White paper

# Mobile Banking:
# One size doesn't fit all

A best practice guide to developing & implementing a successful mobile banking service

# Executive summary

As financial institutions fight to retain customer loyalty, gain competitive advantage and increase revenues, their success hinges on staying relevant to consumers by adding value and adapting to fulfil changing requirements.

Across banking channels, mobile has advanced the most in recent years. However, research has shown that mobile banking also offers the least positive customer experience. While many users have signed up for mobile banking services, the on-going use of these services is often limited.

Financial institutions must close the gap between expectation and experience.

While packaging traditional financial services into a mobile delivery channel provides consumers with remote access to their bank account via a mobile device, this only skims the surface of the channel's potential. By leveraging the ubiquity of mobile communications, financial institutions can deliver always-available highly personalised services and instant access anytime, anywhere.

However, as multichannel banking adapts and evolves to embrace mobile, financial institutions are facing new sets of challenges fuelled by increasingly complex integration processes and fragmented technologies.

This white paper examines why mobile banking should be a fundamental part of a long-term customer acquisition and retention strategy. It also looks at the various mobile banking approaches available and provides a best practice guide for successful deployment, market engagement and ongoing consumer adoption.

This white paper will demonstrate that while there is no 'one size fits all' approach to the implementation of mobile banking services, there are critical strategic considerations and guidelines that will underpin a successful mobile strategy.

# The mobilisation of financial services

Universally defined as the provision of financial services on a mobile device, mobile banking is more than the mobilisation of financial services. Increasing the reach of 'traditional' banking, mobile phones enable customers to access account information, payments, deposits, withdrawals and transfers. Customers effectively have a bank branch in their pocket.

In the same way that the Internet has transformed how people manage their banking services, the mobile channel has the potential to have a significant impact on the customer's relationship with their financial institution.

A plethora of services are already gaining market traction, from simply locating a nearby branch, to more sophisticated services such as loans and insurance. Financial institutions now face the dual challenge of integrating new, mobile driven services with their existing offerings, and mobilising their current services to increase their reach.

Today, the banking environment is truly multichannel, encompassing traditional branches, telephone, Internet and mobile banking. The increasing use of the mobile channel is an opportunity for financial institutions, not just to get mobile banking right, but to make sure that all channels work hand-in-hand, to provide simple to use, seamless and secure services.

This white paper will not attempt to cover the wide range of services that the mobile channel could provide; it will instead outline how to deliver a successful mobile banking service in today's mobile-focussed world.

# A place for mobile phones in financial services

To meet market expectations, financial institutions need to take a long term approach. Mobile banking isn't a 'one size fits all' business: it is a balancing act between the needs of new and existing customers with the individual financial institution's own business strategy in an environment heavily affected by a variety of socio-economic, political and technological factors.

In many developing markets, bank branches are only found in the cities, meaning customers have limited access to financial services, making them fall into the underbanked or even unbanked categories. These unbanked populations provided a catalyst for mobile banking globally, as in many rural and remote parts of the world with little or no infrastructure, mobile is the only secure and convenient method of banking. For example, the success of the M-PESA service in Kenya.

Mobile banking strategies must also take into account the 'hybrid' markets such as China, Brazil and the United States that have both banked and unbanked populations and tailor their mobile products accordingly.

In developed markets, mobile banking is usually regarded as a tool of convenience. The mass adoption of mobile devices such as smartphones and tablets has increased the demand for mobile banking services from consumers. The challenge for financial institutions is therefore to ensure that they deliver banking services that fit in with the customer's lifestyle.

Numerous research firms have published results confirming that user experience is key for both attracting and retaining customers. Banking apps are a key part of this user experience, and as such, providing relevant and easy to use apps is crucial in order to remain competitive.

Enabling customers to use their mobile device for banking services can also deliver further cost savings by reducing traffic in branches and call centres, as well as offering the opportunity to cross-sell through a mobile banking service, increasing revenue.

In addition to promoting customer retention, mobile banking has a role to play in customer acquisition. Studies have shown that people stay with the financial institution where they opened their first account. According to a survey by Consumer Focus, the independent UK watchdog, nearly three-quarters of consumers have never seen switching bank accounts as an option. Capturing this wave of young technology savvy individuals is important for acquisition, while providing the potential to increase revenues by charging for new services.

Regardless of market – developed, developing or hybrid – the requirement to provide mobile banking services in order to fulfil consumer need or convenience, acquire new customers, reduce churn and increase cost efficiencies is clear.

# Building an effective mobile banking strategy

To build a successful mobile banking service, you must first build a successful mobile banking strategy. The mobile banking offering must be easy for consumers to use and flexible enough for financial institutions to adapt as mobile banking demands and services evolve.

Below is a best practice guide to building and implementing a mobile banking service that is both valued by the customer and rewarding for the financial institution.

## Understand your market

A study by Gartner in the U.S. and UK found that consumers "aren't looking for generic mobile payment solutions. Instead, they want solutions that respond to specific needs. Moreover, younger customers are 'relatively satisfied' with existing payment methods."

The first step is therefore to ensure a clear understanding of the market requirements: customer, socio-economic, political and technological.

There are customers who rely on mobile as their main banking channel and those who use the channel as a supplementary access point to their bank accounts. As such, one important point to understand is that financial institutions should not assume that mobile banking functionality is simply an add-on. While mobile must be integrated seamlessly with banking channels, it should not depend on them in order to work. It is crucial to understand that that each channel has unique capabilities and these should be utilised to the full in order for customers to realise the value of the channel. For example, features exclusive to mobile phones including the use of GPS, Bluetooth, NFC and inbuilt cameras can provide an entirely different banking experience. This means financial institutions need to carefully consider what they should offer to customers.

One such consideration could be asking a customer to subscribe to mobile banking via Internet banking, which is often not a viable option if this customer is either a dedicated mobile user or has limited or no access to other channels. Once this type of customer has signed up to mobile banking there is then an opportunity to cross-sell additional relevant services and open up new revenue streams.

For multi-channel customers, financial institutions need to consider the continuity of the services offered across all channels. For example, the functionality of Internet banking should be mirrored in mobile banking and all payees set up by a customer using other channels should also be accessible via the mobile channel, and vice versa.

With so many options available, customer research and clear market segmentation is essential to understanding which features should be prioritised. In some circumstances, providing customers with too many features could give them too much choice, which is more likely to confuse them and even discourage adoption.

## Choose your deployment option

There are five main mobile banking deployment options used globally today. Financial institutions can use a mix of these options depending on their market needs.

### 1. SIM-card application

The banking application is installed on a SIM-card that is controlled by a mobile network operator or a specialised organisation called a Trusted Service Manager. The main function of SIM-card applications is to provide users with access to additional services and interaction channels via USSD and SMS.

Advantages: Nearly all mobile phones use a SIM-card and have a mobile phone number, SIM-card unique identifier (IMSI) and device unique identifier (IMEI). The deployment method therefore offers strong access with inherent identification capabilities.

Disadvantages: SIM-card applications are severely limited in terms of functionality, user interface and future development when compared with other deployment options. Devices with no provision for a SIM-card, such as tablets, cannot be addressed. These applications also have security issues, for example, all transferred data is accessible by the operator or Trusted Service Manager.

### 2. SMS

This deployment utilises SMS to enable transactions. SMS banking services operate using both push and pull messages, such as transaction alerts (push) and account balance enquiries (pull).

Advantages: Similar to the SIM, SMS works with every mobile device. SMS is also simple and easy to implement.

Disadvantages: Financial institutions must agree contracts with mobile network operators to pay for messaging services (including those initiated by customers). SMS delivery is not guaranteed and can suffer from security problems, for example, the messages are accessible by operators and are stored in the memory of the mobile device. There is also the possibility of messages being intercepted by malware. Size and format restraints also limit the user experience.

### 3. Basic application

Most feature phones and a number of smartphones use Java ME as the operating system. Users download the applications from a financial institution's website or via a web link within an SMS.

Advantages: Availability as these applications are accessible in developing markets where Java ME is one of the most widely application.

Disadvantages: Demand for this application, even in developing markets, is waning as the platform is usurped by Apple iOS, Google Android and Microsoft Windows Phone platforms. Fragmentation is also an issue as manufacturers interpret and implement various aspects of the Mobile Information Device Profile (the specification published for the use of Java) as they see fit. The platform is unable to effectively utilise mobile hardware functionality such as GPS, Camera or NFC.

### 4. Mobile website

This is where customers are directed to an Internet browser to access a mobile banking session, rather than a normal e-banking session.

Advantages: Widely accessible on the majority of mobile phones, including feature phones. Building a mobile website is more cost effective than a native application: conventional web-development tools are used, which means there is no need to create native applications for each new platform.

Disadvantages: The user experience on a mobile website is not as engaging as it is on a native application. A mobile website only has limited access to mobile hardware functionality such as local data storage mechanisms, camera, etc.

### 5. Native Application

A native mobile banking application is designed for a certain mobile platform and is accessible via centralised application stores, e.g. Google Play.

Advantages: The native application is the most sophisticated, reliable and comprehensive deployment option. Hardware functionality such as GPS, camera, etc., can be utilised to enable the maximum functionality possible in the most convenient and usable manner. The iOS and Android platforms are continuing to grow in popularity and are likely to be the most prevalent platforms for the foreseeable future.

Disadvantages: Fragmentation is the biggest issue. Every mobile OS offers its own tools (language, framework, set of required APIs) for development, which means it is necessary to develop and provide for each of the four main platforms (Android, iOS, Blackberry, Windows Phone). Furthermore, there is fragmentation within a single platform. There are multiple versions of Android and iOS and multiple devices with different specs (screen resolutions, memory volume, etc). To enable distribution through the official application stores, a relationship with each platform provider also needs to be established. Developing a native mobile banking application is therefore the most complicated and costly deployment option.

It is critical to address the majority of the market requirements first, however, other significant consumer segments must not be ignored: a financial institution must understand their customer requirements and ensure their mobile banking products are tailored to meet both need and expectation.

## Be tech agnostic

Mobile devices differ greatly, not only from feature phones to smartphones and tablets, but also between individual devices, operating systems and network operators. To ensure the maximum reach of mobile banking services, solutions need to be software and device agnostic to maximise availability.

Financial institutions need to understand the impact of these differences and that the underlying mobile banking technology must be capable of evolving with the market trends whether consumer or technology led.

## Personalise your service

Financial institutions must provide customers with the ability to personalise mobile banking services to meet their specific requirements. This ability is critical to drive on-going use and for the service to be attractive to a larger audience.

For instance, customers may wish to set up alerts (SMS or email) at a certain time of the day, allow regular transfers to be saved for repeat use, personalise names and upload pictures for different accounts and payees, and allow push notifications for location relevant services like ATM finder.

## Be secure

The on-going battle between security and convenience is nothing new, however it has been at the forefront of discussion since mobile has emerged as one of the newest and most convenient remote channels. For example, security measures for the Internet (such as DPA/CAP technology) are not transferrable to mobile as they defy the key advantages of using this device. Services must provide convenience to the customer without compromising security.

Although not all security features are transferrable to mobile, this is not to say that security should be decreased to such an extent that a passcode is the only layer of protection, which is worryingly becoming the current trend.

While mobile is still regarded as a newer channel, fraudsters continue to pay close attention. With the balance between convenience and security still in limbo, and the security of added authentication methods such as biometrics under the spot light, safe-guarding customer information has never been so important. It is therefore essential that financial institutions ensure high levels of security are built into mobile services to retain consumer trust. Financial institutions need to clearly demonstrate to customers the extent of security and the availability of fraud management services. Issues around security need to be tackled openly and visibly.

A proportional approach to security can help to alleviate concerns. This approach recommends that financial institutions implement different security requirements depending on the level of sensitivity or risk of the function the customer is about to undertake. For example, this will allow services such as viewing a bank balance to require only a username and passcode, while functions such as making payments will require additional layers of security, such as a one-time password (OTP) via SMS, and other unique identifiers. The approach balances high security with a simple and convenient user experience to make sure security doesn't become a barrier against adoption.

## Underlying mobile banking technology

Stand-alone mobile services may be attractive by allowing financial institutions to quickly enter the market – "we are now mobile" - but as these services and associated technologies proliferate, the result is a spaghetti technology system that is disparate, expensive to maintain and can become quickly outdated.

Financial institutions need to take a platform approach, deploying a unified architecture that can flex to accommodate market needs across all banking channels - not just mobile - to enable true service integration and appeal. As no one size fits all when it comes to mobile banking, the only option is to use a platform which supports a wide range of existing and new technologies, ensures seamless integration and provides high levels of customisation.

A platform approach is highly recommended as:

- it ensures service integration across all banking channels (branch, phone, ATM, Internet, mobile and social media) so that service options and payment preferences, as predefined by the customer, can be made available across all channels ensuring the continuity of the overall customer experience;

- it ensures that a mobile phone is utilised to its full potential, delivering added value across all banking services, e.g. receiving an SMS notification after making a card transaction as a fraud detection feature or using a mobile phone as a readily available token to receive OTPs for Internet banking.

Technology aside, to ensure a consistent and intuitive customer experience, it is also important that staff members are equipped with the information required to handle queries about different channels even if they do not work as part of that channel, e.g. a bank clerk in branch can deal with questions regarding your mobile banking service.

# Conclusion

With the right approach and the right guidelines, financial institutions can deliver compelling mobile services that deliver clear customer and business benefits across all banking channels, rather than quick-to-market, fragmented and standalone solutions.

The key guidelines for financial institutions looking to build mobile banking services are as follows:

- Learn from early adopters. Many issues have resulted from fragmented technology, complex infrastructure, and poor integration. Financial institutions need to adopt a strategic, long-term approach.

- Recognise short-term solutions for what they are. Markets will often have a unique set of requirements that are constantly evolving. As mobile becomes increasingly pervasive, and more and more new technologies are made available (banking and telecom) an integrated, platform-based approach will be essential for long term success.

- Build a roadmap to progressively introduce solutions. The approach will help ensure that mobile solutions meet real customer needs and complement existing services.

- Do not underestimate the capabilities and reach of mobile devices. Mobile has the power to deliver new services and to enhance existing ones.

In addition, financial institutions need to ensure mobile banking investments are not made to the detriment of other operations such as cards. Only a strategy that recognises that mobile as both a channel and a capability will be successful.

Mobile banking offers a cost effective way to engage customers. It is particularly important for tech savvy customers whose lives pivot around their mobile device, and for those who cannot visit a branch and can only access banking services via mobile communications.

A well thought out mobile banking service based on specific customer and market requirements – not a 'one size fits all' approach – will increase loyalty, drive customer acquisition, reduce costs and bolster revenues.

Mobile is here to stay.

**About Compass Plus**

Compass Plus provides comprehensive, fully integrated and flexible payments software and services that help financial institutions and payment service providers meet rapidly changing market demands. Our diverse customer base spans retail banks, processing centres, national switches and personalisation centres in countries across Europe, Asia, Africa, the Middle East, North and South America. With 30 years' experience, Compass Plus helps build and manage all-scale electronic payment systems that generate new revenues and improve profits for its customers.