Information Technology

BCA continues to improve the capability and capacity of the Bank's IT systems to support the development of more sophisticated delivery channels and to service growing transaction volume as well as the evolving and increasingly complex needs of the business lines

Along with the evolving and increasingly complex needs of the business lines, Information Technology at BCA spent significant new investments, and optimization expenditure on its existing platform. BCA made considerable IT investment in the period from 2011 – 2013 when the Bank planned and completed a new world class Disaster Recovery Center in Surabaya. The Bank also invested heavily in regular hardware capacity expansion over this period in order to support rapidly growing transaction volume and expected increases in the number of transactions in the future. It is essential that BCA provide a highly reliable, safe and convenient banking environment that is always 'online' and that data is timely, accurate, and recoverable at all times.

BCA grounds its IT policy on three main pillars: to serve and expand the Bank's business lines, to strengthen IT hardware and infrastructure performance, and to maintain and advance IT governance.

Serve and Expand the Bank's Business Lines

Keeping abreast of cutting-edge developments is crucial for BCA as it is the Bank's priority to remain the leading transaction bank in the highly competitive Indonesian banking environment. Due to the growth of the business, BCA's IT platform has expanded in both size and complexity over the past several years. BCA manages this increasingly complex IT platform based on a Service Oriented IT Architecture (SOA) framework. The SOA framework provides an effective means to facilitate the grouping of various programs and applications into distinct services installed in IT middle-ware, which can be utilized to create and replicate new or similar business programs and applications for use by other business areas or for further refinement which may be needed to enrich the Bank's products and services in its front-end delivery channels. The SOA is an expedient IT architecture to reduce redesigning and reprogramming and to minimize errors in creating functionality for other business uses.

BCA's business model is moving away from a product focus marketing culture to a customer-oriented focus business process. To support this transition, BCA is developing an integrated customer data base system designed to integrate BCA's expansive transaction repository with consumer behavior tools to better understand customer needs and enable the Bank to bundle products and deliver suitable financial solutions to customers. The IT Group is at the center of this initiative and is facilitating the development of this powerful single view customer relationship management system that will facilitate customer and bank interaction.

IT Group is focusing on enhancing data repository and developing the Customer Relationship Management system to facilitate relationship managers' ability to

conduct accurate and meaningful dialogues with BCA customers. The ability to customize data access services provides relationship managers with the tools required to identify customer segments and to structure specific service packages targeted to selected customers.

BCA IT constantly strives to follow the rapidly changing developments in the fast growing usage of electronic banking and delivery channels. In 2013 BCA developed new up-to-date smartphone applications while expanding the functionality of its multiple electronic channels. These developments reflect BCA's mission to remain as the bank of choice for transactional banking services by providing the high quality products.

The IT Group is proactive in collaborating with the business units to ensure that IT resources are adequately allocated to support the growing needs of the business lines.

Strengthen IT Hardware and Infrastructure Performance

BCA continually expands its infrastructure to facilitate the increasing number of both electronic and branch transactions. In 2013, the Bank made a number of upgrades to capacity, including increased processor capacity for the mainframe and servers, increased bandwidth to the network and general upgrades to hardware and the Tandem system as well as enhancing capacity in the real time processing system infrastructure. BCA IT continued to expand IT infrastructure for host-to-host interconnection with the Bank's external strategic partners and customers in various strategic industries.

These IT efforts have enabled BCA to meet growing capacity needs and improve IT capability in line with requirements as laid out by the Bank's business lines. Given the importance of customer data, transaction-ability and security, BCA has invested in redundant capacity and back up communication bandwidth and channels. Currently, the Bank operates two mirrored redundant systems on two data centers, with each data center able to operate independently of the other to ensure business continuity.

In 2013, BCA completed a state-of-the-art Disaster Recovery Center (DRC) in Surabaya, East Java. This significant investment, started in 2011, is designed as an integral back up to the two mirrored data centers. After undergoing strenuous operational testing, the Surabaya Center has been seamlessly integrated with the two mirrored data centers into its important function as a disaster recovery backup IT Data Center. Given BCA's role as a large and nationally important transaction bank, BCA is committed to ensuring that, in the event of a disaster, the Bank is ready and able to restore bank operations within a short period of time.

To support DRC efforts, the Bank routinely tests not only IT systems but human systems as well. At the branches and head office, staff participates in scenarios to test the Bank's Business Continuity Plan preparations. Given that disasters strike unpredictably, the best preparation is to inform staff of effective actions to take and ensure they have practiced such actions. The Bank encourages branches to always be prepared by making business continuity plans available online and by measuring responses to mandatory tests to gauge compliance. As a result, BCA now manages one of the best data centers in the Southeast Asia region and thereby giving customers confidence in performing transactions in any situation.

IT Governance

The Bank has instituted systems to manage all steps in the IT development process. In this process, the Information Technology Committee, an executive committee under the Board of Directors, has a major role in ensuring that IT investments achieve targeted levels.

Foremost in designing and running IT improvements is the adherence to an international best practice Quality Assurance methodology. One example of this in 2013 was assessing the IT System Development Lifecycle (SDLC) with the Capability Maturity Model Integration (CMMI) method.

While BCA's IT system has expanded in both size and complexity over the past years, a step-by-step approach to building capacity remains the core philosophy in maintaining and enhancing systems performance.

The importance of effective security can never be understated. The increasing value of Internet-based transactions as a share of the Bank's total transaction value represents a trend that needs to be monitored carefully given the potential for cyber crime in today's world. One recent measure BCA has taken to increase the security of Internet transactions is to send notifications via SMS for selected sizable transactions and for listing of new transfer recipients or payments. The Bank has also set up a system of malware detection for client devices so that appropriate action can be taken to protect electronic transactions.

Its accomplishments in information technology earned BCA multiple awards over the years. The Bank received Recognition of Outstanding Achievement in Building the Top Brand from Frontier Consulting Group & Marketing Magazine for the Bank's developments in Internet Banking and Mobile Banking. Also, the 2013 Indonesia Property & Bank Awards awarded BCA with the Pioneer in Modern IT-Based Banking Services for banks with assets over Rp 200 trillion.

Going Forward

Moving into 2014, IT will continue to implement initiatives that assist in meeting BCA's core objectives of enhanced reliability, convenience and security. BCA IT has been active in developing Bank Indonesia's National Standard for Indonesia Chip Card Specification (NSICCS). The division will also apply Personal Identification Number (PIN) authorization for credit card transactions as a way of increasing customer security.

BCA will continue to test and implement new products and features in line with customers' growing expectations. BCA will further enhance its host-to-host capability to support the dynamic high-functionality cash management demanded by corporate customers. This new system will better integrate businesses along the supply chain, while offering simplified power at the 'click' of a mouse.

BCA will continue to focus on developing the competency and capacity of the division's human resources to best meet needs in improving IT systems, networks and infrastructure. The Quality Assurance Centre of Excellence will also undergo enhancements to improve the Quality Assurance process by implementing an international best practice methodology for quality assurance.

We expect to introduce more Cash Recycle Machines for some target markets as part of BCA's focus to a new level of ease and effectiveness.