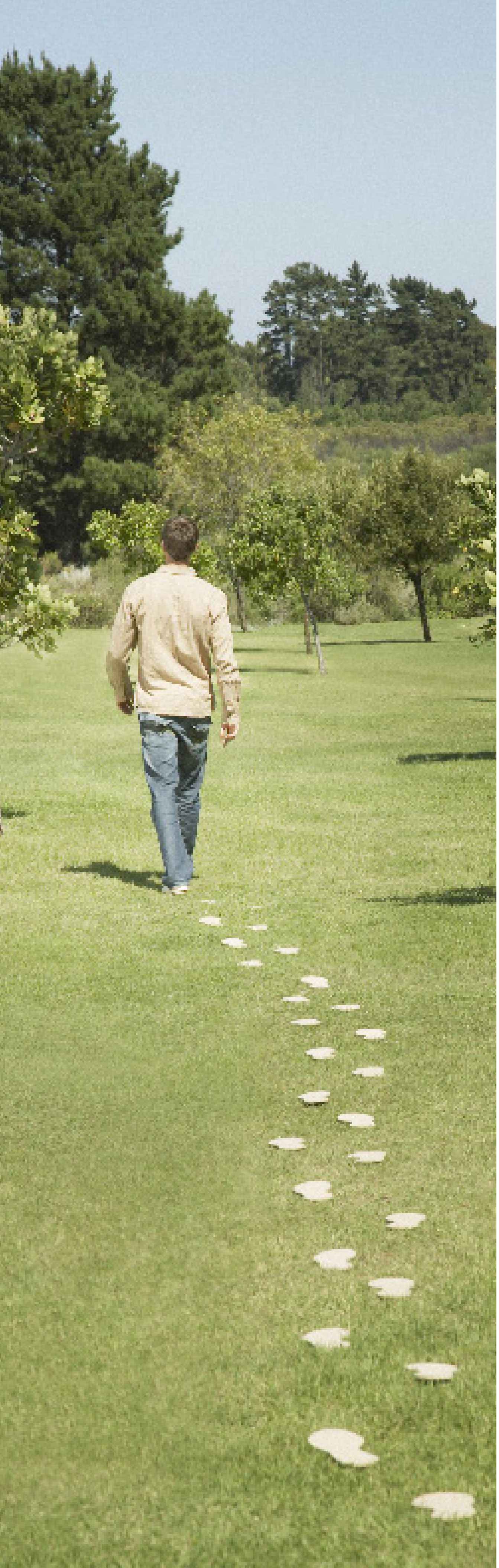

Bank 2.0.

2012 Trends in Retail Banking

April, 2012

CHOICE
Savings & Investments

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CHOICE Savings & Investments equips financial institutions to innovate – giving people better ways to save and invest their money. It also provides customized products, patented technology, innovation consulting and expert training.

CHOICE Savings & Investments is a strategic line of business of CHOICE Financial Solutions, an affiliate firm of the IDEON Financial Solutions group focused on providing consulting services and IT solution developments for the saving and investment segment. IDEON is a product innovation partner to leading financial institutions in the United States and Europe. Led by banking professionals with deep expertise in retail banking, wealth management, IT and capital markets, IDEON's partnerships with leading financial institutions in the US and Europe provide insight into global innovation challenges and needs.

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About the 2012 Trends in Retail Banking Series: Bank 2.0.

CHOICE Financial Solutions' Bank 2.0. Trend in Retail Banking is part of the 2012 Trends in Retail Banking Series, focusing on providing retail banking leaders insights into the evolving customer needs and challenges facing retail banks and brokerages. Starting with the release of the Personalization paper in February and the Personal Finance Management paper in March, this series continues to bring you each of the trends in the new savings and investments landscape on a monthly basis through July of 2012.

In this volume, we will discuss how the banking industry is evolving towards a 24/7 service. New devices and the growth of a strong social network and community are changing the needs for service of today´s customers and the way Financial Institutions respond to these needs. If Financial Institutions are able to embrace this concept and adapt its offering to the new technologies, a true competitive advantage will be established over peers and the levels of satisfaction and new customer acquisition will be significantly increased.

The Challenges of Banking in the Digital Domain

The first use of the word “computer” was recorded in 1613, referring to a person who carried out calculations, or computations. In the 1970s, computer engineers throughout the United States began to link their computers together using telecommunications technology. In the 1990s the spread of applications like e-mail and the World Wide Web, combined with the development of cheap, fast networking technologies like Ethernet and ADSL saw computer networking become almost ubiquitous.

The first hand-held mobile phone was introduced by Dr Martin Cooper of Motorola in 1973, using a handset weighing around 1 kg. In 1983, the DynaTAC 8000x was the first to be commercially available. In the twenty years from 1990 to 2011, worldwide mobile phone subscriptions grew from 12.4 million to over 5.6 billion.

A few decades ago, PCs and mobile devices were unconceivable, but the rapid evolution of technology has made these products part of every day life.

The market is now populated with the latest generation devices (4G mobile phones, laptops, tablets, etc.) that give access to a large array of new services.

Just like any other sector, the banking industry needs to adapt to the new needs and habits of a tech savvy customer generation willing to carry out their banking activity without setting a foot in the branch.

“Banking is no longer something you go to but rather something you do”

Brett King - Author of BANK 2.0 and Movenbank Founder

In this Bank 2.0. paper we analyze the prosperous future of Online/Mobile Banking and the significant role Social Media will play in increasing customer loyalty and brand awareness.

Banking has evolved into something virtual, and Financial Institutions (FIs) need to realize that online and mobile channels can no longer be considered as “exotic” or “alternative” but rather necessary to interact effectively with the customer.

However, interacting with the customer base goes beyond the question of merely providing new technology interfaces, and they need to comprehend and address the specific idiosyncrasies that we discuss in this paper surrounding (i) Online Banking, (ii) Mobile Banking and (iii) Social Media.

To date, too many FIs have mistakenly believed that banking in this new world is simply a question of enabling existing transactions and services via new web channels, and have not recognized, or correctly reacted to a more profound change in interaction concepts:

- Online Banking: FIs need to adapt their service to a 24/7 banking model. In this sense, an effort in customer experience is required, since traditional websites are no longer working to drive business for new customers using their tablet or other device to access bank sites.

- Mobile Banking: Mobile solutions functionality has to be enhanced to enable mobile wallet activity and Peer-to-Peer payments, which will continue to be a strong need for customers in 2012, as they move away from the use of checks and cash for day-to-day transactions.

- Social Media: Social Media will play an important role in the efforts FIs make to know customers better by integrating their understanding into a framework for dialog.

In order to capitalize on the opportunity, FIs need to take the appropriate steps so the desired results may take place.

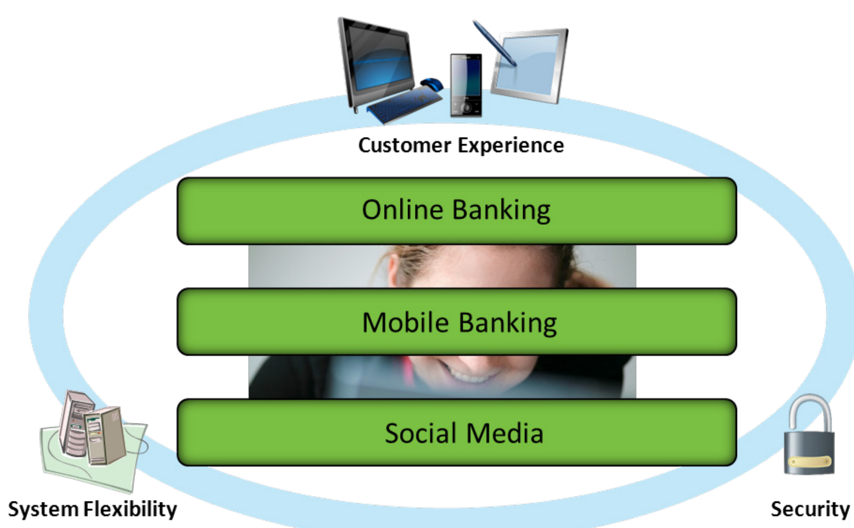
First, FIs will need to redesign their traditional channels to provide a consistent customer experience across all of them.

Second, clear Social Media policies and authentication software (digital certificates, electronic signatures, etc.) are required to prevent data leakage and fraud, thus reinforcing customer trust in the virtual engagement.

Finally, FIs aging core systems will need to be enhanced to allow for flexible solutions capable of coping with today´s real-time engagement.

Combining these musts with a proactive approach to the Online, Mobile and Social Media activity will make the difference in today´s banking environment. Only then, FIs will be able to consider themselves successful 2.0. bank examples.

Exhibit: Adopting a Successful Bank 2.0. Strategy



Online Banking: Building Customer Experience

Generation Y, who are now choosing their primary financial services provider, cite digital technology as an important factor in their decision.

In response to new customer behavior, direct channels are expected to hold the highest share of global banking transaction volume by 2014.

Online Banking

The first, and perhaps best known of the three areas we discuss in this paper is Online Banking.

As reflected in Fiserv´s Consumer Trend Survey, the use of Online Banking is growing significantly among households with Internet access in the U.S.. In 2011, half of respondents to the survey who opened a money market account did so online, up from 16 percent in 2010, while 42 percent of respondents who applied for a credit card did so online, up from 31 percent in 2010.

> *"45% of current and future tablet-owner households in the U.S. would like to use their tablet for banking"*
>
> *FISERV - Consumer Trend Survey 2011*

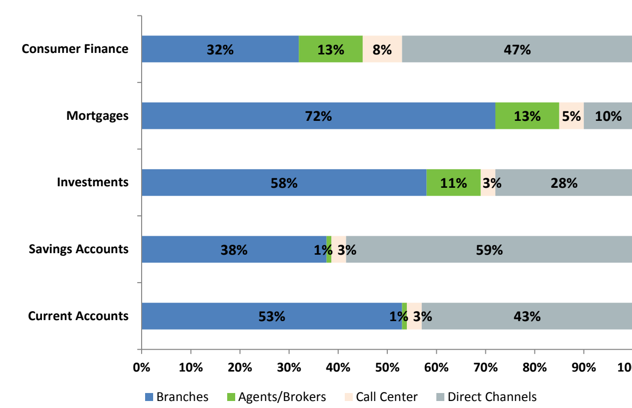
The Online Banking channel has evolved into an essential and prosperous part of the banking channel mix. McKinsey&Co. estimates the potential value created by Internet Banking at €15-20 billion in Europe, reflecting both cost reduction potential and the opportunity to deploy capacity for other activities.

Easy availability and affordability of high speed internet, personal computers, and improved online security are also contributing towards the increase in Web 2.0 adoption.

The online channel is increasingly being used for traditional banking services such as account balance checking and money transferring, and Fiserv´s survey shows that online bill payments now account for 50 percent of all bill payments made by U.S. households with Internet access.

When analyzing the use of Online Banking by product typology, a McKinsey&Co. and EFMA 2011 global survey shows that standard current /checking and savings accounts will be opened online and customer basic investment and insurance needs will be held electronically. However, when buying more sophisticated products and seeking post-sales support, consumers responded they will continue to prioritize face-to-face advice:

Exhibit: Expected Dominant Channel 2015E
(Source: McKinsey&Co. and EFMA 2011 Global Survey)



Despite the growing popularity of emerging channels, branch networks typically constitute nearly 75% of a banks' total distribution costs.

If banks can effectively transition their customers from higher-cost to low-cost channels such as mobile and online, they can reduce their overall costs while also improving their return on investment. Those banks that adapt most quickly to customer needs, and share part of the cost savings they make with customers, will be able to gain market share.

In addition to differentiating their offering with traditional factors such as better product and pricing, banks are now expected to deliver a successful online experience that would allow customers to take full advantage of product personalization at the time of finding the right solution for their needs.

Delivering a successful customer experience

Innovations around better and faster delivery of the right products to a customer will help banks provide a differentiated customer experience, thus supporting better customer retention.

A mobile user is different than an online customer and FIs need to carefully design the layer of these channels to satisfy the particular needs of each type of customer, allowing for effective interaction and increased activity.

Simple (former BankSimple) was created by an eclectic group of engineers, designers, and mathematicians that aimed to provide a web solution to banking customers to manage, understand, and automate customers´ everyday spending and saving.

Combining a platform approach and a focus on user experiences, the "web native" bank was designed with function in mind. Simple, clean and intuitive, it enables an approachable and thoughtful way to manage finances.

Although multi-channel interconnectivity is not new and banks have already made some progress in this direction, an effective Online Banking strategy will require banks to deliver a true seamless experience across channels.

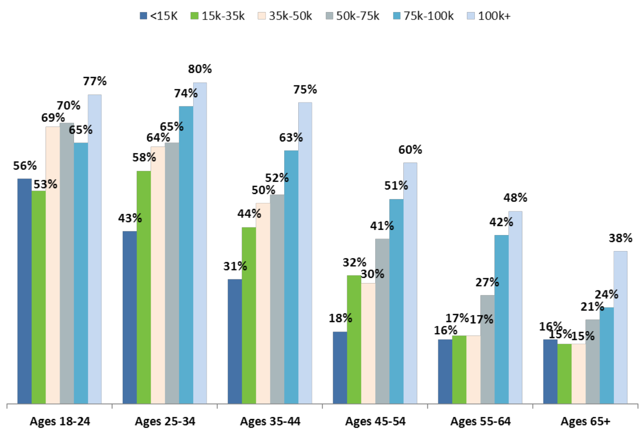
Banks face challenges around their existing legacy applications, systems, and processes which often operate in silos, thus reducing FIs flexibility to get the most out of a multi-channel environment.

Traditional FIs stiffness and resource scarcity present external providers as a reliable alternative to optimize e-business performance and turn web portals into true customer engagement platforms.

Mobile Banking: A Fast-Pace Innovation Sector

The widespread use of smartphones, together with the behavioral shift taking place in customers are boosting the Mobile Banking activity.

Exhibit: Smartphone Penetration by Age and Income (Source: Nielsen 2011 U.S. Digital Consumer Report)



For instance, in the 3 month period ending December 2011, over 4.8m UK smartphone users accessed their bank accounts on the go, compared to 2.6m in the same quarter a year ago.

While approaching Mobile Banking as a new delivery channel will help banks compete for and win new clients in this space, prioritizing features and functionality is the real key to success.

In the second subject of this paper, “Mobile Banking”, we highlight some key considerations that many FIs lose sight of, and that is the fact that Mobile Banking cannot be treated as a mere extension of online services based on existing user interfaces.

There is widespread consensus that appealing and functional apps should be created for boosting the revenue opportunities in the mobile domain.

71% of app downloaders would be interested in an app that allows them to use their phone as a credit card

2011 Nielsen U.S. Digital Consumer Report

When it comes to its design, there are two primary schools of thought. The vast majority of banks opt to put everything in a **single app,** having the utility of both the bank and payments capability in one (e.g. Bank of America, Citibank). A minority of banks, however, adopt the strategy of creating **specialized apps** for payments and day-to-day banking (e.g. JP Morgan Chase, Zions Bank).

Whether FIs decide to go for a single app or a multi-app solution, there are important things to consider in both environments.

Mobile Banking

According to Compete´s Mobile FS Intelligence Survey in the U.S., in Q2 2011 36% of financial service account owners (bank, credit card, brokerage or auto insurance) were using a mobile device to manage their accounts or conduct financial transactions. Moreover, 54% of bank account owners used their phone to manage their checking or savings account and make transactions.

When moving their services to the digital spectrum, FIs should start by conceptualizing the Mobile Banking experience, considering the restrictions of screen size and navigation, and then rethink the rest of the direct channels consistently.

The mobile solution has to be clearly articulated, adding the value a person might not get from the branch or call center – ease of use, time saving and instant deals. By improving the customer experience, businesses gain customer loyalty and turn consumers into outspoken brand advocates.

Mobile Payments

Mobile payments and the behavior required to drive mobile payment adoption is already widespread. The mass market loves the ease of use and modality of a mobile payment compared with plastic, cash and checks.

Informa Telecoms & Media forecasts that in 2013 almost 300 billion transactions, worth more than $860 billion will be conducted using a mobile phone – a twelve-fold increase in just five years.

In response to this growing trend, newcomers are trying to capitalize on the opportunity. A good example of a successful newcomer is **Movenbank**, founded in October 2011 by Brett King, which recently entered the industry as a mobile-centric, cardless and branchless bank.

> *"By 2016, 10% of mobile users will be paying bills using their mobile device"*
>
> *2012 Computer Business Review Report*

So far, mainly non-banks are leading the innovation and are capturing mobile payment opportunities. For instance, in the last 12 months, **VISA and Mastercard** have been accelerating to replace the existing merchant point of sale units with Payment Card Industry (PCI) - compliant alternatives that also facilitate Near-Field Communication (NFC) mobile payments.

Google Wallet app, with the same NFC contactless technology, enables customers to securely store credit cards and merchants offers on a phone, using them to check out at brick-and-mortar stores that accept Google Wallet just by tapping the phone at the point of sale.

Apple will be launching its **iWallet** application in Q4 2012, included in the upcoming iPhone 5. The app gives its users a way to completely control their financial accounts. Instead of focusing on an advertising-like model (Google Wallet) or promoting cross-platform capabilities and the ability to avoid checkout lines (PayPal), Apple emphasizes security.

Exhibit: Mobile Banking Innovation - Examples

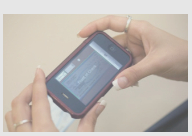
WestPac Impulse saver – Funds Transferring

Westpac

Westpac NZ has recently launched its **Impulse Saver** app, which enables users to transfer funds from their checking account to a savings account by pressing a huge red button on the screen

USAA Mobile Check – Check Deposit Remotely

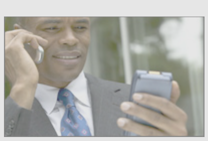
USAA®



Pioneered by USAA in 2009, **mobile check** allows customers to use their smartphone to take photos of a check and have the check deposited remotely. This trend is being widespread deployed by FIs all around the world

FNB – Cash Withdrawal Scheduling

FNB



South African First National Bank customers can log onto FNB´s mobile banking service and **schedule a cash withdrawal** from a nearby ATM. They then receive a text message from the bank with a temporary PIN to use at the ATM

As an alternative to the NFC technology, **Square** launched its first electronic payment method consisting of a squared item to be attached to the mobile phone. Now, its **Pay with Square** application allows users to find nearby stores where Square mobile payments are accepted and create a profile connected to a credit card, eliminating the need for swiping. Square is currently processing $4 billion in annual mobile payments.

In their effort to spread the use of its technology, Square recently launched the new **Square Register**, an iPad app aimed at replacing the traditional cash register and credit card terminal at brick-and-mortar stores.

Similarly, **PayPal** recently launched its **PayPal Here** mobile application, enabling users to execute mobile transactions and read credit cards on the move. With a simple triangular device attached to the phone jack, PayPal projects mobile payments to increase to $7 billion in 2012.

The mobile payment sector is a dynamic environment, in which major players (banks, card issuers, merchants, payment processors) are showing few signs of meaningful collaboration.

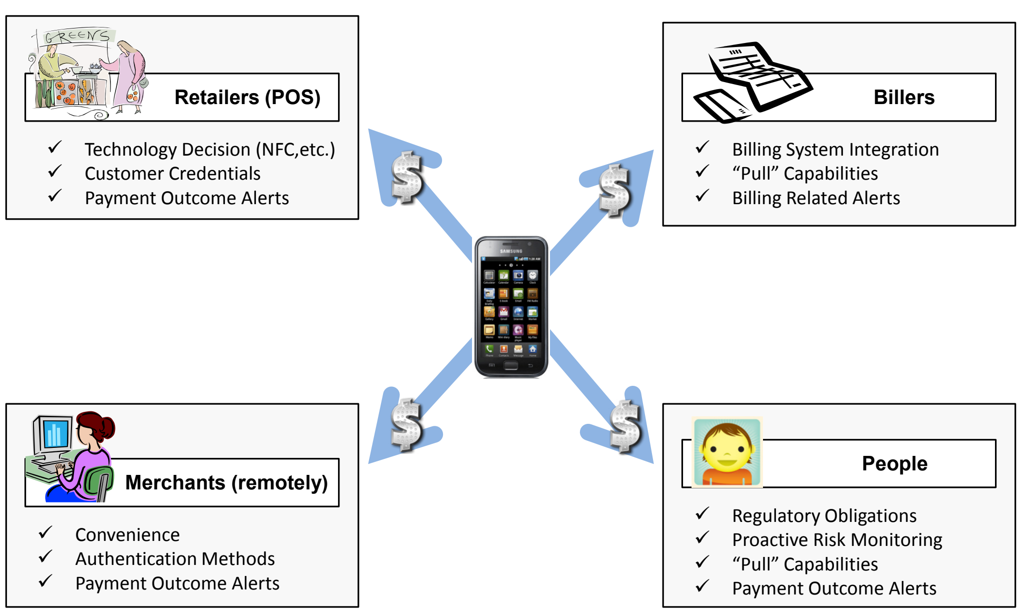
In the peer-to-peer payment environment, **Barclays** recently launched its **Pingit** app, which enables UK-based customers to link their account at Barclays to their mobile number to send and receive payments. Pingit is a free to download app available for iPhone, Android and BlackBerry devices that shows payment information on Barclays bank statement once it is completed.

Similarly, in their effort to test new approaches to transfer money, **Russian Sberbank** presented an application that basically mirrors Barclays service, except for the SMS interface being used instead of a GUI one, responding to the SMS - oriented mobile banking habits of its customer base.

The ability to guarantee secure payment and the alliances taking place between different market players to make fees more competitive are considered to be the key factors defining the market champions in the years to come.

FIs should look for strategic acquisitions or partnerships with the new market participants to secure their long-term positions in the battle against other banks for customer relationship primacy.

Exhibit: Mobile Payments Recipients - Factors to Consider



Social Media: Stimulating Customer Interaction

In the third section of this paper - "Social Media" - we bring into consideration something that should not be confused with other technology innovations, and instead is a consequence of the democratization of information exchange related to financial services and products, where customer behavior and opinion can create huge influence among peer groups that is facilitated by the previously mentioned technologies.

Social Media

According to the eBizMBA Rank, the most popular social networking sites are Facebook, YouTube and Twitter with 750, 450 and 250 million estimated unique monthly visitors, respectively.

The need for social networking and sharing has led to the proliferation of different sites that have had significant success in a record time. By age, the largest group in terms of penetration is the 18-34, with more than 40%, followed by the 35-49, with 25%. However, the need for interaction through the social media is increasingly reaching younger segments, with Tumblr achieving significant success in the 13 to 17 age range.

Foursquare, Google Latitude, Spotbros, Tuenti, Yelp, Pinterest, Groupon and StumbleUpon are just a few examples of other websites that have already gained millions of users with their innovative location, communication or shopping tools.

Exhibit: Social Media Websites and App Examples

Many Banks have started using social sites to help them on their efforts of boosting brand awareness, customer engagement and community building.

A good example of this is **Ally Bank,** recently recognized by the Change Sciences Group as a leader in financial services companies using social media.

Ally Bank´s presence on Facebook, Twitter and YouTube, including the level of engagement displayed on each, contributed to the Bank´s number one ranking among 22 companies.

"Social Media allows Ally Bank to connect with customers in a straightforward way, in forums that make it easy for them to access information"

Sanjay Gupta, Chief Marketing Officer of Ally Financial

In October 2012, ASB Bank, located in New Zealand, was announced as the award winner in Service Innovation at the 2011 BAI-Finacle Global Banking Innovation Awards for its **ASB Virtual Branch on Facebook.**

The Virtual Branch on Facebook, allows real-time, secure and private conversations with ASB banking specialists who provide confidential advice on a range of products, services, or general financial and banking queries. From customers wanting advice on getting onboard a home loan to simple savings tips.

Furthermore, ASB strives to offer its customers the best in banking service. The Virtual Branch complements their existing online offering and provides another way for customers to interact with them to get financial help.

In addition, the ASB Virtual Branch community allows customers to interact with each other via the ASB Facebook Wall, where a range of conversations about different topics take place – product insights/feedback, customer service queries, compliments or complaints, and sponsorship or community involvement.

Social Media: 10 Best-Practices For Banks

1. Dialog opportunity: Banks have started to leverage "the Voice of the Customer" (VOC). Frank Eliason, Director of **Citibank´s** Social Media programs: "We view the space as one that is owned by the consumer and we are the invited guest".

2. Community Building: Social Media is not just about size, but engagement and brand intimacy. **Chase** accrued three million fans with its non-profit "Community Giving" campaign, launched in 2009.

3. Customer Service: A visible Twitter or Facebook account can be used to provide a more personal form of product support than traditional scripted responses to provide product specific information.

4. Product and Market Research: With hundreds of millions of reported users and a new wave of tools to analyze social media comments, social networking sites are not just a brand building tool but also a window to conduct research.

5. Create Awareness: Banks are integrating social tools into their existing or new marketing campaigns to capitalize on the spirit of the community.

6. Product Promotion & Sales: More and more people, especially members of Generation Y, are turning to customer reviews before purchasing. Launching a product using Social Media provides a multi-media approach that spreads the marketing message about products and services.

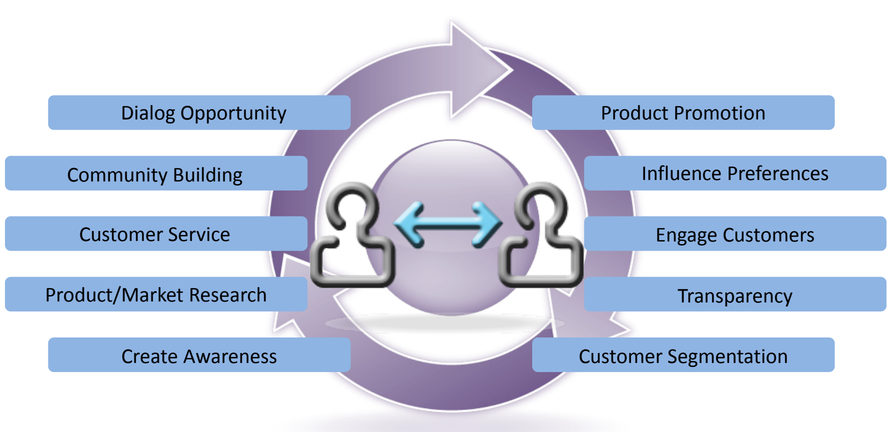
7. Influence Preferences: The community manager and the bank´s influential blogger can discuss important financial news, favoring the dialog with the customer. When the bank does not over sell its products, the influential capability increases.

8. Engage Customers: Social networks increases the emotional connection the customer has to the bank. Banks can engage prospects and customers with targeted content, both authored and crowdsourced, building credibility and loyalty through education and value.

9. Transparency: The current financial crisis has led many customers to distrust banks. Senior management participation in Social Media is an example of the growing emphasis on proximity and transparency that banks are showing nowadays. Peter Aceto - @CEO_INGDIRECT (CEO of **ING Direct Canada)** and Juan Carlos Escotet - @ jescotet (President of **Banesco Banco Universal**) are two of the most approachable executives in the banking industry sharing their thoughts on their twitter account.

10. Customer Segmentation: Credit regulation has limited the bank´s ability to use Social Media data in a meaningful way to lending or financial decision making. However, social networks can be profitably used to leverage existing customer information for new customers.

Exhibit: 10 Ways Banks Are Using Social Media



ATMs: The Future of Cash

In addition to the main topics covered in this paper, in the final section of the document we would like to address the discussion about the impact this growing digital environment will have in banking activity through local branches and ATMs, as a logical consequence of customers increasingly demanding to have the possibility to access financial services remotely.

The financial services industry is struggling with recent regulation changes and the economic environment. As commented by Debbie Bianucci, CEO of BAI "some banks have entered into major expense reduction programs – including reducing their branch footprints to reduce costs – and many institutions are raising fees for retail banking services".

With more and more people going online, the associated cost of providing physical interaction to customers will force the number of branches to decrease even further. However, we believe there will still be room for new conceptual branches, focused on providing face-to-face support, creating cross-selling opportunities and educating in the use of smartphone applications.

Is cash dead?

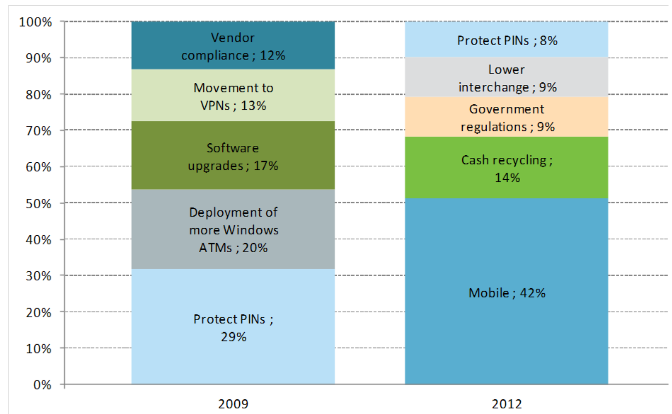
Analysts debate about the survival of cash. From a positive view, cash is accepted as a trusted exchange of value that is private, anonymous and cannot be deleted at a touch of a key. On the opposite side, cash can be contaminated with shadow economy activity and issuing money has an associated cost that can be higher than the intrinsic value.

It is hard to conceive a world, in which millions of transactions for goods and services occur every day which do not rely on cash as a remuneration alternative. Accordingly, as long as cash exists, so will ATMs that provide instant access to it.

However, ATMs will need to be adapted to become a cost-efficient alternative for FIs.

The ATM Future Trends Report 2012 from ATM Marketplace shows that, in only three years, the top four trends have changed completely among the industry leaders:

Exhibit: Industry Trends
(Source: Trends Report 2012 from ATM Marketplace)



As is happening with branches, ATMs and Kiosks will need to have enhanced capabilities and better design to entice customers to use them more often. Furthermore, ATMs should be prepared to allow customers to contract the products and services of the FI through the machine.

PNC Bank, for instance, enables pre-approved credit card offers on the ATM. "So far, about 3 percent of customers who have seen the messages have accepted the offers, which is higher than the percentage from mailed offers", said William Demchak, Senior Vice Chairman at PNC Bank.

BBVA believes they can significantly expand customer usage of ATMs by improving the user interface. They found that by simplifying the more complex teller processes, consumers would move beyond the basic cash dispensing, inquiries, and payments that make up more than 90% of traditional ATM transaction mix.

The new BBVA ATM design released in 2011 has shifted the industry paradigm by custom-designing a machine around user experience offering the most common banking transactions in a simple, flexible, and intuitive manner.

Conclusion

New regulatory constraints and the impact of the recent financial crisis put FIs under cost-efficiency pressure. With banks fiercely struggling to retain existing customers and to become the financial services provider of new generations, there is a strong belief that FIs will need to re-think and re-conceptualize the way banking service is being provided.

Generation Y, bound to replace Baby Boomers as the main customer segment in the short term, are tech savvy individuals that, beyond product innovation, demand service experience. Moreover, FIs might never have the option again to face-to-face interact with some of these customers in branch.

Years ago, the online and/or mobile channels were considered “exotic” ways of interacting with customers. The future evolution of direct channels was predicted by some, although they could not specify an exact date. In fact, there were banks who chose to explore a digital strategy early on, but separated it from their core business, playing a reactive role with innovation.

Now, this fast pace of innovation in technology is changing the way customers do banking. Survey figures show that direct channels can no longer be considered a residual trend, but an opportunity to turn customer behavior into a prosperous business.

The mass market loves the convenience of remote banking, so the battle for brand awareness and customer loyalty will be taking place in the digital domain. If banks are able to define a coherent strategy based on the customer feedback available through Social Media, customer relationships can be even deeper than with traditional banking.

Competition on product innovation and pricing will remain as fierce as ever, but banks will also need to fully transmit the advantages and convenience of self-service to the new generation of customers. The question is, are FIs prepared to provide a satisfactory and consistent customer experience throughout the different interaction channels? Furthermore, are existing core system capacities flexible enough to create and sustain advantage ahead competition?

Traditionally, banks have preferred a “build” approach for most changes. However, we believe a “buy” or “partner” strategy would be optimal as this change requires a new way of thinking and building that is difficult for competitors to copy.

Given current resource scarcity and the existing in-house capabilities, an external provider could provide FIs with the required present and future flexibility to be able to adapt to the emerging necessities of customers in a rapid changing environment.

How can we help you?

CHOICE Financial Solutions patented technology is an excellent complement for a strategic move into the Bank 2.0. environment, equiping FIs with the technical and operational capabilities to innovate to better meet customers needs:

How can CHOICE help you?

- Customers are able to build their very own saving products (traditional deposits, market and non-market linked deposits, notes, etc.) with the pricing and product flexibility parameters set by your FI
- Dynamic and interactive tools that favor the understanding of product behavior and the interaction with the customer
- Seamless integration with existing FIs systems that enables a multi-segment offering adapted to every channel of interaction, providing a consistent customer experience
- System flexibility and innovative product variety difficult to replicate, offering real saving and investment alternatives and the latest market trends (philanthropy accounts, PFM tools, etc.)

But CHOICE is much more than just a Bank 2.0. tool...

- Customer information management capabilities that increases customer knowledge and enables tailor-made marketing and cross selling opportunities
- The design process of new products is simple and agile, improving the speed to market of new products without any IT intervention
- CHOICE helps FIs be sound with recent regulatory requirements
- With CHOICE, product pricing decisions can be made dynamically, based on the relationship of the customer with the FIs through the life of any product

CHOICE offers several implementation options to fit your FIs strategic objectives, timing and budget. For more information, please visit our website:

CHOICE
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