



Digital Core: Enable end-to-end Agile Banking

WHITEPAPER



'Banking As Usual' is over

Digital Transformation is an over-used industry buzzword. But its impact for financial services nonetheless is serious, particularly for traditional banks as they spend millions of dollars to adopt digital solutions. After decades of 'Business as usual' in banking why is this change happening now?

The answer lies in the newfound vulnerability of traditional banks. A perfect storm of new technologies, fresh and innovative FinTech challengers and, most importantly, heightened customer expectations, has forced the hand of even the most conservative banks. In short, traditional banks are now threatened on all sides, and have nowhere to hide. Many are now scrambling to find ways to augment, enhance, and in a few instances overhaul the core banking infrastructure which served them well for decades.

According to WEF 'The combined value – to society and industry – of digital transformation across industries could be greater than \$100 trillion over the next 10 years'

As a result, Digital Transformation for most banks are less proactive and more of a reactive change. However, this makes the undertaking no less risky. For most banks, Digital Transformation involves the deployment of an omnichannel solution to bring a seamless and consistent customer experience.

A more agile interface, directly of benefit to the customer sounds like the perfect solution and while omnichannel platforms have some great capabilities, they are only as good as the information they get from the back-office systems. The customer's true experience therefore depends wholly on the contextual information stored within the transaction lots in the core systems at the back office. This makes the strategy some banks are pursuing, of patching disjointed data silos with omnichannel solutions, inherently flawed.

The challenges facing banks today lie much deeper than revamping front end systems. Banks must focus on the synergy between often siloed front-end channels, such as mobile, app or web, and the often forgotten middle and back-end systems. This is easier said and sketched on a whiteboard, than achieved to the satisfaction of today's bank customers.

For all banks, the middle and back-office transaction processing systems are critical, serving as the backbone of the entire organisation and have been built over many years with a combination of systems and applications. These middle and back-office layers are where the banks' business logic, financial products, core processes, metadata and many other business-related assets are stored in its core systems. It is within these layers that banks run their auditing, monitoring for risk and compliance, as well as their business decision algorithms. Given the critical nature of the day-to-day operations of a bank, the growing complexity and size of these layers make transformational change an extremely risky endeavor.

However, modern banking is all about agility. Customers' day-to-day digital interactions with swathes of other organisations are increasingly faster than ever before. Think about customer experiences with Amazon, Google, Facebook, or Netflix and compare this to the average banking experience. Today, banks must provide a level of service, which keeps up with customer expectation but most of them lack the agility required to do so. The most common reason is that the three traditional layers of core banking - front, middle and back-office systems are siloed and as a result, do not work together efficiently.

So, while omnichannel deployments address the disconnect in siloed front-end channels, they often cannot draw upon all the important information stored by the middle and back-office layers, which remain in silos. The scope of Digital Transformation is clearly more than 'plugging in' a new user interface.

The solution though needn't be infinitely complex. Deploying a digital core middle layer allows orchestration across the bank. This eliminates any disconnect to the back-office layer, without a fundamental overhaul of the entire system. This headache-free transformation provides the agility required for modern banking by progressively transitioning the business logic out from the complex legacy core to the middle digital core layer. This also has the advantage of letting banks run digital transformation at their own pace. Or more correctly, the pace which suits their customers

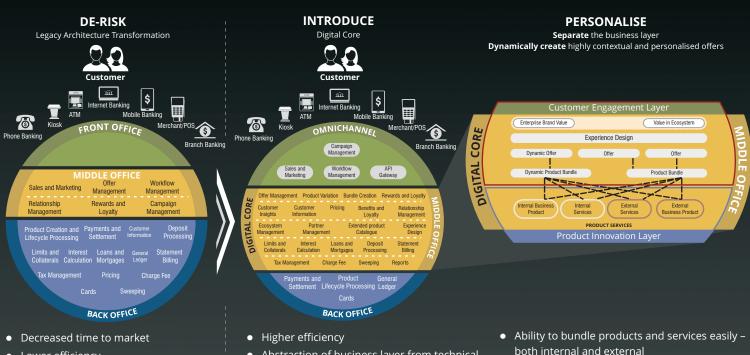
For a bank to provide the elevated service experience modern customers expect, all three banking system layers must work in unison where each has a very clear role to play in the 'Whole Bank' digital transformation. This approach can only succeed with a Digital Core, as illustrated above.

This approach simplifies, de-risks and drastically improves the chance of success during a bank's digital transformation journey. It also adds efficiency thereby saving costs, while ultimately helping provide a seamless end-to-end service to today's more demanding financial service customers.

Digital core enables banks to defy the Potemkin effect of digital transformation and go from being just a digitised bank to a truly digitalised bank. The solution achieves this without a major overhaul of the bank's existing core.

Digital core removes the complexity out of existing core systems, by decoupling the Systems of Engagement from Systems of Record enabling your bank to focus on its customer-facing capabilities. It acts as a central digital layer that dynamically handles complex business logic between the Systems of Interaction, Systems of Records and the external partner ecosystem hence enabling true digitalisation and innovation. The solution brings out the intelligence and agility required to achieve multiple business product and service possibilities that enable right customer engagement value at the right time

Move beyond digital transformation. It's time for a digital core – Own your customer



- Lower efficiency
- Inability to manage bundles
- Enhanced brand risk

- Abstraction of business layer from technical
- Enhance overall value in the ecosystem
- both internal and external
- Lesser time to market

Why an Enterprise Product Catalogue is essential

Banks and other financial institutions offer multiple products to their consumers. However, many do so via separate lines of business within the organisation. From mortgages to vehicle finance, student loans, savings accounts, credit cards and investment products, the list of offerings is expanding all the time. For largely administrative reasons these offerings are organised separately from each other, despite customers viewing them as offers from the same brand.

To retain existing customers and attract potential new ones, new and diverse products, some even built from services external to the bank, are periodically introduced by banks. However sourced, for banks, orchestrating new products across a large scale is always a complex process, especially when each product was separately created by different lines of business or separate organisations.

Operational scale adds to the complexity. Many banks have hundreds, or even thousands, of branches in a single country. One leading UK-based bank, for example has 3,900 offices, across 67 countries and 38 million customers. Meanwhile, one large Indian private bank has 4,715 branches across 2,657 cities and towns. Moreover, some banks operate in multiple geographies, across multiple timezones. Operating at such huge scales, it is imperative every customer-facing channel and each bank employee is uniformly updated on all the active products available to new and existing customers in their specific region, as well as products which are obsolete. Inconsistency in product information is a recipe for expensive mistakes.

For large-scale operations with proven processes, this kind of communication should be a matter of basic organisational hygiene for a bank. For sure, without accurate, locally relevant data, digital channels along with local branches, banks simply cannot cater for today's modern customer needs. The orchestration of new financial products needs

accurate, flexible and localised information, detailing regional nuances like currency, price points, and cultural preferences, all from a single system.

To ensure banks' front-line channels and personnel are always equipped with the most up-to-date information, a robust Enterprise Product Catalogue is essential. This is a centralised placeholder of all active products, services, packages and bundles, as well as offers from both internal and external parties. Compiling the products created by separate lines of business and product processors in silos, an Enterprise Product Catalogue is the repository, which ensures products are linked and can be grouped logically by their relevance to needs of the customer.

It may sound obvious, but too often bank employees do not have a complete view of the bank's offerings. Internal confusion can lead to an unhappy customer, or an unsold product line, simply because they cannot be seen. In an agile digital world, omnichannel platforms have to have access to all active products, logically grouped, to help staff and customers find what they want.



The Open Banking Opportunity

For banks and other financial services institutions, evolution means significant disruption. Additional regulation makes this worse. Perhaps the most technologically significant regulation for traditional banks ever, in the context of open banking are the likes of PSD2 for Europe and similar regulations in UK, Hong Kong and upcoming ones in Australia and Singapore. These new regulations look to fundamentally disrupt banking by requiring banks to open their customer data and payments infrastructure to third parties. In other words, traditional banks' most valuable asset, customer data, is now available for all to see. Where once this was proprietary bank information, now the customer and competitors can assess its value too.

The term open banking, often adopted in favor of the more technical-sounding regulations like PSD2, has forced the financial services sector to innovate beyond the standard internal product offerings. Under open banking, banks can offer products and services from external ecosystem partners which complement existing offerings, thereby enhancing the holistic experience for the customer. For traditional banks, open banking is a blessing and a curse. What it takes with one hand, it gives back with the other – but only for banks willing to innovate to retain the customers they know and have a larger wallet share of those customers' transactions.

New open banking offerings may come from partnerships with innovative fintechs, other financial service organisations or non-financial entities such as educational institutions or retailers. Examples of this transformation can be seen already as traditional banks offer travel, or mobile phone insurance with successful product applications. Not only does this help the bank to customise its service and add value for their client, done seamlessly it also helps to generate customer delight, improve retention and build customer loyalty.

As the waves created by open banking proliferate, product catalogues will become increasingly important to make sure products and services from

external ecosystem players are listed and grouped in a contextual manner. Today, bank ecosystems are relatively small, soon though they will become very large, consisting of myriad new product skews, each personalised to the customer. When this happens, product catalogues will become powerhouses of information and central to banks' offerings today and tomorrow. They must then be treated as a strategic way of orchestrating financial products effectively.

A relevant and well-packaged range of core offerings will delight end-consumers. Offering anything less allows more innovative competitor to steal the day. This is the new frontline of banking. Product rationalisation, versioning, partner offerings, related linkages, governances, risk management, customer level personalisation and consistent information flows are just some of the business capabilities enterprise product catalogues bring.



Product variety - Bank Customers' spice of life

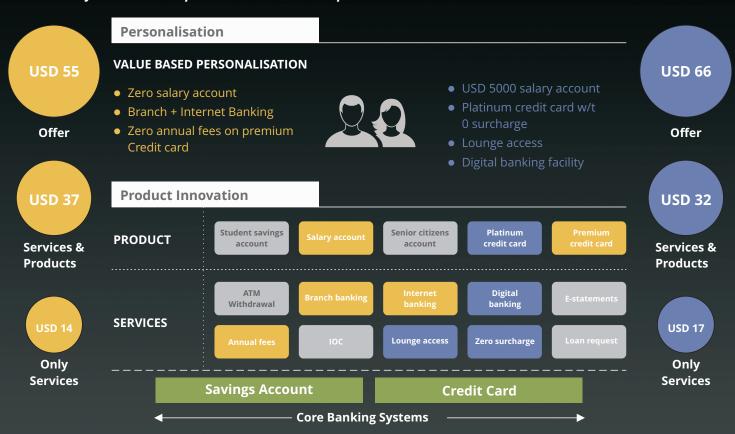
Banking has changed forever thanks to a growing number of digital channels options, customers spoilt for choice from innovative fintech disruptors and an expectation of high personalisation suiting their lifestyle and specific needs.

This extremely personalised demand, nicknamed a "Segment of One" by the industry, indicates the growing trend that consumers expect financial products to be heavily personalised. However, for most banks, this level of customer understanding is a pipe dream today. Restricted by a predefined set of products and dragged under by the weight of legacy back-office systems, banks are forced to store each new product variant as a separate product to achieve even the most minute product variations. Worse, even this is a complex and time-consuming process involving actual lines of codes being written with the help of IT teams. The limitations of their core processes forces banks to ask customers to pick one of the few options they currently have instead of being able to offer what the customer needs.

In today's banking environment, a lack of agility is the recipe for dissatisfaction and bank customer churn. But there is another way. Using the enterprise product catalogue within the digital core, the bank can move all the business logic and product variation design into the middle layer. This frees up the core back-end product processor systems from the weight of storing multiple product. Instead they become systems of records to simply maintain specific templates of products which can be termed as technical products. This means products in all their variations, potentially as many as or more than the number of customers a bank has, are managed and serviced by the product variation module in the middle layer, saving the duplication of effort.

The flexibility to vary product features to meet customer needs dynamically reduces the administrative load on the banks' digital core. This effectively brings the agility omnichannel-banking demands while keeping consumers happy with the bank's personalised service.

Illustration of how technical products can have multiple views



Creating need-based personalised experiences

Designing relevant products in the open banking era relies on a deep understanding of the true needs of each customer. However, this isn't the whole story. Building new offers in conjunction with providing a holistic customer experience for the customer is the way forward. Designing the right experience to meet modern customer expectations is vital to ensure these newly designed products actually sell.

Having Experience Design (EX) as a module within a bank's digital core allows them to present the customer with a need-based product design in a compelling way. This is a massive turnaround from offering less-relevant standard, siloed, core offerings they once foisted on them.

For instance, when a customer approaches a bank to enquire about their mortgage product, they are already in the process of buying a home, hence it's important for a bank to consider fully the whole home buying experience. The customer would need home insurance and home furnishings. By understanding the customer's real needs around the core product (mortgage in this example), the financial product design becomes more holistic. The mortgage inquiry happens to be just one part of that entire home buying experience and represents a single product a bank can offer.

"...the business we are in is to meet the unmet, unarticulated needs of customers.
That's what innovation is all about."
- Satya Nadella, CEO, Microsoft

Indeed, beyond the internal products the bank can offer, a mortgage customer will have very specific, individual requirements for white goods, home security, broadband, furnishings, and electronics. In fact, most customers will have fixed preferences as to the specific brands they require for these items. Orchestrating the product offering and fulfilling a customer's expectation to this degree is possible only by building an ecosystem of partners and tapping into products and services that would complete this experience for the customer.

Crucially pre-defined packages for differing product segments can now be designed by experienced B2B product managers, focused on ensuring the products they develop fits in with customer expectations. By working this way, the options available to a single customer, around a single offering of the core product, can be defined with

multiple categories of external products, making It convenient from the customer point of view as well as meeting their complete requirement.

Each external product can offer many choices to ensure customer personalisation. In the previous mortgage example, a customer looking to benefit from a bank's included discount on white goods, for example, could choose between a number of brands - Siemens, Samsung, Toshiba or Smeg for example. With experience design built in to a bank's digital core, offers can be designed to dynamically choose and recommend various new options of digital interactions, separate from the prepackaged bundles to prospective customers basis their persona and neighbourhood analysis and insights.

Executed well, experience design is the catalyst for a whole new level of business model adoption which offers more than just a customer experience, rather a set of products which will delight the customer. Without experience design, modern financial product design cannot happen. The way banks choose to construct their products is up to them and could range from related products the bank wants to offer, partnerships they want to bring in, tax assistance or currency management, for example.

Omnichannel rethought, with context

Banks spend billions of dollars to create omnichannel touchpoints where customers gain seamless access to account information, carry out basic transactional banking and even interact with customer service representatives across multiple devices. This though is just table stakes.

Current banking systems lack the intelligence to identify the contextual intent of customer transactions. In order to bring added value to customers, it is important for banks to understand what consumers are trying to achieve via those interactions.

For example, if a consumer is looking for a Forex card to use when travelling abroad, banks will generally match four generic products with the card and offer it as a bundle to the customer. It sounds like personalisation, but it isn't. A robust digital core grants banks the ability to interpret these transactions more accurately and effectively. It gives financial organisations the ability to understand why a customer booked an international ticket to the US and allows banks to offer something much more relevant alongside it, such as specific US travel insurance, or even a Forex card with a fixed rate exchange on the US Dollar.

In this situation, the next time the consumer logs in; the systems will automatically be able to suggest much more personalised and relevant offers to the customer. These options can be shared via the various communication channels banks have with their customers such as emails, texts, ads in banking apps, or even retargeted web advertising.

At a time when customer expectations continue to increase, they care greatly about receiving the same user experience across multiple platforms and devices. Banks' omnichannel strategies still are woefully lacking in this basic intelligence whereas e-commerce and retail organisations have been using such techniques for years. This is an important discrepancy in the 'war' for customers, who may prefer better service over established brands.

Customers demand personalised communication. Adding a digital core, to a bank's core competencies, allows those employees tasked with delighting customers to focus more on customer needs. Understanding the context behind banking transactions is perhaps the most fundamental competitive advantage banks have. A deeper level understanding on what customers really need and the ability to execute fast is the best way to keep them loyal for life.



Digital Core - the key to profitable customer engagement

Now that the fourth industrial revolution is afoot, digitalisation is business as usual for all organisations including banks. To keep up with the changing customer needs and behavior often influenced by the Googles and Amazons of the world, digital transformation projects are not just necessary, they are the first step in the journey of customer satisfaction.

With regulations like open banking attempting to give the customers what they want, banks need to step beyond just digitalising their core systems. Digital transformation strategy should include integrating a digital core which essentially has two components – a Product Innovation layer and a Customer Engagement layer.

The product innovation layer brings with it an option to simplify core and de-risk the complete overhaul of legacy to give the required agility for true digitalisation. More importantly, an innovation layer helps build products based on future needs thereby enabling banks to preempt their customers' requirements. The future of financial product design will include an increasing number of value-based components coming in from internal and external products which smartly connected to create the perfect personalised offering for each customer – be it any LOB.

A customer engagement layer brings with it the required intelligence and insights which the cannot be catered to by an omnichannel system alone. Understanding the intent & context of the customer interaction and there by providing products and services which are relevant to the customer or prospect enables the bank to increase product usage as well as penetration.

With a powerful digital core, banks will not only be able to provide integrated services including both internal and external products, but take ownership of the complete customer relationship. Open banking has radically changed the scenario. It has given rise to potential new partnerships and business opportunities for banks outside of financial products and digital core enables it and provides future proofing o adopt to changing business models driven by any external and internal demands e.g., regulation, operational improvements. It's time for a careful introspection - Where are you in your digital transformation journey? How comprehensive is the transformation plan bringing in true comprehensive agility from front-end to the back-office? How are you currently using your partner ecosystem to offer more context-specific bundles for your customers?



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If you want to know more on how a digital core can enable you on your digital journey, please send us an email at contactus@suntecgroup.com and we will get in touch with you.

