SOA, standards and IT systems: how will SOA impact the future of banking services?

A report looking into the attitudes of the banking community, with a focus on how the adoption of Service Oriented Architecture in financial services IT systems will create tangible business benefits for both banks and software vendors
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Foreword

Steve Van Wyk, Chairman of the Board of BIAN and Chief Information Officer
ING Bank

Banking services are at a crossroads. Four years ago the financial crisis started and markets continue to remain in flux. Banks are facing the continued need to increase the flexibility in how they provision services in order to remain competitive, whilst also feeling intense pressure to reduce costs.

The IT infrastructures of many of the world’s financial services providers are slowing banks down; not only are these systems inflexible, but they are also expensive to modernise, and indeed maintain. Soaring integration costs are stifling banks’ ability to effectively replace or enhance existing legacy IT systems. This cost is a direct result of the lack of interoperability and standardisation within infrastructures.

According to a survey commissioned by Infosys and Ovum in May 2012, approximately three quarters of European banks are using outdated core legacy systems. What’s more, 80% of respondents see these outdated systems as barriers to bringing new products to market, whilst 75% say such systems hinder, rather than enable, process change. Integration cost is effectively a barrier to service provision flexibility and subsequent innovation.

With banking IT spend predicted by Ovum to reach $90 billion by 2015, the problems of how to reduce integration costs and tackle this barrier to innovation needs to be addressed.

It is increasingly clear that service oriented architecture (SOA) is the best technology for internal and external interfaces, and when combined with industry-level agreed standards, this technology can virtually eliminate integration costs.

BIAN brought together its member banks and software vendors for this research, in order to understand more about the role SOA will play in the future of banking. The results make for promising reading.

The key mission of BIAN is to bring together the banking enterprise services community in order to collaborate on the creation of a standardised SOA framework and the formal description of a banking services landscape. This report illustrates the practical benefits which will result from the realisation of this mission.

I hope you enjoy reading the report.
Key findings at a glance

- 78% of banks believe the adoption of a service oriented architecture will result in a 25-50% reduction in banking IT costs. 56% of vendors are confident that SOA standards will reduce these costs by up to 25%

- 100% of banks state that the adoption of SOA will increase their institution’s ability to compete in the current market. 100% of banks also said that SOA will be the dominant accepted future banking architecture

- 78% of banking respondents stated that reduced IT costs will increase their competitive advantage as a direct result of SOA adoption

- Software vendors identified a number of business benefits of SOA adoption, including:
  - the ability to re-direct IT to other value added services
  - increase in bank product offerings and increased innovation
  - increased enablement to bring products to market faster
  - reduced integration costs

- 89% of the bank ecosystem has either already started or finalised the process of SOA implementation

- 100% of software vendors envision an ‘AppStore’ for banking functionalities in the future. 76% said they envisage this option within 10 years, with half of these expecting this to be available within the next 5 years
Why are banks choosing SOA?

Service oriented architecture (SOA) refers to the frameworks and processes that enable application functionality to be provided and consumed in sets of services relevant to specific business functions. It is often described as the offering of a catalogue of ‘building block’ banking functionalities, which allows non-technical bankers from the business side to pick and choose existing functionalities in order to build new products. SOA is gaining increasing popularity among financial services enterprise architects as it encourages fusion between the business and IT needs of a bank. It is widely accepted that the adoption of SOA technology within the financial services industry will result in:

- lower banking IT costs as a result of decreased integration costs
- increased capability to compete in the modern market
- increased speed-to-market of new products
- increased opportunity to provide value-add services to banks’ customers

This report presents the findings of a survey looking into the tangible and anticipated benefits of SOA adoption in the financial services, using BIAN’s community of banks, software vendors and service providers and integrators.

BIAN members:
SOA standards and banking IT costs

Banks overwhelmingly agree that the adoption of SOA standards will result in a reduction in IT costs (see figure 1). The majority (78%) of those questioned believe that adopting this framework will result in a 25-50% reduction in banking IT costs. No banks believe that SOA standards will result in an increase in costs – although 22% did suggest that the reduction in cost may be just 5%.

Predictions from software vendors on the impact of SOA adoption on banking IT costs were far more varied (see figure 2). 56% of vendors are confident that SOA standards will reduce these costs by up to 25%, but 22% did suggest there may be savings of just 10%.

While there may not be full agreement among banks and software vendors as to the full potential effect of SOA adoption in the financial services, it is clear that SOA standards are anticipated to majorly impact banking IT costs. Banks currently face record-low levels of customer trust and loyalty, while competition from new entrants is advancing. This is placing increased pressure on banks to tackle their IT budgets, improve efficiency and illustrate cost reduction. This research finds that the adoption of SOA standards will greatly aid banks in this mission.
SOA standards and practical business benefits

There are a number of potential business benefits which could be reaped from the adoption of SOA standards in the financial services industry. 78% of banking respondents stated that reduced IT integration costs will increase banking business success as a direct result of SOA adoption (see figure 3). 56% also identified increased product offerings as an important result of SOA adoption. The ability to create more innovative products, with a faster time to market and the impact this will have on a bank’s ability to remain competitive were also highly ranked amongst banks as key business benefits to SOA adoption.

Software vendors also identified a number of business benefits of SOA adoption (see figure 4). A staggering 78% of software vendors identified the ability to re-direct IT to other value added services as the key business benefit of SOA adoption. 56% of software vendors said the adoption of SOA will result in an increase in bank product offerings and increased innovation, allowing banks to better respond to market demands and maintain competitiveness. This can be tied in to the enablement to bring products to market faster, which 44% of software vendors identified as a key business benefit of SOA adoption. The reduced integration costs and the subsequent impact on bank profitability were also identified by software vendors as business benefits which would result from joined SOA standards adoption.

Evidently those surveyed in this research appreciate that the adoption of SOA standards in banking IT systems would create a number of opportunities for banks, which would in turn allow banks to increase their competitive advantage.

Fig. 3 How will the adoption of SOA Standards increase the success of your business? (banks)
Fig. 4 How will the adoption of SOA standards increase banks’ success? (software vendors)

Remaining competitive in a changing market

Ensuring competitiveness is a key consideration for any business. This is why it is particularly interesting that a staggering 100% of banks state that the adoption of SOA will increase their institution’s ability to compete in the current market.

The impact of new market entrants, such as Metro Bank and Shawbrook Bank, has only gone to further illustrate the inflexibility of the outdated legacy systems of more mainstream banks. It is, perhaps, unsurprising then, that the adoption of SOA, and the increased flexibility and reduced integration costs that this would provide, is seen as a crucial tool in remaining competitive in this new market landscape. The results of this survey make it clear that banks and software vendors believe the adoption of SOA standards has the potential to create a number of profit-increasing and customer-retaining tools for banks.
The SOA journey – where are we now and where are we headed?

SOA: the future of banking architecture

Whilst it is clear that there are many tangible benefits to the adoption of SOA in the finance services industry, this report also presents the extent to which SOA is accepted as the future of banking architecture – how far is the industry on the journey towards SOA adoption and full inter-system interoperability?

An undeniable 100% of banks said that SOA will be the dominant, accepted future banking architecture. Given the strong and necessary business benefits which have already been identified as results of the adoption of SOA standards, this evidence of SOA acceptance within the banking ecosystem strongly indicates that SOA will be the future of banking services. The survey also reveals the full extent to which banks have already begun the implementation of SOA. 89% of banks said their institution has already started the process of SOA implementation and the other 11% have already finalised their plans (see figure 5). 76% of software vendors have started their SOA implementation programme, with 63% having already finalised their plans (see figure 6).

Fig. 5 When do you start your SOA implementation? (banks)

Fig. 6 When do you start your SOA implementation programme? (software vendors)
The future for banking IT

The ‘building block’ characteristic of business functions under SOA allows for the reuse of these ‘building blocks’ to create any manner of fully interoperable new products and services. This SOA catalogue then allows the effortless use of additional and different components into any variety of processes. In this way SOA has often been cited as having the potential to allow for an ‘AppStore’ scenario for business functions, assuming both banks and vendors share the same SOA framework.

100% of banks envision an ‘AppStore’ for banking functionalities within the next 5 years. Software vendors also believe an ‘AppStore’ will form part of the future of financial services, with 76% of vendors agreeing that there will be an ‘AppStore’ in the next 10 years (see figure 7).

It is clear that the vast majority of banks believe that SOA is the future of banking IT architecture and are planning to implement this within the next two years, or sooner. Furthermore, the vast majority of banks and software vendors believe that within the next 5-10 years they will have access to an ‘AppStore’ of business functions, allowing non-business users to build new products.

Fig 7 Do you envision an 'AppStore' for banking functionality? (software vendors)
Conclusion and recommendations

Hans Tesselaar, Executive Director, BIAN

There is little doubt that recent years have been difficult for the financial services. The days of unlimited IT budgets are gone but the challenges facing banks have increased substantially. What’s more, at present integration costs of software implementation are prohibitive, often costing triple the purchase costs of the original software, damaging the business case for technological upgrades. It is imperative that the financial services industry tackles this issue and finds a way of reducing IT costs, whilst also improving efficiency and flexibility.

The industry-wide adoption of open SOA standards would increase interoperability, eliminating integration costs, opening the door for more IT improvement projects.

This report illustrates that there is an option available which will help banks achieve all these objectives, and more. To illustrate some highlights:

- 78% of banks believe the adoption of a service oriented architecture will result in a 25-50% reduction in banking IT costs
- 56% of vendors are confident that SOA standards will reduce these costs by up to 25%
- 56% of software vendors identified that SOA adoption will result in an increase in product offerings and innovation
- 100% of banks state that the adoption of open SOA standards will increase their institution’s ability to compete in the current market.

Given the huge potential benefits of industry-wide SOA adoption, it is perhaps unsurprising that 100% of banks see SOA as the future dominant accepted banking architecture. Nevertheless, it is greatly encouraging to see SOA infiltrating the banking ecosystem, with 100% of banks and 76% of software vendors already starting or finalising their SOA implementation process. The adoption of SOA standards will have great benefits, both business and financial, for the banking industry. The next question is how we go about achieving this nirvana where integration costs are a thing of the past and banks are freed from the shackles of their outdated IT systems.

Whilst it is clear that service oriented architecture is the best solution for internal and external interfaces, SOA adoption will require the agreement of industry-wide standards and semantics. Collaboration between banks and software vendors is essential if we are to achieve this. This is why BIAN members are working together, bringing a wealth of expertise together in order to establish the de-facto SOA standards for banking services.

Cross-industry standardisation and collaboration is the key to the adoption of SOA standards and, ultimately, the future of banking services.
About the survey

BIAN recently undertook a survey of 24 tier 1 banks, vendors and consultants, exploring attitudes towards, and expectations of SOA within the banking industry. Respondents were predominantly architecture roles: systems architect, chief architect, enterprise architect, etc.

About BIAN

Established in 2008, The Banking Industry Architecture Network (BIAN) is an independent, member owned, not-for-profit association to establish and promote a common architectural framework for banking interoperability issues. BIAN’s goal is to define SOA and semantic definitions for IT services in the banking industry. The community focuses on creating a standard semantic banking services landscape, while ensuring consistent service definitions, levels of detail and boundaries. This will help banks to achieve a reduction of integration costs and use the advantages of a service-oriented architecture.

Financial institutions, software vendors, and system integrators, along with technology partners, are invited to join the association and play a collaborative role with other industry leaders in defining, building and implementing next-generation banking platforms.


To learn more about BIAN please visit www.bian.org.