

IDC CASE STUDY

The Tale of Two Super Regional Banks and Their Core Banking Transformation

September 2013

With excerpts from IDC Financial Insights' Core Banking Update Report 2013 – "It Will Get Interesting in 2013 and Beyond" — by Michael Araneta and Cyrus Daruwala, IDC Financial Insights

Preamble

Core banking is the central nervous system of a bank managing channels, accounts, products, deposits, loans, and overall GL functionalities across the bank. The system is essentially responsible for processing and posting transactions to and from a customer' accounts, enabling customers to maintain and access multiple products belonging to different lines of business.

A typical Core Banking Systems (CBS) is augmented by various line of business (LOB) point solutions. In the midmarket segment, CBS typically includes channel systems for call center, Internet banking and ATM, business intelligence, and CRM. Sometimes CBS also include Cards & Payments solutions. Meanwhile, core systems for the smaller institutions typically provide all systems and technology necessary to run the entire business, and even include accounting, fraud management, compliance, and systems architecture. These are often referred to as bank-in-a-box.

In this document, which is partly an excerpt taken from IDC Financial Insights' *Core Banking Update Report 2012*, we will highlight the drivers that encourage these banks to refresh, modernize, or replace their core systems. We also highlight the role of Silverlake Axis and IBM as strategic partners in the transformation of the two super regional banks, CIMB and OCBC.

ASEAN' Top Banks and Their Core Banking Partners

A review of the largest banks in Asia/Pacific confirms our observation that no one vendor *dominates* the core banking vendor landscape. Some of the larger global core banking vendors from the United States and Europe have their fair share of references among the regional banks, some as much as 12- to 15-year-old references, but nevertheless nobody dominates the CBS space.

In terms of sheer number of references among the top 120+ banks, Silverlake Axis is one of the leaders, with more than 30 references in Asia/Pacific, followed by Temenos, FIS, Fiserv, Oracle, and Infosys. The region is also home to a large number of internally developed systems, usually mainframe-based, as well as systems developed by local vendors, a trend we see especially in South Korea and China.

Vendor Strongholds

Vendor strongholds prove how vendors' references in the market are crucial, allowing banks to see if similar models can be easily replicated within their own institutions, with greater certainty and that local know-how, skills, and support are available. As a slew of core banking projects get started in the near to medium term, certain countries will likely see vendor incumbents get even more dominant, as

they are best placed to clinch the upcoming deals and as they squeeze out less prominent players from the game. In short, vendor strongholds — highlighted in Table 1 — will most likely perpetuate.

Table 1

Leading Core Banking Players in the Top 10 Bank Segments in 12 Asia/Pacific Countries

Country	Prominent Core Banking Applications		
Australia	Internal / Older proprietary, SAP, Oracle, Hogan		
China	Local / Internal / Older Systems, Temenos, TCS		
Hong Kong	Local / Internal / Older proprietary systems		
India	Infosys, Oracle, TCS FNS		
Indonesia	Silverlake Axis		
Malaysia	Silverlake Axis		
Philippines	Silverlake Axis, FIS, Infosys		
Singapore	Silverlake Axis		
South Korea	Local core banking applications, Hyundai		
Taiwan	Internal and proprietary systems		
Thailand	Silverlake Axis, FIS		
Vietnam	Silverlake Axis, Temenos, Hyundai		

Note: The list of prominent core banking vendors in each market changes when non-top 10 institutions are included.

Source: IDC Financial Insights, 2013

Old is Not Gold

The age of core banking systems across the Asia/Pacific markets brings up perhaps the most common call to action for core banking modernization — that current core banking systems are simply too old to support the new ways of banking; the way the *customers* would like to bank.

As a group, Asia/Pacific banks compare favorably versus their peers in the United States and Europe, with respect to the age of core banking systems currently in use. In Asia/Pacific, there have been many references of banks leapfrogging technologies and investing in new generation core systems, not to mention how several newly emerged institutions have built up altogether sophisticated core banking platforms.

However, certain markets in Asia/Pacific stand out for having relatively "older" systems — Taiwan, Philippines, South Korea, Hong Kong, and the tier 2 banking segments in Australia are where a more wide-scale migration of core banking systems might be impending.

IDC Financial Insights estimates that nearly 32–38 of the 120 banks (a range of 26.7% to 31.7%) will effect significant changes to their current core banking systems within the next three years. Note that these include not only whole-of-core transitions but also significant changes to key components of their core systems such as chart of accounts, GLs, and loans, deposits, payment systems — reflecting the growing preference for iterative creation of a core banking platform for many banks in the region (and worldwide).

Results from a recent survey conducted by IDC Financial Insights covering Indonesia, Philippines, Taiwan, and Vietnam, give an indication of the extent of core banking modernization activity we expect in the short term (see Table 2).

(Please note, however, that our survey results *included non-top 10 banks as well*, and that similar surveys were not run in the remaining 8 markets covered in this report.)

Table 2

Banks' Plans for Core Banking System Modernization in the Next Three Years

	Have decided to replace	Actively looking to replace	Will do minor/major changes	No change/Undecided
Indonesia (n=9)	0%	22.0%	66.7%	11.1%
Philippines (n=24)	7.1%	21.4%	57.2%	14.3%
Taiwan (n=26)	11.5%	15.4%	61.5%	11.6%
Vietnam (n=9)	11.1%	11.1%	77.8%	0%

Source: IDC Financial Insights, 2013

OCBC and Its Journey

OCBC is Singapore's longest established local bank, formed in 1932 from the merger of three local banks, the oldest of which was founded in 1912. It is presently the second largest financial services group in Southeast Asia by assets and one of the world's most highly-rated banks, with an Aa1 rating from Moody's. OCBC was also recently ranked by Bloomberg Markets as the world's strongest bank, an accolade that holds a lot of credibility given the current financial market turmoil.

The bank's consumer, business, investment banking and other specialist financial services solutions are delivered through an extensive global network of over 500 branches and representative offices in 15 countries and territories, including more than 400 branches and offices in Indonesia operated by its subsidiary, Bank OCBC NISP.

OCBC's subsidiary, Great Eastern Holdings, is the largest insurance group in Singapore and Malaysia, while asset management subsidiary, Lion Global Investors, prides itself as one of the largest private sector asset management companies in Southeast Asia. Its private banking services

are provided by subsidiary Bank of Singapore, which ranks among the top 5 global private banks in Asia.

With a dominant presence in both the consumer and business banking segments in Singapore and Malaysia, OCBC is among the core bancassurance providers in Singapore and features as one of the top players in unit trust distribution, home loans, personal credit, small- and medium-sized enterprises market and the Singapore Dollar capital market.

During the late 1990s and the early 2000s, OCBC Group quadrupled in assets and total customers and simultaneously, in the various applications and solutions that it has acquired over the years.

While OCBC evaded catastrophic systems failures that seemed to have plagued some of its peers, it was accepted bank-wide that its solutions and systems at that time were rigid, and it took a long time (and an army of programmers) to roll out new products and services, thus retarding time to market and escalating operating costs. Then, ongoing maintenance also continued to weigh down the bank, contributing to recurring expenses and reliability issues. All these were in turn, directly affecting the bank's efficiency and cost-to-income ratio.

As such, a technological transformation and refresh was in order, not only to support OCBC's New Horizon strategy but to assist the bank in gaining sustainable competitive advantage by delivering on a differentiated customer experience, deepen its business presence in Singapore, and craft further inroads into the rest of the region. This would for instance, equip the institution to better expand distribution capabilities in Malaysia and capture market shares within the Islamic banking and Takaful insurance markets, grow its burgeoning businesses across Greater China, and build its private banking business through Bank of Singapore.

A technology refresh would also work to better harness aggregated synergies and increase cross-sell and customer referrals among the various entities within the Group, including OCBC Singapore, OCBC Malaysia, OCBC Al Amin, Bank OCBC NISP, Great Eastern Holdings, and OCBC Securities.

The Solution

OCBC has been a client of **IBM and Silverlake** Axis since 1994 in Malaysia and since 2001 in Singapore. After an extensive nine month long assessment of the various options available in the market, and mapping back to OCBC's long-term, regional, business aspirations, OCBC decided on the **Silverlake Integrated Banking Solution (SIBS) on an IBM AS400 (Power Systems) Platform**. Choosing the right platform was a very important consideration. OCBC knew that a typical core banking platform has a life-span of 8 to 12 years. The big investment aside, the solution and the platform will need to scale as quickly as the bank's businesses wanted to, and do so in a secure, robust and complaint manner. Given these 'mission-critical' requirements, the *Silverlake and IBM Power Systems combination stood neck and shoulder above the rest, as testament from as many as 50 banks in the region that are enjoying the strategic alliance of SIBS sitting on a robust and scalable IBM AS400 (Power System) platform.*

The total migration for the Singapore operations from the Tandem system to a more flexible and costeffective SIBS was completed in November 2001, well on time and within budget, allowing the bank the ability to enhance product delivery and transaction processing capabilities, and deliver innovative products to customers with a shorter turnaround time.

IBM and **Silverlake** have hitherto served OCBC's technological requirements well, effectively facilitating the account, offering post-implementation support and continually improving on its service quality. As such, the bank did not see the need to reinvent the wheel and invest in any massive core banking system overhaul as part of its latest New Horizon strategy. Instead, OCBC's Head of Group

Operations and Technology, felt that it was more crucial to ensure that there was an excellent integration of the core banking system with all incumbent working systems internally, rather than to plug-and-play the newest best-of-breed disparate applications and expect these to elevate the bank's technology platform.

To this end, OCBC conducted a holistic internal study to revisit its technology platform in 2008-2009, where it analyzed its core banking, channels, CRM, branches, workflow imagining, risk management, data warehousing processes and requirements, and took stock of its existing technology portfolio, emerging business demands, and the key implementations or refresh required. Following this extensive study, OCBC concluded that **the SIBS and IBM partnership had continued to integrate well** with all client fronting systems (the Internet, branch, ATM and mobile distribution channels), and provided for the bank's evolving business requirements, especially as it maintains a concerted focus on delivering a superior and differentiated customer experience and invests in design delivery capabilities to gain a sustainable competitive advantage.

While the SIBS solution framework with IBM Power System remained the most apt system, OCBC needed to execute a core banking refresh to enhance some of the existing functionalities. Such a continued spotlight on technology at the front-end system is crucial to the bank as it pursues its core focus of providing quality customer products and experience. The latest core banking modules that OCBC continues to employ from the SIBS are the: Bank-wide Customer Information Facility (CIF); Financing or loans system to handle the complete life cycle of loans from the application stage right up to the settlement of these loans; and, Funding or deposit system to craft new deposit products to meet customer needs.

The Benefits

The benefits are principally measureable in qualitative terms, with OCBC expecting to enjoy operational efficiencies, and quicker time and lower cost to market in terms of rolling out innovative best-in-class products and capabilities in Singapore, Malaysia and the rest of the region. The SIBS continues to serve its intended purpose by enabling the bank to service increasingly capricious and challenging customers better and faster than competitors. For instance, this is illustrated by OCBC enjoying a first mover advantage and appearing as technology innovators by being the first to pioneer a mobile banking application to customers via the Apple iPad and iPhone devices in this part of the region.

CIMB & THEIR JOURNEY

CIMB Group is Malaysia's second largest financial services provider and one of Southeast Asia's leading universal banking groups. It offers consumer banking, investment banking, Islamic banking, asset management and insurance products and services. The group operates under several corporate entities, which include CIMB Investment Bank, CIMB Bank, CIMB Islamic, CIMB Niaga, CIMB Securities International and CIMB Thai. The group's business activities are primarily in the areas of Consumer Banking, Wholesale Banking, comprising Investment Banking and Corporate Banking, Treasury & Markets, and Group Strategy & Strategic Investments, with its core markets being Malaysia, Indonesia, Singapore and Thailand. CIMB Islamic operates in parallel with these businesses, in line with the group's dual banking model.

The group has about 42,000 employees located in 17 countries, covering ASEAN and major global financial centres, as well as countries in which its customers have significant business and investment dealings. The group's geographical reach and its products and services are complemented by partnerships. Its partners include the Principal Financial Group, Bank of Tokyo-Mitsubishi UFJ, Standard Bank and Daewoo Securities.

CIMB Group is listed on Bursa Malaysia via CIMB Group Holdings Berhad (formerly known as Bumiputra-Commerce Holdings Bhd). It has a market capitalisation of approximately RM62.4 billion as at 30 June 2013. Beyond ASEAN, the Group has offices in Hong Kong, Bahrain, London and New York, as well as a 19.99% stake in Bank of Yingkou, China.

Situation Overview

The CIMB Group is an amalgamation of various financial institutions:

2004: CIMB acquired 70% of Commerce Trust Berhad (CTB) and Commerce Asset Fund Managers Berhad (CAFM). This led to the formation of CIMB-Principal, a joint venture with the Principal Group of the United States. Then in 2005, CIMB acquired Singapore based G.K. Goh, which was established in 1979, as an international stock broker. This led to the formation of CIMB-GK, CIMB's international investment banking operations.

2005: Commerce Asset Holdings Berhad (CAHB) announced a decision to create a universal bank by combining its commercial and investment banks. Following this announcement, Bumiputra-Commerce Group was acquired by CIMB. As part of the exercise, CAHB was renamed Bumiputra-Commerce Holdings.

2006: In January, CIMB completed its restructuring exercise under Bumiputra-Commerce Holdings Berhad. The new CIMB Group was known as a universal bank. It made a transition to a full-service banking provider serving corporates to individuals. Then in March, CIMB Group acquired SBB after extensive negotiations. After the acquisition, in September CIMB Group was launched by the then Prime Minister of Malaysia, Dato' Seri Abdullah Ahmad Badawi.

2007: The CIMB Group launched its presence in both Thailand and the USA through the establishment of CIMB-GK Securities (Thailand) Ltd. and CIMB-GK Securities (USA) Inc. In November, CIMB Foundation launched as a not-for profit organization that will carry out the group's corporate social responsibility.

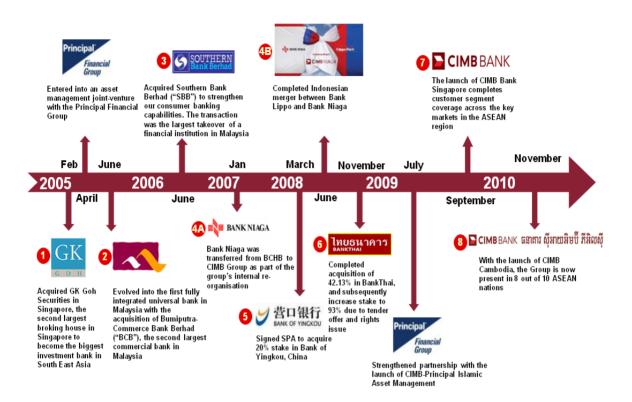
2008: The CIMB Group entered into an agreement for a 19.99% stake in Bank of Yingkou adding mainland China to the Group's network. In the same year CIMB Group undertook the merger of PT Bank Niaga TBK with PT Bank Lippo Tbk to create the 6th largest bank in Indonesia. CIMB Group and the Principal Financial Group launched CIMB-Principal Islamic Asset Management also in that year. Lastly, CIMB Group entered into an agreement with Financial Institutions Development Fund to purchase a 42.13% stake in Bank Thai Public Company.

2009: The CIMB Bank and CIMB Islamic moved to a new headquarters, the 39-storey Menara Bumiputra-Commerce which houses CIMB Group's consumer banking franchises. The building site was the location of the bank's predecessors, Bank Bumiputra and the United Asian Bank. In the same year, CIMB Thai was officially launched with its new brand and logo unveiled to the public in May 2009 by Khun Korn Chatikavanji, Thailand's Minister of Finance. In September, CIMB Group set up retail banking services in Singapore through CIMB Bank Singapore.

2010: The CIMB Group expanded to Cambodia through the fully owned subsidiary CIMB Bank Plc. The first branch, which also serves as the headquarters, was officially launched in Phnom Penh on November 19, 2010.

2012: The CIMB Group purchased the Asian investment banking business of Royal Bank of Scotland, including the RBS franchise in Australia.

Figure 1



The Solution

CIMB in 2010 decided to implement a unified banking platform across Malaysia, Indonesia, Singapore, and Thailand, and planned a phased rollout of this universal banking platform over a five-year period (2012–2017). The "1Platform" project involved building a single operations and information technology (IT) framework, which will help it operate as one entity across the region. It promised to unify the CIMB group and its various subsidiaries and regional banks, and enable them compete as a truly "super regional" bank. 1Platform also promised to facilitate quick product development and proliferation across the region, enabling its sales staff to bundle products and cross-sell more effectively and more accurately.

In 2011 CIMB inked agreements with its main technology partners for the project. They chose **Silverlake Axis on an IBM Power Systems platform over a dozen other competitive solutions**. Given the scale and magnitude of the 1Platform project, its implementation was planned on a country-by-country basis, starting with Thailand, followed by Malaysia, Indonesia, and Singapore. The whole group is expected to be on the unified platform by 2015. The full impact of the investment in 1Platform and other transformation initiatives will only be felt progressively, over the next three to five years.

CIMB implemented its new Regional Core Banking project (1Platform) to achieve its vision –"To be the most valued universal bank in Southeast Asia". As such it was crucial for the Group to enhance its regional banking capabilities and manufacture its core products cost effectively and efficiently.

The scope of 1Platform covers 4 countries, i.e. Thailand, Malaysia, Singapore and Indonesia, which is to be implemented over 4-5 years. However, due to the urgent need to replace the core banking system in Singapore to support its aggressive business plans, CIMB decided to embark on a separate "standalone" core banking system replacement project for Singapore, using the **Silverlake Axis Integrated Banking Solution ("SIBS") with IBM Power Systems**. This core banking initiative was scheduled to be a fast track implementation project with minimal customization, to provide Singapore's business with a scalable platform for growth. The Singapore version of the SIBS will be upgraded to the 1Platform standard version upon completion of the 1Platform implementation across Thailand, Malaysia, and Indonesia.

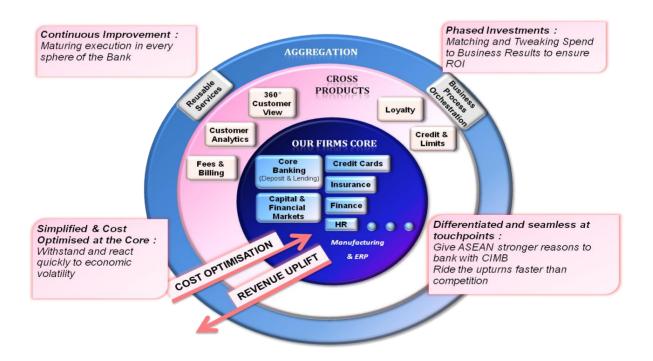
There was a strong business case for this implementation, with a breakeven period of 5 years based on net cash flow. As for medium-term returns, total benefits can be expected to increase due to further cost savings upon full integration with 1Platform. As **IBM and SIBS** were selected for the core banking replacement project, with the same base as the 1Platform initiative, the required costs to complete the integration in the future was minimal, while benefits remain high. In actual terms:

- ✓ Total Benefits: SGD >70 mil over 10 years
- ✓ Projected Return on Investment: 176%
- ✓ Internal Rate of Return: 24%
- ✓ Breakeven (Net Cash Flow): 5 years
- ✓ Breakeven (Discounted Cash Flow): 7.5 years

The Benefits

Despite early days, CIMB has already reported significant improvement in is Branch & Teller systems, in its Loans and Credit systems and their ability to respond faster to market and regulations. This has already interpreted into millions of dollars of savings and a significant improvement in Customer Experience.

Figure 2



The Future for the Two Super Regional Banks

From a business perspective, both continue to excel in customer centricity and continue to offer new locations, new channels, new products and new services to both its consumer and corporate customers. From a technology perspective, they evolve, renew and build upon new capabilities to stay relevant to business demands as it forges ahead in the financial industry — all the while being supported by proficient partners - *Silverlake and IBM*.

Beyond the ongoing core banking implementation or refresh, the near to medium term would see the operational and technology teams focusing on its roadmap to align technology with business and on reviewing these plans on an ongoing basis to ensure that internal strategies are continually in sync. This is the bare necessity given the fact that today's business environment is evolving at break-neck speed and industry practitioners need to react equally promptly to financial and competitive challenges, new regulatory mandates, as well as collaborate with various divisions on businesses and technology innovation and on introducing novel products and services to remain pertinent in the market place.

Future Outlook for Asia/Pacific Banks

For 2013 - 2015, a higher percentage of core banking deals will continue to be seen from India, Indonesia. South Korea. Malaysia. the Philippines. and Cambodia.

ASEAN. The momentum for core banking renewal will come from either the top-tier domestic players in Vietnam, Malaysia, Sri Lanka, and Cambodia or from the midsize banks in Indonesia, Philippines, and Thailand that want to use modern core applications to propel them to the big leagues. Aggressive market share competition is expected within the ASEAN markets, and a new core banking system is tied closely to the organization's ability to compete and rise above its peers.

Australia and New Zealand. Huge core banking deals come in cycles, and the recent surge in core banking spending (coming from the Commonwealth Bank of Australia) will not be sustained. Smaller banks, however, will still need to modernize their legacy platforms

China. Scalability is the name of the game. Outside the big state banks that are going for in-house solutions that might or might not be based on large vendors' core banking frameworks, the mainland's city-based banks will invest in core solutions that are easy to deploy and that will provide significant capabilities in throughput and transaction volumes. Thanks to newly issued banking licenses, foreign banks are quickly setting up operations in the country and are thus eager to roll out core banking systems expeditiously, albeit with some customization to align with Chinese banking practices. Meanwhile, rural cooperative banks are keen to invest in utility-based solutions

India. A wide range of banks, from large public sector to smaller private banks, are still deploying core banking solutions in an effort to upgrade manual processes and increase overall operational efficiency. Financial inclusion, banking joint Ventures, bancassurance, and other unbanked initiatives are creating opportunities for banks that previously not exist.

North Asia. Core banking deals will be signed by banks that have recently finalized or will soon finalize their strategic IT master plans. These master plans are built on banks' views of how banking will be undertaken in the future, reflecting the forward-looking mindset of only the strongest, most sustainable banking organizations in South Korea and Taiwan.

Singapore and Hong Kong. The Asia/Pacific financial powerhouses are competing to be the IT and operational hubs of emerging Asia/Pacific super-regional's and will thus seek core banking platforms that can serve multiple operations across multiple countries. Banks will be looking for a base set of applications that will be the platform for country-specific overlays for risk management, currencies,

products, and pricing. Meanwhile, the dominant domestic players (3 home-grown banks in Singapore and fewer than 10 banks in Hong Kong that have really old core banking platforms) will need to map out their respective core banking systems for the future.

Essential Guidance for Banks

Banks that are pushing forward with core banking upgrades will have to integrate to their program of work their organization's strategies in traditionally "noncore" areas such as data management and risk management. A truly modern core banking system will significantly scale up a bank's capabilities in these two "hot" areas for 2013 and beyond. A program that neglects these areas will create a run-of-the-mill core system and represent a missed opportunity for real banking modernization.

Core banking vendors such as **Silverlake Axis**, **with partners IBM**, have responded and have come up with propositions in these same areas of risk and data/analytics — and others as well, although some of these "others" like social media or peer-to-peer functionalities can prove to be more nice-to-have factors in the meantime. Banks need to understand what exactly their current and alternative vendors have to offer in these new areas and how these fit in the vendors' view of what a "new core system" is. Furthermore, how a vendor addresses the "what is your 'new' core banking vision" question will help the bank in determining whether the vendor will fall victim to the supposed consolidation of the vendor landscape.

Finally, while cost blowouts and timeline extensions are common issues in core banking projects, they will become more pertinent as core banking projects regain momentum in Asia/Pacific. Projects will compete for skilled and experienced resources for systems architecture and core banking implementation, ultimately making core banking more painful than it should be. However, it is the adherence to the old but still relevant principles of project management that will keep banks on the path to success.

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