Escaping the Problems of Legacy IT In Banking

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Despite recent crises and the rise of fintech, traditional banks are undoubtedly here to stay. The basic concept of a trusted and fundamental institution acting as a store of value, a source of finance, and a facilitator of transactions is the keystone of our economies.

Nonetheless, much of the landscape in which banks sit will change significantly in response to enhanced customer expectation; increased regulatory scrutiny; new technologies; changing demographics; competition; and, innovative economic and commercial models. As the landscape changes, so the blueprint for banking business and operational models will have to respond.

This article describes the sorts of changes that we are likely to see, and the technologies that will drive those changes. We focus especially on the problems of current IT operational infrastructures in banks and how those problems can, and will need to be resolved for organizations to survive.

Typical business issues with enterprise IT architectures that need to be addressed urgently include cost of operations and support; lack of flexibility and agility; excessive and unhelpful complexity; and, excessive redundancy. More technical operational issues include hardware constraints; limited storage; insufficient power and cooling; cyclical demand bursts; and, increasing user expectations.

The good news is that cloud computing can be of huge assistance in addressing these issues. In fact, we would go so far as to say that it is essential that banks migrate to cloud if they are not doing so currently. The alternative is that the problems of in-house infrastructure will grow to the point of threatening to sink the ship.

The most important thing for bank customers, shareholders and regulators is that things are being done in the most effective and efficient manner possible, using best practice, not that everything is being done in-house in the style of a cottage industry.

To make this happen, organizations need to create a strategy for moving from in-house infrastructure to cloud software, hardware and processes. It is not a simple 'lift and shift' operation (and beware vendors who claim otherwise).

Strategies for each service (internal and external) will need to be decided. Eg public, private, hybrid cloud; PaaS (Platform as a Service), IaaS (Infrastructure as a Service), SaaS (Software as a Service); overcapacity or scalability; how to utilize dynamic service models (use what you need; only pay for what you use; resource sharing etc). Enabling existing applications for cloud needs to be done carefully if the full benefits of cloud (eg guaranteed availability) are to be realized.

Enablement will include using templates, application API's (Application Program Interface) and containerization. Competence and experience may need to be brought in. But as well as the technical challenges, organizations will also need to address a need for new roles, responsibilities, processes and culture. A genuinely new way of thinking about the role of business and IT operations will be required.

Banking institutions can even share in public cloud payment services for cross platform integration or use hybrid cloud for integration services between several banking applications – AML (Anti-

Money Laundering) tools, credit history, social networks, standing orders etc. For legacy systems unsuited to cloud migration (or those holding master balances of accounts etc) one solution can be to use open API services and private cloud with integration though hybrid cloud for mobile on-line service purpose.

But it is not just about resolving problems. New technologies and models are highly empowering and will help banks create and realize new opportunities, while satisfying increasing customer expectations set by the use of phone apps and mobile internet in other domains. Such technologies (eg Artificial Intelligence / cognitive computing / machine learning) will themselves facilitate ideas, innovation and ecosystems where we see a highly efficient connection between new technology releases and partnerships.

One highly prized goal that can now be achieved more easily is the ability to move from products to services (which is much more efficient as it removes the enormous functional duplication, redundancy, inconsistency and opacity seen in banking models currently). Services could include account opening; account closing; payments; loans; cards etc.

The concept of banking products as a service will drive new organizational models in which transparency of services will ensure clearer roles and responsibilities; better collaboration; consensus driven decision making; and, improved focus on the needs of customers and markets.

We will see:

- More points of contact with individual clients

- More cross-sale and up-sale opportunities

- Cost savings on multi-channel product or service implementations

- Increased speed of multi-channel implementation

- True omni-channel services in which the user has the same experience wherever the bank is present (mobile, web, branch)

- Improved campaign management and financial behaviour profiling for cross-channel sales and communications

- The superior usability of personal banking moving into the corporate segment, and therefore a seamless experience between the personal and corporate approach

- Increased ability to easily maintain different business lines within the bank

- Ability to create new models such as "family banking:" i.e. sharing levels of access with family members, cross-sale possibilities for family members, involving young people into banking experience, reduce servicing costs for families

- Managing security through limitation policies improves banking usability, single window to administer security rules for all of the channels on customer level

- Assigning product rules for different channels and access roles

As a result of the huge transformations described above, including moving operations into the cloud, banks will enjoy significant cost efficiencies that they can use to better support enterprise software

solutions. They will also gain the ability to capture the full potential of new technologies and scale up / down resources in few minutes or hours to match workload.

Banks will be able to react quickly to new business needs, and avoid overbuying IT resources to meet those needs. They will also be able to organize and safeguard workloads with advanced security and compliance (contrary to some of the original concerns about cloud when ubiquitous computing itself became ubiquitous), reduce operational risk (another huge benefit) and cut capital and operating costs.

To summarize, any business strategy in a changing market is worthless if its execution depends on inflexible and outdated IT systems. That applies as much - if not more – to banking than any other industry. But the future is bright, and computing should start to become an enabler rather than a source of pain in our major financial institutions if the opportunities before us are exploited.

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