

TRANSFORMATION OF RETAIL BANKING TO CLOUD SERVICES

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ABSTRACT: Today, modern financial institutions are transforming themselves to meet the challenges of the digital marketplace. The financial patterns enable us to explore and develop a new and exciting financial apps to help the organization be a leader in the new wave of 21st century retail banking services. In this period of change, banks need to redefine the value they want to supply to their customers. Some banks are trying to keep up with rapid industry innovations by purchasing fin-tech technologies, using those technologies to create new entities, and then integrating them into their main business. Many are improving their lending and risk assessment by adopting cognitive technologies. Truly responsive banks are using electronic clues that their customers provide to fully understand what the marketplace is looking for from banking services. The latest advances in cognitive computing, combined with new data sources and a readily accessible cloud computing platform, creates the opportunity for massive innovation. Banking boardrooms have become a hotbed of debate about transformation, and which changes are necessary for banks to survive and thrive. In this article we are understanding about the transformation of retail banking to cloud banking services, benefits and challenges.

Key words: Retail Banking, Digital Banking, Cloud Banking and Services.

I. INTRODUCTION

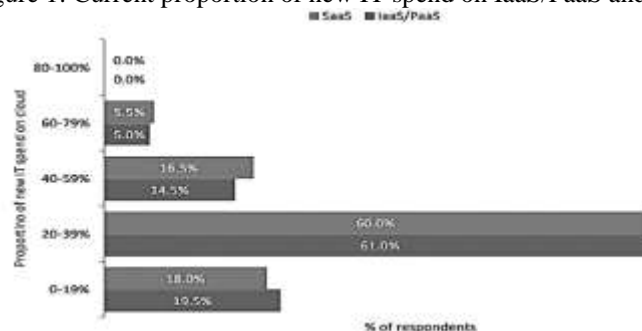
Digital transformation in retail banking is driven by customer experience. Technology and data that supports, and enhances the customer journey is part of this change. While digital transformation for a retail bank requires a new appreciation of the customer as an individual. A total redesign of the bank's business model, and an engaged workforce, there is a lot of work to be done in the tech space too. This will be unique to each bank, and defined by its range of products and services, current core banking systems, IT budget and vision for a digital future.

1.1 What is cloud? In part, some of the uncertainty surrounding the role and adoption of cloud technology in the retail banking sector stems from the differing understanding, both on the part of IT groups and wider business functions, of exactly what cloud is. To ensure consistency and accuracy in the study. It provided respondents with a concise definition of cloud and its components prior to the interview. It definitions used in the study are:

1. IaaS (Infrastructure as a Service): IaaS offers computing, storage and network resources and associated services usually from a virtualized environment.
2. PaaS (Platform as a Service): PaaS provides a platform to develop and run applications, delivered via a public or private network and includes operating systems, development environments and tools supported by the PaaS provider.
3. SaaS (Software as a Service): SaaS combines application functionality delivered via a web browser and open published APIs with data encryption, transmission, access, and storage services. The deployment of SaaS is usually supported by underlying IaaS and PaaS elements.
4. Cloud: 'cloud' technology, services or solution is defined as the combined use of IaaS and SaaS, and possibly PaaS, to provide required business functionality delivered via a public network (such as the internet), private network or a combination of both.

Over 60% of banks currently utilize both SaaS and either IaaS or PaaS for between 20% and 39% of the relevant budgets on cloud technology or services (see Figure 1).

Figure 1: Current proportion of new IT spend on IaaS/PaaS and SaaS

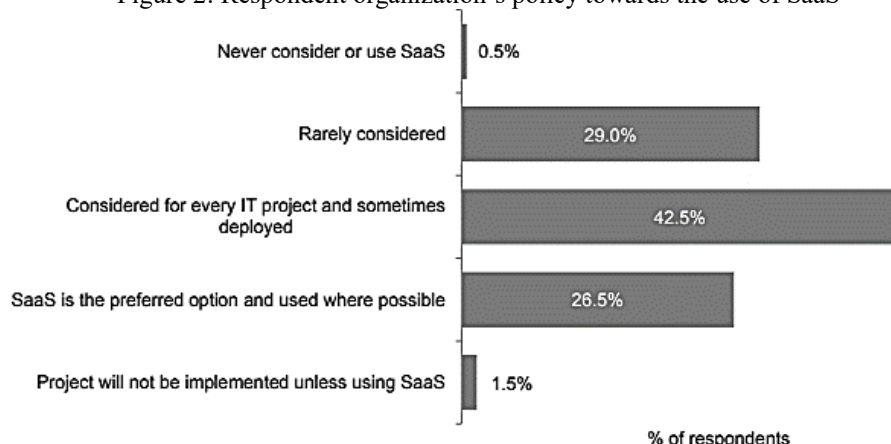


Underpinning this is the role cloud plays in the IT provisioning process in many banks. When respondents were asked about their organization's policy towards the use of SaaS, over 70% report that it's a factor in every software sourcing decision. In 42.5% of

banks, SaaS is deployed on a tactical basis, evaluated against the alternatives in each case and utilized where it is the most appropriate choice (see Figure 2).

While this also highlights a significant minority of retail banks that rarely or never even consider SaaS, over a quarter have a ‘cloud first’ sourcing policy in that it is the preferred deployment option and used wherever possible.

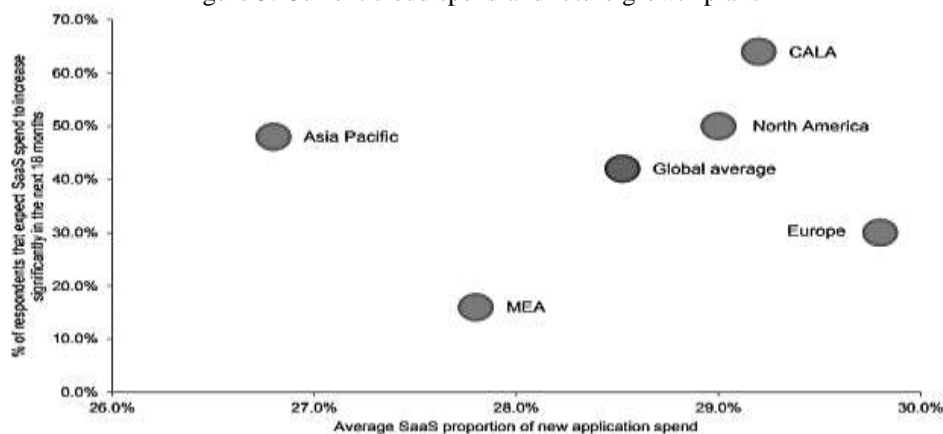
Figure 2: Respondent organization’s policy towards the use of SaaS



This ‘cloud first’ policy is particularly prevalent among banks in the highly competitive North American and CALA markets, which both see high adoption rates of both IaaS/PaaS and SaaS. Europe sees the highest penetration of SaaS as a share of new spending, with 4% of respondents from this region reporting that projects will only commence if they can be deployed using SaaS.

Banks in Asia Pacific are the least likely to consider SaaS as part of a sourcing strategy. In this region, 42% of respondents report that it is rarely considered in this context, and only 20% report that SaaS is their preferred deployment method. These attitudes are evolving however, and the expectation across the industry is that SaaS spending will continue to increase. As Figure 3 demonstrates, there is a positive correlation between SaaS penetration and expectations of the level of future spending in this area. Banks in CALA are likely to see the highest growth in SaaS deployments over the next 18 months, with 64% of respondents expecting spending to increase significantly. As retail banks in this region already report among the highest levels of SaaS within new IT spending, the benefits are clearly being felt.

Figure 3: Current cloud spend and future growth plans



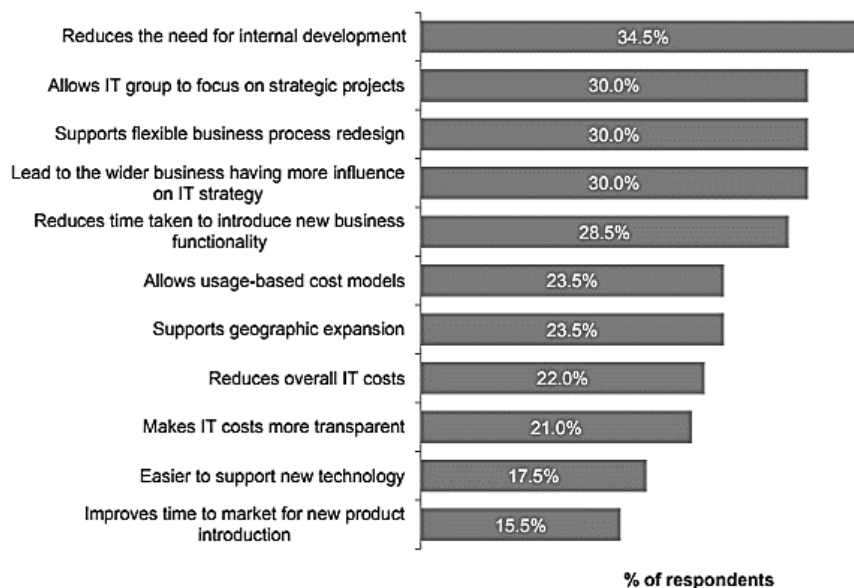
SaaS is increasingly supporting the whole business ecosystem. The use of SaaS has been relatively high in horizontal and collaborative-focused systems over the last three years with our survey respondents reporting a significant proportion of email (63%), backup/archive (53%) and business continuity (50%) solutions currently being supported by cloud technology.

But cloud is far from being restricted to horizontal activities, with SaaS increasingly used in support of what has traditionally been seen as vertical and core business activities (see Figure 4). Nor is this adoption limited to a narrow range of specific core activities; a growing proportion of retail banks use cloud services across a broad range of back, middle and front office functions. Key areas include customer-focused activities, such as product origination and customer servicing, as well as back-office functions such as payment processing.

Indeed, in the case of product origination for lending, deposits and checking accounts, SaaS is used to support all or the majority of activities for 57% of banks. Considering that this covers a wide range of activities including both self-service and agent assisted applications, decision, processing, and compliance across the full channel estate, this is a particularly significant finding.

Over 70% of banks use SaaS in some capacity in areas including product development, marketing, and digital channels. The study also revealed that the benefits sought by retail banks through the use of SaaS are far more nuanced than simply reducing overall IT costs, with business growth and organizational agility objectives emerging strongly (see Figure 5). This highlights a further shift in attitudes and priorities among banks as IT cost benefits, while still important, are increasingly expected and accepted as ‘the norm’ with SaaS deployment.

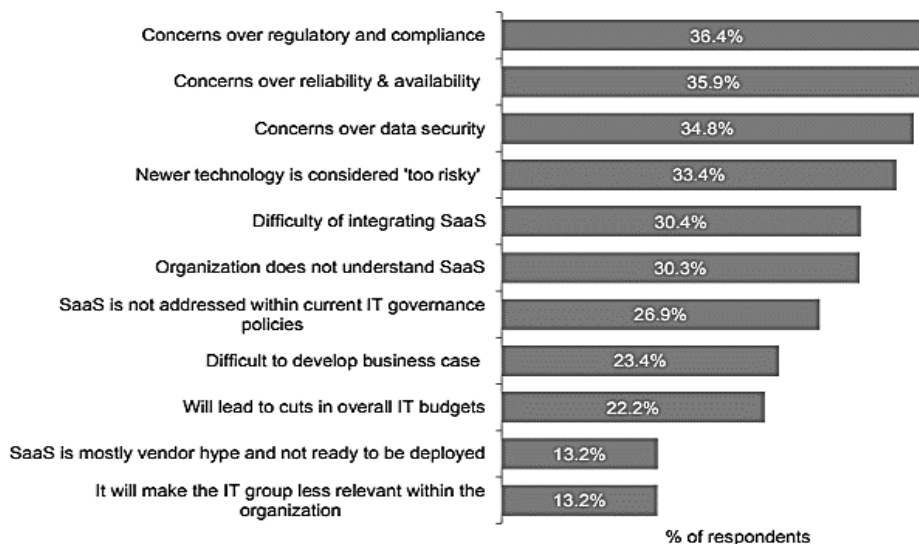
Figure 5: Top benefits sought through the use of SaaS



These concerns are principally around the maturity and reliability of the technology and ensuring compliance in the highly regulated retail banking industry. Concern over regulatory compliance is cited as the major factor inhibiting SaaS adoption among retail banks, which is no surprise in such a heavily regulated sector (see Figure 6).

Concerns over reliability and availability remain important as well, something highlighted by 36.4% of respondents. This points to the need for cloud vendors to further convince the industry of the maturity of their offerings by demonstrating robust SLA, proving the compelling business benefits, and emphasizing consistent, ‘best of breed’ availability metrics. At the same time, they will need to convince the 26.9% of banks which do not address SaaS within their IT governance policies to update their internal policies.

Figure 6: Factors limiting adoption of SaaS within retail banks



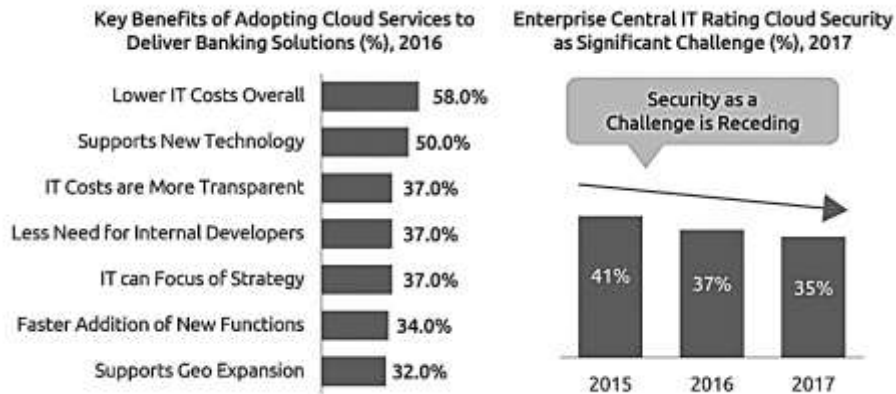
II. Is cloud the future for core banking?

The cloud is surely be the direction of travel for core banking. The benefits in terms of cost, security and speed of deployment being too powerful to deny - a target of 2020 for everything new being done in the cloud is ambitious. And while cloud is certainly the preferred option for start-up banks, those present displayed a number of concerns in common with established players, including worries about how the regulators view cloud. But it’s also the case that there is no ‘one size fits all’ cloud approach for banks. One attendee broke the landscape down thus: tier-I banks will build platforms on IaaS; tier-II banks will leverage PaaS; and tier-III and four banks will leverage SaaS. And every tier-I bank is a tier-III/ IV bank somewhere. Two very simple questions then with some very complex answers – but no denying that cloud is the future. As one participant said “it’s

almost like a mindset” – one the participants in the roundtable discussion had clearly bought into, and one that will no doubt become more pervasive over time.

Clearly, the move to the cloud is accelerating, with most banks initiating migration of infrastructure and applications. Bank of America has tapped into Microsoft’s cloud service platform Azure and is targeting 80% migration of technology workloads to virtual platforms over the coming years.

Figure 7: Cloud Benefits and Security



As cyber-attacks became an ever-increasing dilemma, concern over cybersecurity challenged the broad adoption of the cloud. Many banks are considering a hybrid cloud model through which critical banking applications and processes are migrated to private clouds with enhanced security features, and non-critical applications are migrated to a public cloud for cost efficiency and agility.

III. How Cloud Computing Helps Retail Banks Deepen Customer Engagement

Most retail banks are aboard the cloud train, enjoying the collaboration, uptime, scalability and automation this computing model brings. But what many banks are missing is that the cloud can actually impact and improve customer engagement. This is critical, especially for traditional retail banks whose survival depends on their ability to compete against aggressive fin-tech firms by making the most of every customer interaction and improving the customer experience across all touchpoints. That’s why personalized customer engagement is so important.

Here are three ways the cloud can improve how retail banks approach customer engagement:

3.1. Reducing customer frustration

The cloud ensures your websites and online services have less downtime than if they were hosted on-site. A bank CIO who sees mortgage submissions are down because customers are struggling to upload paperwork can address the problem quickly, reducing customer frustration and increasing the number of submissions. The cloud also provides a more consistent and seamless experience across devices and channels, ensuring data from any customer touchpoint is available.

3.2. Increasing personalization and relevance

With all the mergers and acquisitions in the financial services industry, banks continue to struggle to get a single view of their customers. It’s not uncommon for a bank dealing with a couple applying for a mortgage not to know they already have a car loan if it was through another financial institution the bank acquired. Cloud computing can help solve this problem. That means banks can get a single, 360-degree customer view by merging identity and behavioral data, online and offline patterns and customer service.

3.3. Improving products, services and customer service experience through real-time feedback

Since the cloud supports big data applications, pulling in information from many databases, locations and applications, it can serve up information that front-line bank employees need to handle customer requests on the fly. This provides staff with customer insights that inform their work solving a customer service issue or offering a relevant product and improves products because actionable feedback is delivered in real time.

IV. DIGITAL TRANSFORMATION STRATEGIES IN RETAIL BANKING

The digital transformation strategies at retail banks and credit unions. IDC conducted in-depth interviews with business and IT executives for insights on how they were using digital technologies like big data and analytics (BDA) mobile, cloud, and social business to grow the businesses.

A high-level synopsis of findings from the IDC research can be viewed in the video below:

More in-depth information about the vital role digital transformation plays in the success and survival of retail banks is provided in the white paper, Key Success Factors for Digital Transformation in the Banking Industry. Digital transformation is key in helping banks break down siloed systems in order to deliver seamless personalized, relevant experiences across the connected customer journey. Some key findings in the report include:

Cloud: IDC research found that 50% of new applications launched by financial institutions will be implemented on private cloud some institutions are already implementing aggressive “cloud first” policies for all new applications.

Mobile: Over 50% of customer-facing and enterprise staff applications will be deployed in a mobile-first model in the next five years.

Analytics: Enhanced analytics capabilities will offer any institution the ability to understand its customer base and make personalized offers based on individual, household, risk, and/or business relationships improving share of wallet with existing customers and attracting new customers through product and service differentiation. Predictive analytics will further enable real-time decision to consumers who already benefit from instant gratification at retail stores, for instance, a perfect example of playing a role in the customer journey.

V. Conclusion

The merits of cloud technology in retail banking have been hotly debated over the last 5 years, creating a huge amount of marketing hype in the process. While some continue to see this as principally vendor noise, what is undeniable is that IaaS, PaaS, and SaaS do form an important part of retail bank IT sourcing strategy. The unfortunate consequence of the years of debate is that attention has been drawn away from the developments in cloud, and the real benefits it delivers to the banks that have successfully adopted it.

Key findings of the survey are;

- Cloud is 'business as usual' for the majority of retail banks and continues to grow in importance
- Far from being restricted to horizontal services, SaaS is increasingly supporting the whole business ecosystem
- Cloud is no longer just about cost reduction, as retail banks use it to drive organizational agility
- Cloud is poised to transform the retail banking industry, driving increased levels of competition
- Regulatory compliance remains the biggest inhibitor to cloud adoption within the retail banking industry, but the issue is being resolved
- All banks must have a cloud strategy, with the focus on long-term business transformation

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