversion

method. As described by Sarkis, there are four major strategies for implementation; these are: parallel conversion, direct conversion, phased conversion, pilot conversion [4]. The parallel conversion method allows the existing system and the new system operate simultaneously until there is confidence that the new system is working properly.

In direct conversion, the old system is cut immediately and the new system takes over. Phased conversion is where modules of the new system are gradually introduced one at a time. In pilot conversion, the new system is fully implemented on a pilot basis in one segment of the organization.
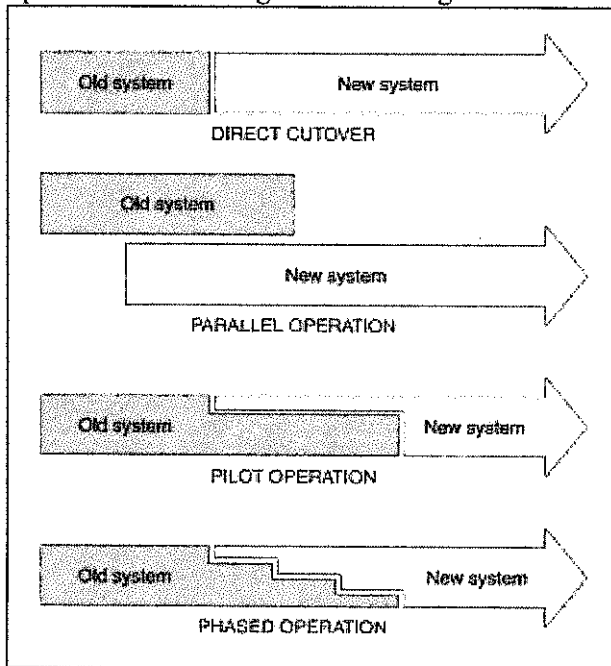


Fig.2 System Changeover Methods[1]

There are two main activities in the information systems merger: 1) Business Model Reassessment and,2) Data Conversion from old system. As previous two entities have different business models, although both merged divisions are in the same business area, merging them requires reassessment on the business model for the new entity's business to run well.Merging different systems of different vendor requires the company to convert the old system's data to the same format as the new system's database. "Data conversion is an important part of the system installation process. During data conversion, existing data is loaded into the new system. Depending on the system, data conversion can be done before, during, or after the operational environment is complete." [1]

### 3.3.1.Challenges
Regarding to the survey in 2.1, there has been identified top three reasons of IT/IS implementation failure: 1) Lack of user input, 2) Incomplete requirements and specifications, and 3) Changing requirements and specifications.[2]

In the merger of UI and UB, reason number three was most likely to happen often. The assessment of UI system is not very well developed, resulting in keep-changing user requirements. In one case, a consultant was kept reconfiguring the same spot in XMB system to meet the constantly-updated user requirements.

## 3.4. The Merger Plan Implementation
To begin planning on the merger, the U Group first appointed a project manager to be in charge of the whole process. A team led by Vice Head of Trade Finance division consisting of IT/IS Analyst, Head of Inward Bills, Head of Export Bills, and more others will take care of the information systems merger in the trade finance division. Also involved are the head of International Trade Services & Remittances Department.

Before further proceeding to the merger implementation, the bank would first need to assess its subsidiaries' trade finance systems. The new entity will implement a system derived whether from UI, UB, or possibly implementing brand new system from different vendor.

UI and UB merger team felt that the most challenging stage in information systems merger is the data conversion. One of the factors that can hamper the process is the use of the new system; the new system is a challenge for UI. As direct system changeover is used, UI has already shut down their trade finance system, with the last outstanding trade finance transactions data available only in prints. The transactions data have to be inputted to the new system during off-work hours, while weekends are used for system testing. Sometimes, misbalanced transactions did occur, causing both system consultants and users to be kept in the site to analyze the error and resolve the calculations.

Backup is definitely very important thing to be performed. To prevent data loss, a major risk caused by direct changeover method, the IT/IS analyst is mandated to do a well-organized backup routine; in this regard, his responsibility is to make sure any backup is available anytime, including a backup of the unrestored (problematic) system.

## 3.5. Evaluation
It's a mandatory in every project, that after the implementation stage, the team needs to do evaluation. A post-implementation evaluation assesses the overall quality of the information system. The evaluation verifies that the new system meets specified requirements, complies with user objectives, and produces the anticipated benefits.

Every Saturday and Sunday during the merger project timeframe, the bank conducted user acceptance test, the users from both UI and UB are involved in the test. Users from UI especially, were also learning the new system.

After the merger of the trade finance division is done, at some times the bank still need daily maintenance from the consulting company that endorses the XMB system. This is necessary as final system fine-tune is reasonable.

## 4 Conclusion
In a merger process involving information systems, data conversion is one of the key aspects that need special attention. Users of the new system can be involved in the data conversion, resulting in project time frame efficiency, in which users can be trained for the new system simultaneously.

Out of the four system changeover methods, direct system changeover is considered to have the cost efficiency, because of the simplicity. On the contrary is the parallel system changeover method. Though, direct changeover tends to have the highest level of risk. With managed backup and well-developed strategic planning, direct system changeover is not a big issue, especially in an information system merger case. To apply direct system changeover on other kind of projects, however, a further study is essential.

Converting transaction data in merger context also involves data restructuring, as the merging entity has different system. Therefore it is important to do daily development environment backup, because this will reduce time wasting caused by wrong data conversion management.

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