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COO CHRO | EDITION 2015

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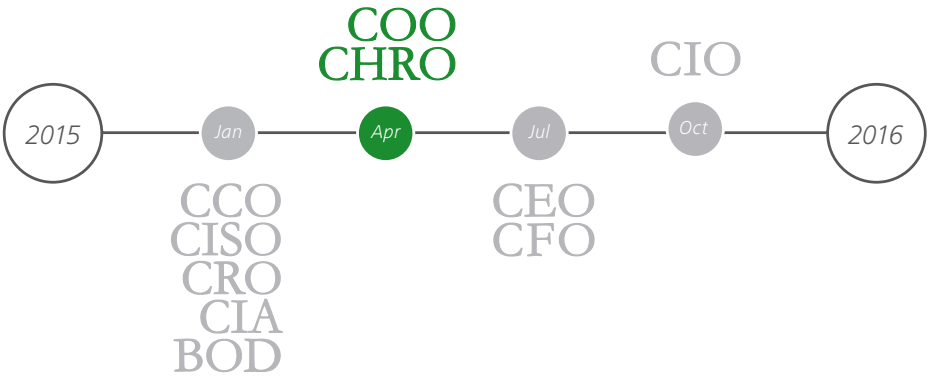
Deloitte.

In this issue

Each edition of the magazine will be addressing subjects related to a specific function. Please find below an overview of the spotlight for the upcoming editions of the magazine:



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Foreword

Dear readers,

It is a great pleasure to provide you with this edition of In*side* dedicated to Chief Operating Officers (COOs) and Chief Human Resources Officers (CHROs). For the past two years, the In*side* team has been following the latest industry trends and this eighth edition focuses on current and emerging challenges and opportunities in the financial services industry – from an operational and human resources point of view.

The success of In*side* has considerably exceeded our expectations. Our last issue devoted to Governance, Risk & Compliance strengthened our belief that the diversity and international experience of the Deloitte network are critical factors when it comes to analysing the complex environment in which the financial services industry is evolving.

When striving to be a discussion forum for the industry, sharing thoughts and perspectives is of utmost importance. One of our main priorities is therefore to increase the role of our clients through interactions and collaboration. In this edition, we welcome the views of Marc Rollmann and Fernand Lepage from BGL BNP Paribas, as well as Jean-Robert Wilkin from Clearstream.

In this issue, we offer our views on various topics such as target operating models, distribution network, digital transformation, Business Process Outsourcing (BPO) and HR policy. Target operating models, and operations as a whole, are going through profound changes as a response to operational challenges, regulatory requirements and digital innovations. The current environment is challenging the financial services industry players, but represents at the same time an array of opportunities for companies to develop and grow.

We would venture to suggest that there is indeed something for everybody in this issue. We hope you enjoy reading it and we look forward to receiving your views and comments.

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Editorial

Dear readers,

It is a pleasure to welcome you to this eighth edition of In*side*, a Deloitte magazine covering essential and actual market topics. While the last edition was dedicated to governance, risk and compliance topics, this edition is particularly devoted to Chief Operating Officers and Chief Human Resources Officers, who are currently dealing with multiple challenges and opportunities.

The environment of low interest rates, reduced growth and high regulatory pressure particularly focused on investor protection, is challenging the financial industry, which will have to reinvent itself. Nevertheless, despite the difficult context, opportunities still exist in the core areas: the economic model, the operational model and the organisational model.

Major changes are required when it comes to how the financial services firms serve their clients: a new customer segmentation, alternative distribution channels as well as disruptive products and services are likely to impact their economic model. The transition from a service-centric perspective to a customer-centric vision will provide professionals of the financial sector with the right customer experience and bridge the gap with other industries.

Moreover, new actors and regulations, digital banking solutions, a high level of transparency for clients, democratisation of products and services combined with a growing interest for collaborative economy are encouraging the financial industry to challenge its current operating model. The financial industry is now looking to foster innovation through digitalisation of operations, optimise collateral management, increase tax transparency and associated reporting, as well as to manage risk data aggregation and transfer pricing aspects.

The key success factors in BPO and the key ingredients for a successful operational migration are two of the topics addressed in this edition. This issue of In*side* asserts that these challenges could be turned into opportunities and serve as triggers to review the existing operating model. The human capital should also be taken into consideration as a new operating model for HR is emerging.

We hope you enjoy reading the topics covered in this In*side* edition. Please do not hesitate to get in contact with us and share your thoughts.

Thank you for your interest and support.

Yours sincerely,

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Banks are still on Mars while others are conquering Venus

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Why service quality is no longer a differentiator and how customer analytics is the key to providing the right customer experience.

For the past decade, most banks have been busy trying to identify and implement several enhancements to their strategies, IT infrastructure, operating models and other key areas. Banks have been trying to proactively accommodate 'the next generation'. What many of them have yet to realise is that the so-called next generation has been around for quite some time now, and is already being served by someone else.

Revenues, profitability, cost-to-income, ROE, EPS and other indicators were and will always be the bottom line for banks and shareholders. The customers, however, have changed drastically over the years.

While banks were busy competing with each other on services, product offerings and market shares, new players have been slowly but surely sneaking in and steeling their thunder. These are players who are mastering the art of simplicity and innovation and players who are spoiling consumers with an experience that seems light years ahead of that provided by banks.

Banks should wake up to this new reality, look around, and act quickly before it is too late.

So what is wrong with that? Is that not precisely what every bank should be striving to achieve?

What have banks been focusing on?

Customers' needs and expectations have been, until recently, questions that banks expected their customers to answer themselves to help them identify how to provide the best quality service. Banks have also been relying on market research, surveys, questionnaires and customer feedback forms to design their service offerings.

Traditional banks have been adopting operating models that would revolve around:

- Targeting the right market
- Providing the right products for the right segments
- Providing the best quality service
- Efficient processes
- The right people in the right position
- The right IT systems and architecture in place
- Having a variety of delivery channels to serve customers

The above pillars are the foundation of every good operating model, but banks need to realise the need to shift and evolve from the service quality standards to a more customer experience approach.

Service quality vs. customer experience

Service quality is the measurement used by banks to assess how much a delivered service conforms to customer expectations and to the banks' internal service standards.

In order to achieve that, banks needed to make sure they had what it takes:

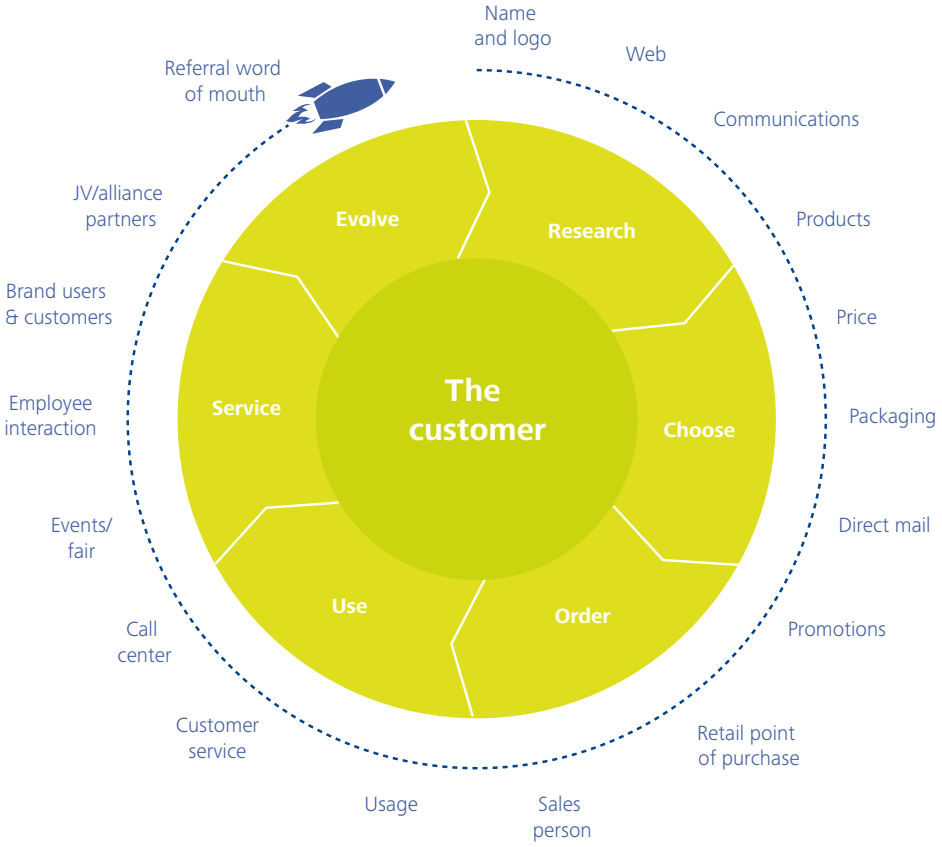
- The right strategy is in place and clearly communicated across the organisation
- The right customer segmentation is in place with the related service offerings
- The Business Process Reengineering (BPR) exercises are in place to make sure their processes are efficient in terms of turnaround time, resources and cost
- Documented and updated procedures are in place
- Service Level Agreements (SLAs), Key Performance Indicators (KPIs), Key Risk Indicators (KRIs) and service standard are set
- Distribution channels are strategically rolled out (from branch networks to online and mobile banking services)
- There is the right IT infrastructure to support all activities
- Front-liners and staff are trained to achieve and maintain the right customer service standards
- There is constant monitoring and measuring of the service level provided

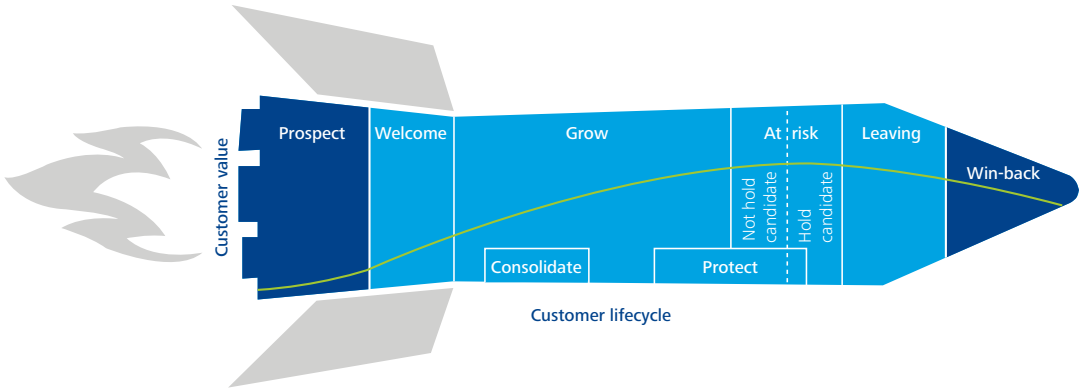
So what is wrong with that? Is that not precisely what every bank should be striving to achieve?
The answer is, there is definitely nothing wrong with that. In fact, all of the listed activities are and always will be what every bank should have and strive to achieve. However, there is something missing in this picture.

The above listed activities will help banks to be reactively responsive to what their customers need and expect from a bank by providing sustained and constant service levels. *But is this enough? Do all customers expect and want the same services? Do all customers have the same taste, preferences, and needs?* Most banks are actually defining the experience they want their customers to have, instead of understanding and anticipating what their customers actually need and, more importantly, offering just that when the customers least expect it.

Customer experience is the sum of all interactions (journeys) customers have throughout their lifecycle with the bank.

Illustrative customer experience lifecycle





Changing focus from products to customers

- Fixed term mortage
- Credit card
- Motor insurance
- ISA

- Peace of mind
- Easy access to funds
- Planning for the future
- Nothing
- New car
- Holiday plans

Customer experience is a holistic concept that affects all areas of a bank's operations and organisation. It requires banks to shift from being reactive to being proactive towards their customers by:

- Building customer experience strategies from the outside in
- Focusing on the customers' journeys instead of being product centric
- Catering for customers' feelings, reactions and expectations while mapping journeys
- Being flexible enough to provide the right service, the right product, the right advice, through the right preferred channel for that specific customer at the right time
- Going one step further beyond segmentation and identifying the main customer profiles and personas within segments. This will help provide more tailored products and services to those profiles
- Knowing and predicting customers' needs to provide them with what they need when they need it (the next best action)

The new kids on the block

Many industries and organisations have been using this approach successfully for quite some time and they are improving every day. Uber, Airbnb[1] and others are recent success stories of how new young players were able to create great business models by targeting open spaces in consumers' lives which were not yet occupied by an existing product or service.

Other examples include:

- Walmart finding out what sells during a hurricane
- Netflix finding out what movies a customer might want to watch
- Apple suggesting apps and songs that a customer would like
- Amazon personalising and customising their landing page based on what a customer likes to see
- Identifying at-risk students before they drop out

Traditional banks are facing a new set of untraditional competitors who really (really!) know what they are doing and are slowly stepping into the banks' territory and grabbing chunks of their market shares.

1 Forbes—Uber: Founded in 2009, Valued at US$40 billion. Airbnb: Founded in 2008—Valued at US$10 billion

Companies like Amazon and Rakuten are not just selling stuff online anymore. They are offering credit cards and loans to their customers. Telecom companies, in many areas around the world, are offering payment services and e-wallets to their customers. And the list goes on.

Customers' expectations, on the other hand, are exponentially evolving and customers will soon realise that they just might not need banks anymore. In no time, traditional banks will find themselves left out and/or competing with new young online banks or financial services companies who will master the art of knowing their customers.

Banks need to evolve and adapt quickly. It is time for them to put on a new thinking cap and wake up to the new reality before it is too late.

Everything banks need is right there—customer analytics

Twenty years ago, banks wished they had a genie that would help them figure out what their customers were doing and what their needs were. Nowadays, this genie is available and has a name: customer analytics.

Analytics is the process of obtaining optimal and realistic decisions based on existing data. It refers to the qualitative and quantitative techniques and processes used to enhance productivity and business gain. Data is extracted and categorised to identify and analyse behaviour and patterns.

Banks have had access to such data for a while already. Customers have been feeding their likes, dislikes, emotions, trends, social status, opinions and feedback on various issues and services through their use of ATMs, credit/debit cards, Internet and mobile banking apps, contact centres, social media, and internet chat rooms and blogs.

Customer analytics is the art of extracting such data, analysing it, and painting a clear picture with a road map of the customers' life journey that will not only help banks know what their customers need, but actually predict the next best action for them at any point in time.

Acquiring this knowledge will provide banks with a better understanding and the proper tools to identify all interactions customers have throughout their lifecycle and journeys with the bank and to design the right service offerings for the right customer profiles.

Banks acquire access to numerous sources of customer data:

- Existing detailed customer information and records
- Card usage (spending habits, trends, preferences, etc.)
- Internet and mobile banking usage
- Credit scoring and history
- And many more

Banks who can utilise such information and master their analytical skills will be a huge step ahead of everyone else. The key, however, is not to lose focus and make sure that customer analytics is efficiently utilised to achieve the desired revenue generation—which is, after all, the ultimate goal for banks.

Obviously, in order to benefit from the analytics enablers, organisations must first think about the prerequisites in terms of compliance with regulations (future data protection directive, for example). On top of this, the quality of the data used for the models is key to ensuring adequate predictions. This can be achieved by leveraging ongoing regulatory projects such as BCBS 239 implementation.

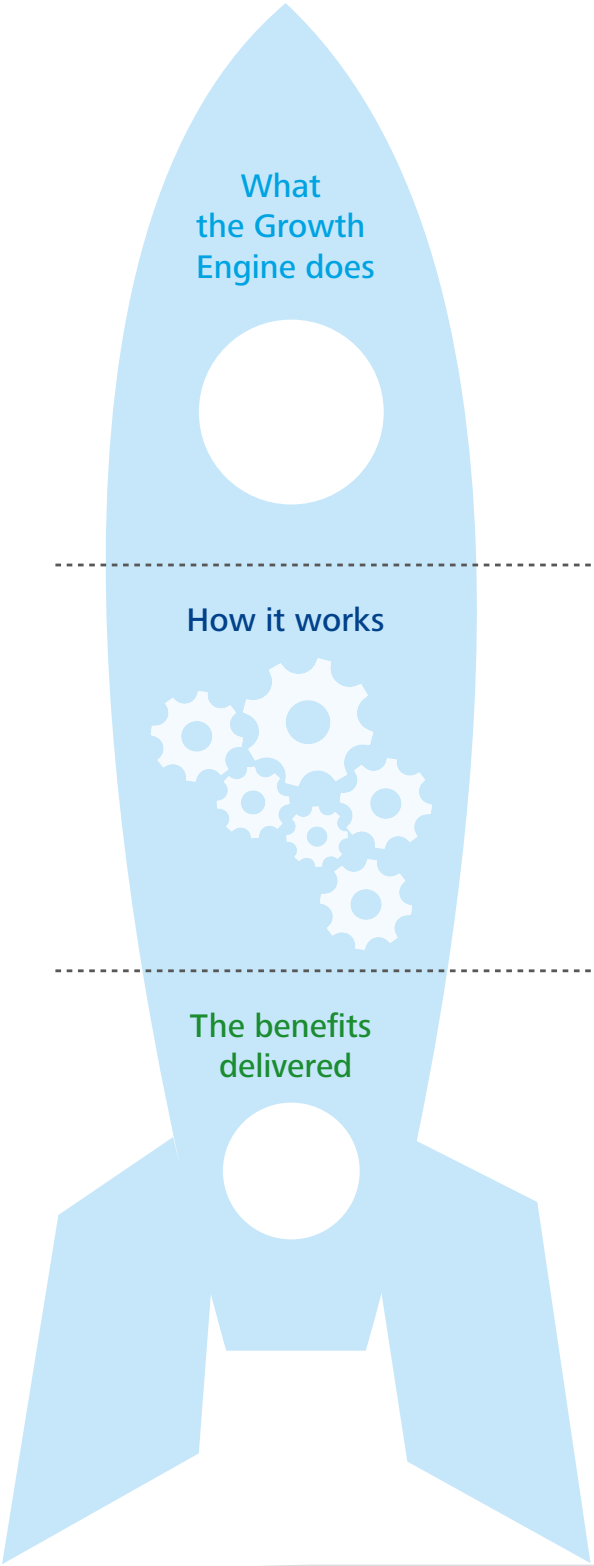
Banks need to use and deploy the right tools to get the best out of this exercise—tools like Deloitte's *"Growth Engine"*, for instance.

The Growth Engine uses customer insights and data to identify revenue growth opportunities based on customer needs, trends, and habits.

It works by analysing the existing data to:

- Find growth opportunities
- Build deep customer relationships
- Link strategy to front-line performance
- Make the most of resources dealing with customers

What the Growth Engine does



- **Finding growth opportunities**
  In this difficult market, identifying areas of potential revenue growth is much harder than in a buoyant economy.
  The Growth Engine identifies new areas for revenue growth.
- **Building deep customer relationships**
  Growth through acquiring new customers is costly and resource intensive in this highly competitive and commoditised market.
  The Growth Engine results increases the share of wallet of banks existing customers.
- **Linking strategy to front-line performance**
  Changing regulatory and customer demands require a more responsive and governed approach to meet strategic business goals through front-line sales results.
  The Growth Engine links corporate strategy directly to front-line sales and service pipeline.
- **Making the most of relationship managers**
  With demanding customers, optimising and driving the best results from the sales teams is difficult within a reasonable operating cost.
  The Growth Engine optimises the sales managers' workload to maximise value to the business.

- **Customer data**
  Extracting the right relevant data from different systems, cleansing the data and projecting it into a single view for every customer.
- **Customer needs analytics**
  This single view will drive the statistical analytics based on customer needs to offer the right product, at the right time, to the right customer.
- **Sales process**
  Changes to processes and organisational design will support newly identified sales strategies and optimise sales processes.

- **Growth opportunities identified**
  A list of revenue growth opportunities for relevant products, based on latent customer needs, mapped to geographic and business areas enabling the growth opportunity to be quantified.
- **Customer priorities**
  Customer needs are identified and valued together with gaps in the portfolio of products held with the bank.
- **Linking goals to front-line performance**
  The sales and service pipelines are directly linked to strategic goals.
- **Making the most of resources**
  The time dedicated to dealing with clients, is spent on the customers with the highest potential for the bank. For each client their focus is drawn to the highest potential actions.

To do so, the Growth Engine combines the main three levers to create a comprehensive and robust sales system that can be fine-tuned to meet changing needs

- **Customer data:**
  - Collecting and extracting the right customer data from different sources within the bank
  - Cleansing this data to avoid any potential redundancy
  - Projecting all the extracted data in a single, useful, user-friendly view
- **Customer needs analytics:**
  - Leveraging this single view to drive the statistical customer analytics based on customer needs
  - Suggesting the right product or service at the right time for the right customer
- **Sales process:**
  - Optimising sales process and applying the right changes to the organisational design to support delivering the bank's sales strategy

Applying the Growth Engine will produce multiple benefits for banks

- **Growth opportunities identified**
- **Customer priorities**
- **Linking goals to front-line performance**
- **Making the most of resources dealing with customers**

Realising the fact that banks possess an enormous amount of customer data is just the first step on a long journey towards the ultimate goal of providing the right customer experience while achieving the desired revenue and growth targets. Using the right tools is crucial to getting the best out of customer analytics.

However, to become a fully customer-centric organisation, where the customer experience is considered one of the main foundations and pillars of a bank's business and operating model, we need to use a wider lens to see the bigger picture. This transition will require banks to implement changes and enhancements at quantum levels to multiple dimensions.

The path to Venus

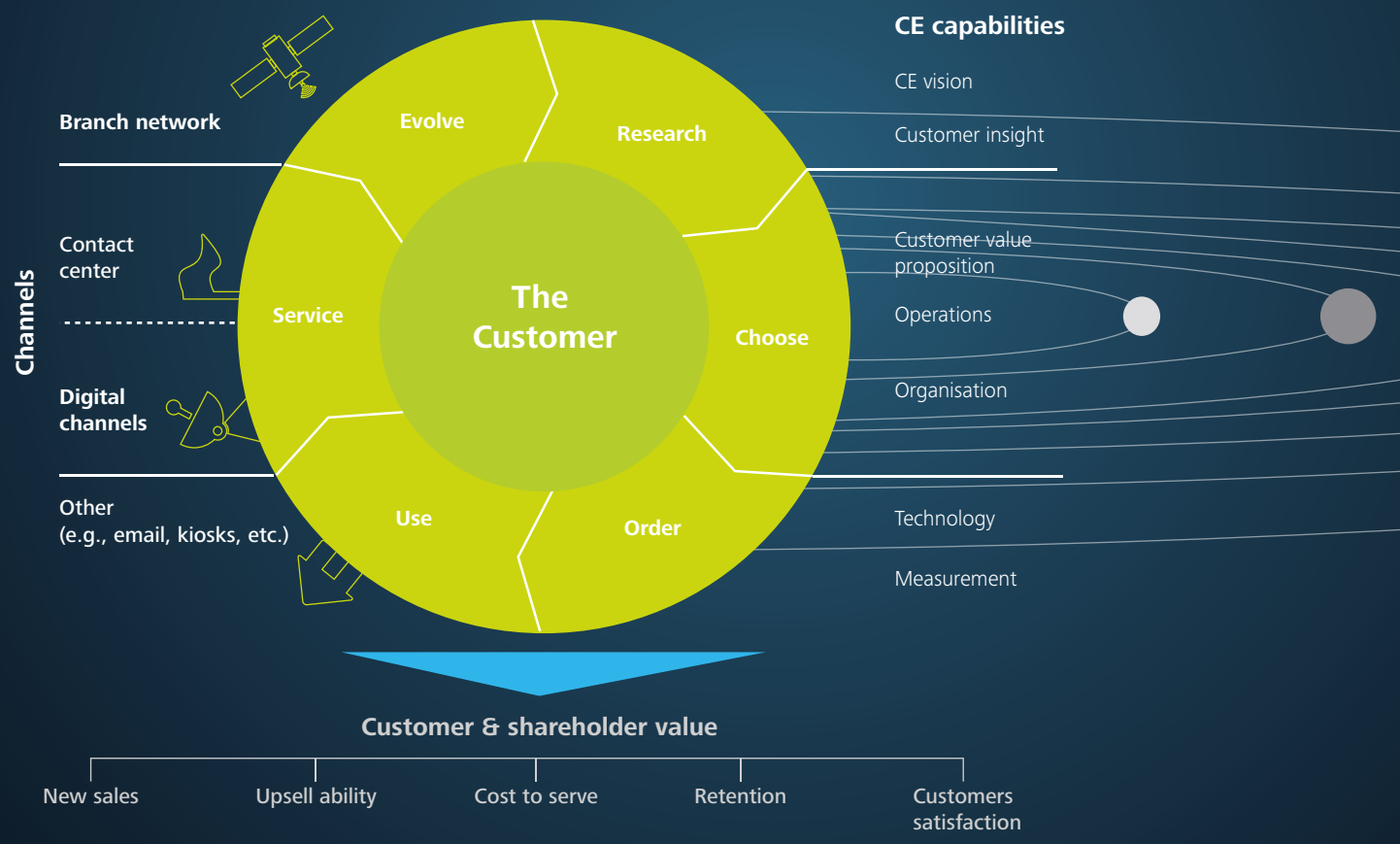
Becoming a customer-centric organisation is neither easy nor a quick mission. Other industries have had a huge head start and banks should benefit from the lessons learned. A whopping 80% of customer experience professionals say that their firms' goal is to be a leader in their industry or across all industries. Despite that aspiration, only 11% of companies succeed in delivering an excellent experience—one that would set them apart from competitors[2].

Successful transition requires the ability to design, implement, and manage customer experience in a disciplined way—a capability few banks have today. For a bank to achieve the desired maturity levels, seven key internal capabilities that are unique to the bank should be assessed and developed:

1. Customer experience vision and strategy
2. Customer insights—customer analytics
3. Customer value proposition
4. Operations—processes
5. Organisation
6. Technology
7. Measurement

These internal capabilities constitute one of the four dimensions of the full customer experience framework.

Customer experience framework



2 *Forrester— Reinvent Customer Experience (16 January 2015)*

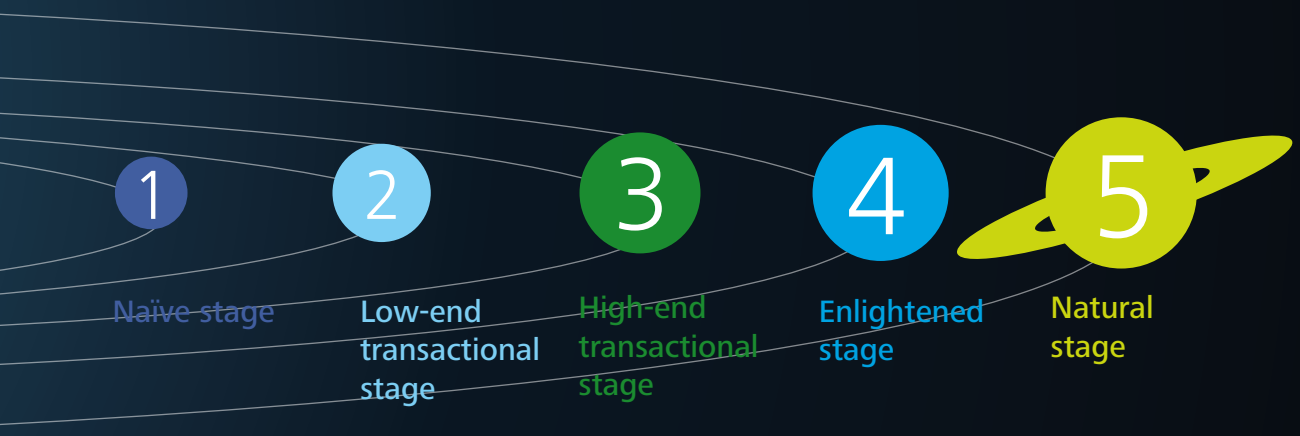
Description

Our Customer Experience (CE) framework consists of four components:

1. **Customer lifecycle (center ring):**
   Customer interactions (Journeys) change over the lifetime of their relationship with an organisation
2. **CE capabilities (right column):**
   The capabilities are the levers an organisation can apply to focus, align, simplify, and measure the customer experience
3. **Channels (left background):**
   Customers interact with an organisation through a variety of new and emerging channels
4. **Customer & shareholder value (bottom):**
   Focus on the customer experience brings tangible benefits: new sales, up-sell ability, reduced cost to serve, improved retention, and increased customer satisfaction

One of the main indicators of a bank's maturity level in terms of embracing customer experience is where this is positioned within the organisational structure.

There are five stages:



1 – Naïve stage

- Study sustomer expectations
- Analyse customer feedback
- Identify problems

2 – Low-end transactional stage

Responsible for:

- Customer measures
- Prioritising initiatives
- Facilitating changes
- Consulting other department

However:

- Limited budget
- No authority to affect change in other departments

3 – High-end transactional stage

- High authority
- Decisions signed by the CE department
- Veto right
- Meet the board
- Appointments with the CEO

4 – Enlightened stage

- Chief CE Officer
- Authority over other departments
- Inputs into operational budgets
- Sets the cultural framework

5 – Natural stage

- The whole organisation is 'CE' centric

Each phase requires employees to adopt new, increasingly sophisticated customer experience management practices. To be a truly customer-obsessed organisation, all employees need training on the basics of customer experience. This training should connect the bank's brand and strategy with the intended experience vision and help employees understand how customer experience connects to their roles.
The customer experience vision and strategy should be clearly communicated throughout the organisation, sharing customer insights through a programme with all employees. Banks should also start adopting practices that set the stage for future progression, such as integrating customer insights into core business processes, adding specific customer experience tasks to employee job descriptions, and following human-centred design processes for new experiences.

'The customer comes first'

Customer experience is becoming the main driver for every industry, technology, service and product. It is about time the banking sector embraces the same trend and follows the pack across different industries. Competition in customer experience is intensifying. For banks to be able to truly deliver exceptional experiences, they must align complex interdependent environments of customers, employees, partners, systems and operating models. In this fiercely competitive environment, banks can no longer rely on simple cosmetic customer experience makeovers. To truly stand out from the crowd and deliver an outstanding customer experience, banks must dig deeper and think bigger for ways to create truly differentiated experiences using customer analytics as a key enabler. They need to understand, control, and ultimately transform their entire operating and business models.

'The customer comes first' motto was fading away towards the end on the last century. It was merely used in a narrow angle as a business slogan to reflect the level of front-line service dedication to achieving customer satisfaction. However, nowadays, it seems that this motto is re-emerging to cover a much wider and deeper scope: 'the customer experience comes first'.

The sooner banks realise that, the faster they can protect and claim back their Venus.

Mobile money
A payment industry revolution impacting marketing and distribution

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"Until now, banking is one of the few industries in the world that hasn't yet been reinvented by Silicon Valley," said Steve Streit, founder and CEO of Green Dot.

Mobile money services are sweeping across all continents. With early successes recorded in Asia, Latin America and Africa back in 2010, mobile money services are breaking out in developed countries in a northbound wave. Entering the market as pure players, retailers or Telco operators, few of them hail from the traditional financial services industry. But all of them compete fiercely to provide enhanced customer experience in transaction services - with growing success. Is it time for providers of savings, credit and risk coverage products to consider mobile money service providers as new distribution partners?

First launched in Africa, Asia and Latin America back in 2008, mobile money gained popularity with a service that allowed end users to safe keep their cash miles away from the nearest bank branch. In rural areas for instance, farmers and traders were able to dispose of their cash receipts in short order, storing their daily earnings using their mobile phone. To do so, they could exchange coins and banknotes for electronic money at a corner shop, a grocery store or a gas station down the road. The benefit? Keeping your earnings safe from theft, fire or flooding, or more prosaically from insistent family and relatives.

Open 24/7, a number of retail stores provide basic financial services, such as the withdrawal or deposit of small amounts of money, to a multitude of clients. In Kenya, Rwanda or Tanzania, 80% of the population now have a mobile money account. A staggering rate of penetration, compared with the 25 to 30% painfully achieved by traditional banking and micro finance after decades of 'financial education'. The speed of this success has also been impressive: mobile money operators break even within three to five years, as recently highlighted by GSMA. This proves that the market was ready for this product before non-financial service providers decided to address it with innovative solutions.

Alongside the basic cash deposit and withdrawal service, mobile money operators have developed a complete payment ecosystem: merchant payment, bill payment, loan installments, payment of taxes, disbursement of loans and payment of insurance premiums are all part of the service available today in most developing countries.

New players entering the game

In developed countries, the challenge is different. Banking services are available to the many. Bills can be paid by wire transfer, and plastic cards are widely used for merchant payments.

Nevertheless, several non-traditional providers of banking services are emerging. Primarily designed for the 'unbanked' (i.e. people without a bank account), they are also enticing a growing number of price-sensitive clients looking for a basic service. In the United States, GoBank has been offering *"a checking account designed for people who are fed up with big banks and their big fees"* (sic GoBank website testimony) since early 2013.

"GoBank is designed from the ground up to be the bank account for the smartphone generation," said Steve Streit, founder and CEO of Green Dot, a purveyor of prepaid debit cards.

Cash deposits can be made at retail partners such as Walmart, cash withdrawals at ATMs or at retail stores, and merchants can be paid with a debit card. Innovations include photo check deposits, which use the smartphone camera, bill payment using an online checkbook, and a discretionary account keeping fee. In France, a similar initiative was launched in early 2014; Compte Nickel is a prepaid mobile account with no overdraft facility, offered by a payment services provider. The major innovation is the choice of retail partner for distribution and servicing, namely the network of tobacco stores in France. This network offers a potential 27,000 points of service across the country, visited by hundreds of thousands of customers every day. The account opening process is designed to take under five minutes, and is carried out directly in tobacco stores, requiring only a copy of the client's ID, a mobile phone number and a postal address. In the first 12 months, more than 85,000 prepaid accounts were opened.

Allowing merchants to communicate with customers is certainly key to the success of mobile money in developed countries

Amazon coins, Google Wallet and ApplePay are not targeting the 'unbanked'. At a time when ApplePay garners a lot of media attention with a U.S. rollout under way and a European one in preparation, the Starbucks mobile money service deserves attention. Although Starbucks mobile money can only be used at Starbucks points of sale, and involves only small transactions, 7.5 million purchases are made each week via the Starbuck app. This makes the Starbucks mobile payment service the runaway leader in mobile payments at retail stores in the United States at the present time.

Convenience comes first

Back in 2009, Starbuck realised that three out of four gift cards where used by the card purchasers themselves, finding them more convenient than coins and banknotes for buying their daily cup of coffee. The app, originally launched in 2010, now offers a virtual gift card, reloadable in seconds at coffee shops, and offering subscribers extra benefits with a companion loyalty programme. The wallet now accounts for nearly 16% of the chain's 47 million weekly transactions. This innovation comes courtesy of a brick-and-mortar retailer which had identified early on the benefit of developing a mobile wallet to drive customer loyalty, enhance customer experience, increase check-out security at point of sale, and lower transaction costs. In mid-2012, a consortium of 15 major U.S. retailers launched a similar initiative to develop a merchant-owned mobile payment solution called CurrentC. CurrentC uses the same ingredients as the one used by Starbucks to build its successful wallet and promises to further develop the customer loyalty features.

Linking mobile payments to loyalty is a promising way of delivering tangible added value to end users in developed countries, from the viewpoint of both the customer and the merchant. Loyalty is central to the Starbucks mobile app and the CurrentC service. It is also deeply embedded in Fivory, the mobile money wallet launched last year by Credit Mutuel, a major French retail bank. The value proposition is very effective once

it offers the client immediate cash back on the retail price, a powerful driver of adoption and usage in the market. Letting merchants interact with customers before, during and after a purchase is another effective feature.

Allowing merchants to communicate with customers is certainly key to the success of mobile money in developed countries. As it provides the payment industry with a new revenue stream, along with new opportunities for marketing and advertising, it fills the space in the traditional revenue model between transaction fees paid by the merchant and cardholder fee paid by the customer.

Mobile money is no longer a hot topic in the payment industry solely. It has ripple effects in marketing and distribution, such as Starbucks' current foray into online retailing based on its mobile account. The retail industry is also driving change by developing and testing new customer trajectories, mixing online and offline scenarios. When scanning the barcode of a product in a store, you can see if the product is well rated by your social circle, and where to find the best price close to your current location.The app will let you know if you have enough money in your mobile accounts to check out on the spot, or suggest alternative payment methods, using credit, for instance. It can go even further – and inform you that by waiting 24 hours, you will save extra money and keep to your monthly budget, by adding the product to an online shopping list for home delivery in two days.

Telco operators position their wallets as new distribution platforms for financial services and products. They have successfully shaped their business model in fast developing countries. In most advanced markets in Asia and Africa, Telco mobile money clients are now able to pay utility bills directly from their wallet, pay taxes and government services, pay scholarship fees, receive pension and social security benefits, make payments to merchants, make loan repayments, get a loan disbursed directly in e-money, and pay insurance premiums. Even a companion Visa or MasterCard debit card is provided to mobile money account holders to enable cash withdrawals at ATMs, card payments to merchants, and to equip customers for online shopping (e.g. Orange money in Kenya, Botswana; Millicom Tigo Cash in Senegal and Rwanda; MTN Mobile Money in Latin Africa). Vodaphone or Orange may well end up offering a similar service in Europe in the near future.

Mobile money a new reality

For traditional financial services providers, providing savings, credit and risk coverage products to the mass market, it is time to consider the upcoming mobile money providers as potential new business partners focusing on transactional services to and from a mobile account. A number of European banks are closely monitoring this fast evolving market, and in a few cases are making early-stage investments in promising start-ups to prepare future interactions with their technology, distribution models or customer value proposition.

The next step is to build their internal capacity to address mobile money opportunities: the capacity to interact with current and future financial customers via multiple mobile-based transaction service providers. This means adding a new channel to customer relationship management alongside existing ones such as social media, online and mobile banking, call centres, branches and ATM's.

The ability to acquire, process and exchange information on payment behaviour for purchases, to accumulate customer intelligence, shape service offerings and provide customised products and services. In that area, even well-established operations such as credit risk scoring might benefit from innovations.

Mastering the operational impact of mobile money may become even more critical when offering proprietary solutions

Lendup or ZestFinance in the United States, Lenddoo in Philippines and Colombia, Kreditech in Germany, Wonga and Cignifi in the United Kingdom are developing alternate credit-scoring models, mixing social media activity, airtime use, location data, web browsing behavioural analytics, e-commerce shopping customer behaviour and device data.

Finally, mobile money offers traditional financial service providers an opportunity to market their financial products via new distribution channels in a way that banks and insurance companies in developing countries are already accustomed to. For this, traditional bankers and insurers must develop specific products tailored to mobile distribution: specific, smartly targeted and available in one tap.

The impact for banking and insurance COOs will depend on their institution's mobile money strategy. In any case, COO involvement in the decision-making process at an early stage is essential for gauging the state of readiness of potential partners, the impact on the institution's existing operations and for ensuring execution in a timely manner.

In our experience, while operational impacts are very low for simple custody of funds for electronic money, they grow larger when a partnership involves the distribution of a portfolio of targeted financial products via mobile, the exchange of customer data in real time or the management of a new relationship channel alongside existing ones.

Mastering the operational impact of mobile money may become even more critical when offering proprietary solutions. One example is Equity Bank, Kenya's largest bank by customer base, which got a MVNO licence (Mobile Virtual Network Operator) in the spring of 2014 from the Communications Commission of Kenya with a view to challenging M-Pesa's dominant position in the Kenyan Mobile Money market.

Survival through Target Operating Model (TOM)

Banks need to rethink their operating models to ensure survival in today's marketplace

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Current versus target operating model

In the current environment of increased regulation, market uncertainty, fierce competition, tighter margins, reduced returns and changing client expectations, it is essential that banks continue to rethink and adapt their operating models.

Banks need to process a larger volume of information at a faster pace with ever-increasing demands relating to client, regulatory and financial data. Importance is placed on data, client information and reporting with zero tolerance for errors and delays. This, together with digitalisation and increasingly more sophisticated and demanding clients, has placed additional burdens on banks and means that they must look at innovative ways to differentiate themselves to successfully overcome obstacles. Some banks have already taken action while many others are still struggling with these questions. Consequently, banks now need to focus on new ways to stand out from the competition to achieve an operating and/or structural advantage.

Rationalisation, simplification, streamlining and automation are now common buzzwords used in banks' business-as-usual and not only in strategic board meetings. After all, these ideas are a means for banks to deliver improvements that bring real economic value. For example, procurement spending reductions, process improvements and smaller-scale system enhancements all help to optimise the Current Operational Model (COM) and reduce costs.

Banks can also re-assess their COM to pinpoint its structural advantage so that they can build and differentiate themselves from competitors by focussing on their core business strategy, sustained efficiency and long-term growth. Indeed, we have observed in the last decade that many banks have—and continue—to look at ways to divest non-core and capital-intensive assets to minimise costs. Near- or off-shoring for lower-cost operations, outsourcing to lower fixed costs, rethinking their customer value proposition by focussing on internet servicing of clients, rationalisation of products and customer segmentation, strategic acquisitions and system integration or enhancements are all options allowing banks to trim their balance sheets, concentrating limited resources where they can earn the best returns. After all, the underlying requirement is the need to do more for less, which invariably means that banks need to review and reconsider their current and target operating models.

This paper provides an overview of the changing business landscape, market pressure, increasing client demands and target operating model considerations that will be required to overcome these obstacles and how to make the successful transition to a more efficient operating model.

What does this mean?

The current operating models of most banks can no longer cope with these heightened business, client and regulatory demands. A patchwork of workarounds may be able to deliver in the short-term but, as we have seen in recent years, this is not a sustainable solution.

Some banks may have been reluctant to overhaul their operating model because of the investment this is likely to entail. However, rising pressures on prices and margins, regulations impacting fees that can be charged and greater demands from clients, together with numerous challenges resulting from digitalisation and globalisation, mean that banks are under pressure from a variety of forces and so must look at their COM and TOM to survive.

The current operating models of most banks can no longer cope with these heightened business, client and regulatory demands

Our experience shows that looking at COMs and TOMs is not simply an intellectual exercise, but essential to implementing a bank's strategy. Moreover, a well-defined TOM is certainly worth the upfront investment.

For example, in the past we have seen banks merge without integrating their IT platforms. Consequently, most of their processes were inefficiently set up and the organisation struggled with different legacy systems and a disjointed IT architecture. This led to huge inefficiencies, redundancies, time wasted and ultimately, costs. However, in recent years, we have seen increased investment in integrating IT platforms or finding alternative solutions to deal with the inefficiency of incompatible and outdated IT systems and infrastructure.

Another example is a study and transformation journey initiated by a major bank that decided to review and challenge its operating model in order to improve its performance, efficiency and ability to respond to new challenges. Our analysis highlighted that the bank's COM presented a series of missed synergies between the various entities of the bank as regional hubs were managed locally, providing a limited range of services. This, coupled with an old legacy system, led to manual processes and operations, which in turn resulted in inefficiency and slow market responsiveness.

Simplification of back office activities and re-organisation from a hub to a product-focussed model became the key focus for the bank.

However, designing a TOM was not a simple task as the team faced numerous challenges:

- How to avoid additional project costs connected with system alignment between the different entities and with the bank model while consolidating the model to optimise process rationalisation
- How to ensure strong programme governance and authority, with comprehensive enterprise architecture to avoid potential incompatibilities and inefficiencies

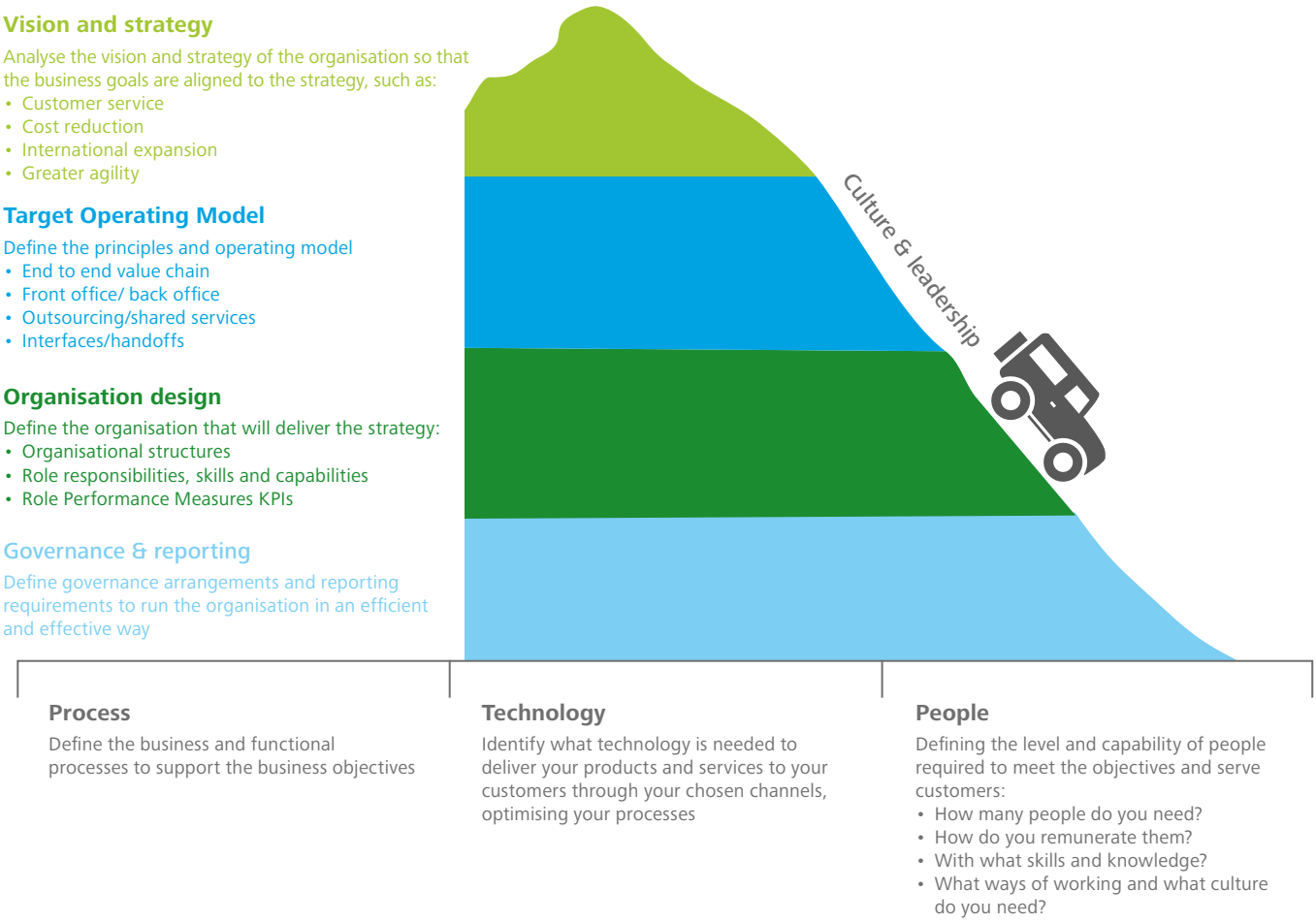
- How to enhance the existing change management framework to better prioritise and cope with change request processes and allocation of activities between front, middle and back-offices
- How to ensure local agility (e.g. client and portfolio management, order initiation, credit approval, cheque collections, etc.) and the support requirement needs of each country

The team worked closely with the bank's employees to design a TOM that would respond to all the challenges whilst ensuring a robust but agile operating model. The final TOM aimed to harmonise channels such as e-banking, relationship manager and client-facing solutions. Moreover, the TOM added specific functionalities, streamlined and standardised back-office operational activities and resulted in the implementation of a new core banking system that not only entailed significant cost savings for the bank at group level but also improved the bank's ability to respond to the changing market. The new TOM meant that front-office activities and functions remained at a local level to support requirements specific to each country, ensuring local agility (e.g. client and portfolio management, order initiation, credit approval and cheque collections). Common and non-client-facing operations were managed at back-office level so that these could be pooled in a regional hub (e.g. order execution and settlement, trade finance transaction processing, client-side treasury back-to-back management, etc.).

Defining TOM to fulfil strategic vision

New landscapes demand innovative responses to drive both efficiency and differentiation, rethinking operating models to deliver strategic vision but also ensuring that there is an integrated solution underpinned by people, processes and systems. Individual functions and departments cannot survive working in silos, but must now focus on integrated capabilities, solutions and competences, as well as standardisation of processes and practice to achieve operational excellence and cost leadership. In fact, configuring the different components to ensure they work together effectively and efficiently is one of the biggest challenges when redesigning a TOM. Generally speaking, a TOM needs to take all the different steps illustrated in Figure 1 into account.

Figure 1



As mentioned above, the first step in defining a TOM is to evaluate your Current Operating Model (COM). It is crucial that you understand where you are today before defining the vision and strategy going forward (i.e. your strategic vision and priorities for the next five to ten years) as this will help you develop a realistic roadmap for your business.

The answers to the following questions can act as a framework for the process:

- What is your business strategy?
- What markets, products/services, channels and segments will you compete in?
- What is your differentiated client value proposition?
- What resources do you need in terms of people, skills, organisation, data and technology?
- Which enabling technologies will you use to support your TOM?

Once aligned on the strategic vision, you will need to begin making critical decisions regarding the TOM. These choices will vary depending on the player, but typically they are centred on three main themes: people, processes and systems. For each of these areas, you will need to consider the following questions (among others):

People

- What are the resources and capabilities required for TOM?
- What is the impact on the current organisational structure and resources in terms of skills, capabilities and roles? Measure the cost of change in the organisation and the potential people change impact.
- How do both individual and departmental roles need to change?
- What level of coaching and training is needed to support the capabilities required by the new model?
- How does the leadership model motivate behaviour and to what degree are metrics and measurement systems (e.g. dashboards, KPIs) set up to reinforce TOM?

Processes

- In what way will the TOM impact the business and functional processes?
- To what extent can process improvement and automation enable the centralisation of tasks and better use of the back and middle office?
- Are there opportunities to streamline and standardise processes such as reporting across business units?
- Are there opportunities to create Shared Service Centres (SSCs) for key activities such as finance, IT and data analytics, for example?
- Are there any opportunities to leverage lower-cost locations for specific activities, and which capabilities are required? Are outsourcing or strategic partnerships a viable option?
- Are there any implication in terms of reporting and governance?

Systems

- Is a full overhaul of legacy systems feasible or desirable?
- What can be achieved by redesigning end-to-end processes without significant technology investment?
- Where can technology enhancements enable process improvements and add value to the client experience?

Once you have addressed the above questions and carefully considered each element outlined in Figure 1, you should be on the right track with a solid roadmap to achieve your vision. Moreover, the roadmap should include target client segments and sources of potential advantage such as product breadth, service models, price positioning, advisory capability, mobile functionality, etc. These should form the basis for your business case for additional investment or divergence from your current operating model. Critical to success for any TOM is having a clear strategy, executive buy-in and in-principle design decisions on key areas (e.g. in-house vs. outsourced model).

Creating a more effective operating model

Creating a more effective operating model requires broad changes across the organisation, impacting everything from organisational structure and governance to processes and systems. Defining an operating model capable of responding to the tougher business environment and regulatory requirements is clearly a huge challenge, which will be heightened by the sheer number of stakeholders, pressure on resources and the need to sustain core reporting responsibilities. Access to mid-management and in-house SMEs, utilising external benchmarks (within and outside the sector) and stable downstream decisions (i.e. executives not changing their mind within weeks/months of making a decision) are critical success factors in TOM implementation.

Conclusion

There is no one-size-fits-all solution; operating models are always evolving and although it is a challenge, it is nonetheless a requirement for ensuring the business is successful and is able to implement its vision while keeping shareholders happy and achieving a bottom line. Moreover, a documented operating model is a useful reference point for assessing the impact of any change, from strategic (e.g. M&A) to tactical (e.g. process change), and helps to ensure that your organisation remains agile and sufficiently equipped to keep abreast of the competition, the changing business landscape, market pressure and increasing client demands.

Common Reporting Standard
A work in progress requiring high reactivity

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"I really do think that on the international, on the global level, we have to fight all together against tax evasion". Jean-Claude Juncker's declaration last November at the G20 summit in Brisbane reflects a clear step-up in the global move towards more transparency in tax matters.

Since FATCA in 2010, the momentum for implementing the new automatic exchange of information has grown and the financial industry is increasingly acting as a data facilitator for tax administrations.

New regulations have been issued, new frameworks designed, technical systems have been implemented and financial institutions are often forced to comply in a short order with these new requirements.

Strategic considerations

From FATCA to the Common Reporting Standard

As a matter of principle, FATCA forces financial institutions to disclose their U.S. clients (and clients assumed to be U.S. clients) to the Internal Revenue Service. To ensure a high degree of participation, financial institutions refusing to comply would be categorised as 'Non-Participating Foreign Financial Institutions' and sanctioned with a punitive 30% withholding tax on U.S.-sourced income and gross sales proceeds of assets producing U.S.- sourced income.

Essentially to facilitate compliance with data protection laws, many jurisdictions, including Luxembourg, have negotiated so-called 'Model 1 Intergovernmental Agreements' (Model 1 IGA) with the United States, in order to enable (in most cases, reciprocal) automatic exchange of information through local tax authorities. Local laws transposing such IGA will force financial institutions to comply with FATCA data exchange obligations.

Month after month, the number of countries which have concluded an Intergovernmental Agreement with the United Stares rises steadily (more than 100 agreements had been substantially agreed or signed as at 31 December 2014).

In parallel, in September 2013, the Organisation for Economic Co-operation and Development (OECD) proposed a new framework to automatically exchange information for tax purposes. The Common Reporting Standard (CRS) is a package based on the OECD Multilateral Convention on Mutual Administrative Assistance in Tax Matters (as amended through a 2010 Protocol), and largely inspired by the FATCA Model 1 IGA mechanics. Implementing the CRS requires partner jurisdictions to enter into multilateral or bilateral conventions. The European Commission quickly leveraged these developments to implement the CRS through an extension of the Directive on administrative cooperation, completing this Directive with CRS-based mandatory automatic exchange of information in tax matters. This lead to Council Directive 2014/107/EU of 9 December 2014 amending Directive 2011/16/EU as regards mandatory automatic exchange of information in the field of taxation (commonly referred to as the DAC2), which in practice will impose CRS reporting throughout the European Union (with a first report due in 2017 for calendar year 2016).

As a result, the EU Commission has already announced it would consider repealing the EU Savings Directive as well as the amended EU Savings Directive on which consensus was reached in 2014 only after many years of political horse trading. Compared to the DAC2, the (amended) EU Savings Directive indeed has a very narrow scope (limited to automatic exchange on certain types of 'interest' income), and consequently become obsolete as soon as the much broader CRS reporting on all types of financial income will apply.

How to deal with new regulatory frameworks?

More than 80 jurisdictions have already signed or announced their participation in the OECD Multilateral Convention on Mutual Administrative Assistance in

Tax Matters, including all EU Member States, but also jurisdictions from all continents such as Argentina, BVI, Cayman Islands, the Channel Islands, China, Ghana, India, Indonesia, Japan, Korea, Nigeria, Russia, Saudi Arabia, Singapore, South-Africa, Switzerland, Turkey, etc. In this respect, we face an unknown factor: when exactly will additional multilateral and bilateral conventions amongst (clusters of) the partner jurisdictions be signed, and to what extent will some of these instruments depart from the standard CRS convention proposed by the OECD? Financial institutions with cross-border clients will need to closely monitor the developments in this area to ensure their reporting systems are adjusted in a timely manner in terms of the country scope and implementation dates, as well as for the management of (hopefully minor) differences in data to be provided to partner jurisdictions.

From a FATCA strategic viewpoint, most financial institutions decided to continue to accept U.S. Persons as clients, and have invested in setting up FATCA reporting systems. However, some institutions decided to terminate client relationships with persons and entities qualifying as a U.S. Person. This strategy allowed them to avoid an expensive implementation project, and limited the FATCA implementation to procedures which decline U.S. Persons as clients, respectively discontinue the client relationship should a person or entity become a U.S. Person. However, from a CRS strategic viewpoint, not accepting clients who are resident in a partner jurisdiction will, especially in an international centre such as Luxembourg, not be an option: in the first instance this would exclude all clients from another Member State, and in a second stage, an increasing number of clients from more than 80 jurisdictions worldwide. Investing in CRS classification and reporting systems will consequently be a must (and may also lead to revisiting certain FATCA strategic decisions taken in the past).

Key challenges for 2015

Two questions will need to be answered in the coming weeks: how to initiate the CRS implementation project? What is the first step?

Since the financial industry will clearly be forced to implement CRS reporting, the most appropriate timeframe for implementation will need to be determined, as well as the strategic choices, which can be different than the ones made for FATCA.

From a FATCA strategic viewpoint, most financial institutions decided to continue to accept U.S. Persons as clients, and have invested in setting up FATCA reporting systems

For example, as the number of U.S. Persons that are reportable clients for FATCA may be relatively limited, some (especially medium-sized or smaller) institutions may have set up manual FATCA reporting processes. In view of the broad country scope of CRS reporting, which will only grow in the coming years, manual processes will likely not be realistic for CRS reporting (except maybe for financial institutions with essentially local clients). In most cases, due to significantly higher reporting volumes than for FATCA, automation will be key to drive CRS compliance. Depending on the success of your FATCA implementation, it could be relevant to leverage resources (project managers, tax and compliance experts), experiences (strengths and weaknesses highlighted during FATCA implementation), procedures and technical systems to put in place KYC and tax reporting solutions, aligned with the Common Reporting Standard.

Once global strategy has been assessed and key decisions have been made, another challenge will consist in client communication. A number of clients may have been contacted recently to provide documentation in respect of their FATCA status (and/or evidence relating to US indicia detected in their file). Financial institutions may have to contact clients once again very soon, starting now, to request additional information in respect of their CRS classification (and/or to provide evidence relating to certain CRS indicia detected in their file). Some clients may express puzzlement at these requests to provide documentation and/or evidence that was already submitted (and to sign yet another updated version of general conditions and other contractual documentation). Relationship manager training and support with appropriate communication will be two of the key assets of a successful CRS project.

Operational workload must be anticipated

Due to new requirements encompassed by the CRS, additional data will be gathered and communicated by financial institutions to local tax administrations. Reporting processes may have to be updated and extended year after year as additional partner jurisdictions will join, and each country may negotiate a customisation of the standard reporting schema.

While the IRS already declared that the FATCA reporting schema (i.e. Form 8966 and the related XML schema) will be updated in 2016 with the aim to more closely align with the CRS released by the OECD, several Member States also stated that they would like to take advantage of this new initiative to enhance the reporting format by adding some specific local requirements. Consequently, this could have the effect that the CRS schema designed by the OECD may increasingly be tailored to local reporting requirements.

Beyond these technical considerations, operational challenges will also arise. Back offices that currently only have to report U.S. clients for FATCA purposes will experience a significant increase in workload with the CRS. Before filing the electronic report to the local tax administration, several operational tasks must indeed be performed in order to enable data transmission and ensure data consistency. Checking client information, analysing data discrepancies, manage communication with the client to confirm or clarify his CRS classification, and manage tax authorities' questions and feedback could quickly turn into a nightmare without proper organisation for a financial institution with an important cross-border client base.

Moreover, clients may expect to receive from their financial institution a copy of the data transmitted to the authorities. This was (and is) not mandatory under FATCA, but several jurisdictions have signalled a desire to introduce such mandatory reporting for CRS purposes. This would make perfect sense: as a taxpayer, one would probably wish to know what data has been sent to tax authorities, and also to be able to detect and correct any mistakes, to avoid unnecessary questions from tax authorities. Again, due to the significantly higher volume compared to FATCA, the CRS workload in this respect will be much higher. On the other hand, there may be an opportunity for financial institutions which already provide separate tax reports on client portfolios to further enhance these reports by making the link with transmitted CRS data (or for those institutions not yet providing such tax reports to their clients, to use the opportunity of CRS implementation to begin producing such reports).

To successfully deal with these new challenges, the financial industry will need to put in place new solutions, both technical and human. The 2020 outlook is still somewhat foggy, but current developments indicate that governments, regulators and tax authorities will continue to put forward new regulations promoting transparency in tax matters at all levels.

Synergies and focus points

At this stage, leveraging FATCA implementation projects appears to be a valid strategy for initiating CRS implementation projects. The philosophy of both texts is the same (as the CRS is inspired by the FATCA IGA Model 1) and most definitions are very similar. However there are also differences. Additionally, as CRS obligations (the DAC2 and future conventions with other partner jurisdictions) need to be transposed into local law, certain country specificities may have to be dealt with.

Registration

The first important difference between FATCA and the CRS is the absence of a central registration process. Of course, financial institutions may possibly have to register with local authorities to submit their yearly CRS report, but no new global identifier (such as the FATCA GIIN) will be used. In terms of responsibility, each jurisdiction will be in charge of ensuring that financial institutions will comply. Unlike FATCA, there is no concept of a FATCA Responsible Officer.

Withholding

Another major point is the absence of punitive withholding under the CRS (in IGA Model 1 countries, FATCA withholding may have to be applied; however only in exceptional cases). Of course, local laws transposing CRS obligations will contain certain sanctions for non-compliance; in most countries under the form of administrative fines (as is the case with FATCA implementation laws).

Client identification and classification

The main principle of the CRS is to report foreign tax residents to their tax administrations. This is again an important difference with FATCA, which starts from the concept of U.S. Persons, who can be classified based on nationality, place of birth, immigration status, substantial presence, etc.

Obviously, in certain cases, complications with identifying tax residence may arise: some clients may be taxable in several countries during the same year or their files may contain indicia indicating potential tax residence in two or more jurisdictions.

The question arises: how may a financial institution determine a client's tax residence?
For new clients, a systematic self-certification will be required. Each time new clients open a financial account, they will have to provide a document containing their tax residence(s), their Taxpayer Identification Number(s) (TIN(s)), their date of birth and their place of birth. This document will not be harmonised and each country or each financial institution may decide to produce its own template.

For existing clients, the approach will be similar to FATCA, provided that local authorities accept the approach. Local authorities may allow financial institutions to rely on the residence listed in their systems and consider this as the tax residence of the client (note that some countries have already signified that they would rather require a systematic self-certification instead). As within the context of FATCA, when indicia of foreign residency are found, these indicia have to be resolved by a self-certification, and the concept of 'reasons to know' is maintained within the DAC2. Relationship managers will also have a particular role in determining to where a client should be reported.

Reporting

The FATCA XML scheme was used as a blueprint for the CRS reporting scheme. In the beginning of 2014, discussions took place to decide whether both schemas should be combined into a single scheme or not. As developments for FATCA had already begun, it was decided not to merge them but the differences are small. Meanwhile, the IRS announced that they would upgrade the FATCA scheme to align it with the CRS scheme in 2016.

Regarding the content, reported financial data is similar: account balances or values at year-end, as well as income and gross proceeds paid during the calendar year. As opposed to FATCA, there will be no phased-in approach. Considering that in 2017, the full FATCA phase 3 reporting scope will apply (including income & gross sales proceeds), the OECD proposed to start immediately with full CRS reporting. Nevertheless, local authorities may - to a certain extent - decide to implement a phased-in approach to facilitate implementation for financial institutions.

As mentioned above, the main difference will be the significant increase in reporting volumes under the CRS. Additionally, an important difference for entity clients is related to the myth that under the CRS, all investment entities in non-partner jurisdictions are Passive NFE, and consequently, controlling persons of such entities that are tax resident in a partner jurisdiction are reportable. For example, a Panama entity could possibly qualify as a Participating FFI for FATCA purposes, and an account held by such an entity with a Luxembourg bank would not be reportable. However, for CRS purposes, as Panama is not a partner jurisdiction (yet), and assuming the entity is an investment entity under the CRS definitions, the same bank should identify the controlling persons of this entity who are tax resident of a partner jurisdiction, and consequently report these persons.

To do's and timeline

Financial institutions confronted with the DAC2 will need to take urgent action in 2015 to start CRS implementation projects.

A first step likely consists in carrying out an impact analysis, which links up with the FATCA implementation project. The impact analysis should among other things also cover a review of the FATCA strategic decisions in the light of the CRS. For example, investment funds having opted for a deemed complaint status under FATCA may be confronted with the fact that a similar deemed compliant status does not exist under the CRS, and possibly reconsider whether it is worth maintaining this status for FATCA.

Of course, the impact analysis should among other things also assess the implementation costs, and whether the organisation should self-develop its CRS reporting systems, consider an external package to be integrated into the organisation's systems, or consider an outsourcing solution of FATCA and CRS reporting. Taking into account the likelihood of significantly higher reporting volumes, IT solutions will generally need to be more complex and robust than for FATCA reporting. Once the CRS project team is activated (which will likely be the same or a similar team as for FATCA), the implementation roadmap developed during the impact analysis exercise and CRS strategy can be executed to deliver training, develop CRS procedures, modify contractual terms and agreements, set up classification and reporting systems for CRS purposes and achieve data collection readiness as from 1 January 2016. Permanent monitoring will nevertheless be required as the DAC2 is just a first step in CRS implementation. Non-EU countries will indeed follow, with more than 20 early adopters other than the EU Member States intending to implement reporting starting in 2017 for calendar year 2016, and many other countries wanting to implement CRS reporting starting in 2018 for calendar year 2017 (among which Switzerland, likely based on an agreement with the European Union). More countries will follow with CRS implementation after 2018, which means that permanent monitoring for the updating and upgrading of reporting systems and procedures will be needed.

Resources

One aspect that should not be overlooked is building resources. To meet the increase in workload resulting from the DAC2 and further CRS conventions with other countries than the EU Member States in the near future, in particular front offices, back offices, IT and compliance departments will be confronted with an additional workload. Indeed, these departments will be in the front line of managing the internal trainings, collection of additional self-certifications, additional documentation and pieces of evidence in respect of client classification and clarification of indicia, correct communication with the clients, collection of the data to be exchanged, managing changes in client status, identifying possible reasons to know that a client classification may be inaccurate, managing the likely increasingly frequent requests over time issued by foreign tax authorities, executing a compliance programme with regular health checks, etc. Existing FATCA teams should thus generally be reinforced to cover this increased workload (which could to a certain extent be mitigated through opting for an outsourcing solution for FATCA and CRS reporting).

Conclusion

With the DAC2 being adopted very quickly, the financial sector needs to move rapidly to implement CRS reporting systems in the course of 2015, in order to be ready to collect the necessary data as from 1 January 2016. Building on FATCA experience and implementation, projects will be possible to a large extent from a technical and legal viewpoint, as the CRS is highly inspired by the FATCA IGA Model 1. Nevertheless, there are significant implementation differences to be taken into account as well, and FATCA strategic decisions may even need to be reviewed and possibly changed in light of the CRS. The most significant difference with FATCA is related to the fact that, in particular in international centres like Luxembourg, CRS reporting volumes are expected to grow exponentially, and continue to grow in the coming years, as more and more partner jurisdictions will implement similar CRS reporting obligations. Institutions which have implemented manual or semi-manual reporting solutions for FATCA are likely to have to reconsider their decision in favour of more automated CRS reporting solutions in view of this increased reporting volume. Outsourcing solutions should also be considered, and could to a certain extent mitigate the need for reinforcing teams dealing with CRS reporting within the institution. Finally, this could also be seen as an opportunity to assess and improve existing tax reporting solutions for clients (or consider implementing such solutions), making the link with FATCA and CRS reporting in order to further improve client service standards.

Collateral management
You will not operate the same way

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The last financial crisis, especially the sovereign debt crisis, highlighted the importance of credit risk mechanisms and more particularly of collateral management.

Introduction

From a buy-side perspective, we note that with inadequate and weak regulation, stakeholders might not recover their assets. For this reason, both client and regulatory considerations have prompted financial institutions to adopt more transparent market practices.

Collateral management consequently became the hub of the new regulations under implementation, which are substantially reshaping the way institutions operate in the market.

To fully understand these regulations and most importantly, their impact on the financial landscape, let us take a step back to examine how collateral is currently managed in the financial industry from an operational point of view. This could partially explain the major current concerns about collateral management and the fact that no financial institution will be able to survive without taking into account this major issue in the operational landscape and development plans for the following year.

Collateral management is currently viewed as a support function, managed by back-office teams. Their main activities are focused on valuation, margin calls, and providing Central Securities Depositories (CSDs) with a back-office and accounting perspective.

Furthermore, collateral management is a daily activity, performed once or several times a day, but not in real time, sometimes even not within an integrated system, which leads to a waste of time in the mobilisation of collateral and a lack of efficiency.

Finally, the investment decision by the front office is usually taken without any consideration of the collateral's impact.

Consequently, and for all these reasons, it is perhaps misleading—or at least limiting—to point out a lack of collateral without taking into account another dimension which is the limited access to collateral. In this context, market solutions coupled with an in-depth review of the current operational model of all COOs in the financial industry, could bring effective solutions.

The introduction of regulatory reforms - MiFID and the Dodd-Frank Act

The Markets in Financial Instruments Directive (MiFID) of November 2007 signalled the intention of European regulators to rein in financial markets and protect investors from investment service providers and credit risk. The main aspects were the safekeeping and administration of financial instruments, thus providing a framework for the development of collateral management activities. It enforced a harmonised regulatory environment across all member states of the European Economic Area.

EMIR adds real value, going further than MiFID since derivatives were not in the scope of the 2007 regulation

In parallel to European regulations, collateral management functions acquired increased importance in investment management activities in the United States, with the Dodd-Franck Act, an attempt to make financial markets more efficient and stable.

To promote greater transparency of financial activities, the Dodd-Frank Act passed by the United States House of Representatives as *"The Wall Street Reform and Consumer Protection Act of 2009"* aims to push Over-The-Counter (OTC) derivatives trading activities as much as possible onto central exchanges and central counterparties. It provides guidelines for strict time limits, multiple counterparty reconciliation, margin calls generation and collateral optimisation. Collateral monitoring and record keeping on a near real-time basis were adopted to manage daily requirements and limits. The shift towards OTC clearing has a substantial impact on the operating model of investment firms, focusing on mutualised risk that strikes bilateral arrangements activities. In line with standard exchange-traded derivatives, all derivatives contracts (IRS, CDS, etc.) now have to be cleared with initial margins based on daily mark-to-market.

The post-Lehman regulatory momentum that aimed to regulate financial markets, reduce systemic risk and improve transparency, has promoted the use of regulated platforms, such as Central Counterparty clearing houses (CCPs), Multilateral Trading Facilities (MTFs) and Organized Trading Facilities (OTFs) to capture OTC business.

Moving forward with EMIR

The global effort to regulate the products and markets involved in the 2008 financial crisis (e.g. CDS), led the G20 leaders to launch the European Market Infrastructure Regulation (EMIR) in order to supervise and monitor OTC derivative markets. It aims to build secure market processes for standardised OTC derivatives, promoting their use through financial constraints on non-standardised ones, establishing reporting requirements for OTC derivatives positions through trade repositories and risk mitigation for uncleared trades. It specifies clearing, reporting and risk mitigation rules. EMIR adds real value, going further than MiFID since derivatives were not in the scope of the 2007 regulation.

The clearing obligation for standardised and liquid OTC derivatives through CCPs had a massive impact on financial institutions' operating model, where the rigorous risk management practices applied by CCPs (initial margins, haircuts, eligibility rules, limited range of collateral assets, etc.) led to reconsidering collateral management as a strategic activity to make the best use of available assets. These changes have come in addition, to address risk mitigation requirements for uncleared trades with initial and variation margin requirements, daily valuation, timely confirmation, reconciliation, portfolio compression and dispute resolution (these requirements will be effective by the end of 2015). It will help the market transition to a stable environment, as well as prepare for the regulations to come.

New regulatory requirements to drive European Markets

The ambition of MiFID II is clearly to take further steps towards reducing systemic risk, in order to reinforce financial stability and increase investor protection. In addition to the EMIR regulation, the European Commission has worked on providing transparency to the OTC markets and extending requirements currently applicable to equity markets, to non-equity ones. The MiFID II regulations adapt a number of existing features and introduce new constraints on positions (position limits and reporting), business rules (wider inducement and best execution) and increase transparency requirements. They also seek to remove the current opacity in OTC markets by introducing a new venue for non-equity instruments, the OTF. Derivatives within the scope of the clearing obligations defined by EMIR will have to be traded on regulated markets, MTF and OTF to shape a more liquid market, making excellence in collateral management a must.

The Alternative Investment Fund Managers Directive (AIFMD) and the Undertaking for Collective Investment in Transferable Securities (UCITS V) regulations are impacting investment management market practices, leading to substantial changes in collateral management activities by depositary banks. They both impose efficient and strongly monitored portfolio management techniques with account segregation, rigid requirements on counterparty risk limits, qualitative and quantitative criteria on collateral received, reinvestment of this collateral, and oversight.

Past and coming regulations are highly involved in collateral management transformation practices. It has evolved from an under-considered back-office function performed on self-developed solutions, to a strategic and supporting exercise for front office or risk management activities.

Towards greater centralisation in collateral management

Going forward, banks will have to manage collateral much more centrally. They already have a certain level of experience in centralising processes, as the trend towards the centralisation of cash across multiple currencies through treasury management has been in place for several years.

Banks and their buy-side clients, mainly serviced by global custodians, must find a neutral space to deposit and exchange collateral

However, this change will not only affect banks (sell-side institutions) which up to now have mainly carried out collateralised interbank transactions. It will also greatly impact a number of their clients (often referred to as buy-side institutions) which are progressively entering a much more collateralised, and therefore secured, financial world.

The implications for the buy-side raise a number of operational 'collateral challenges'. For example, where will the sell-side and the buy-side meet to exchange collateral when required? If they restrict themselves to only using cash as collateral, this is still workable due to the efficiency of the payment infrastructures in place, which are readily available in the main currencies.

However, for numerous reasons, cash will increasingly be replaced by securities as collateral. In this case, banks and their buy-side clients, mainly serviced by global custodians, must find a neutral space to deposit and exchange collateral.

Integrated solutions

This is where integrated solutions such as Clearstream's Global Liquidity Hub can help. It was launched in 2009 and now covers a wide range of integrated products and services which cover the growing need for settlement and custody of collateral.

Numerous collateral management and securities lending services allow for a seamless transfer of collateral between banks and increasingly also their clients, often supported by their global custodians.

Such integrated solutions provide centralised access to numerous central banks, CCPs and many other large institutional collateral takers worldwide. In addition, they offer extensive asset consolidation possibilities, for example by pooling multiple collateral asset classes such as cash in numerous currencies, debt, equities and even investment funds.

Full alignment with market developments

These integrated solutions are constantly adapted in line with changing market and regulatory requirements. This means that banks and buy-side counterparties do not have to worry about keeping abreast with other market developments, such as the growing need for secured term-funding by banks, central clearing for OTC derivatives, repo and securities loans as well as mandatory margining for uncleared derivatives.

It is also worth mentioning the implementation of new settlement infrastructures such as the new European settlement platform T2S, enhanced settlement finality in the US and the extension of the settlement period for JGBs in Japan. All this is taken care of by triparty collateral management providers such as Clearstream.

The ultimate aim for these providers is to offer a real-time platform running close to 24 hours a day, which connects all major collateral pools and a maximum of market participants across the globe. Thanks to increasing automation, banks and institutional investors can rest assured that their assets are in good hands and are put to maximum use by fully automated, highly sophisticated collateral management solutions.

You will not operate your collateral the same way

In line with the current and future regulatory agenda, the demand for collateral will continue to increase. Several surveys have appeared in recent years on collateral scarcity and have tried to quantify the missing collateral required to support the future regulatory framework (EMIR, CRD IV, etc.). Astronomic amounts of new collateral requirements were mentioned with huge variation from one study to the other, depending on the business model hypothesis and the collateral definition used. Navigating this wave of different figures is difficult.

For the first time, we believe that the question is not necessarily about collateral scarcity, but much more about how you can better use the existing collateral.

As demand for collateral continues to increase, it is critical to understand how the market for collateral management services will evolve and enable firms to meet their various collateral obligations.

The regulatory framework impacts directly the operations related to the collateral and affects the composition of assets a firm may hold in terms of their quality.

The liquidity coverage ratio requires firms to hold more high-quality assets on their balance sheets.
The derivatives markets reform (EMIR, DFA,) will require firms to hold high-quality collateral for margining not only the central cleared derivatives transactions, but also the bilateral transactions.

While the collateral implementation for the centrally cleared and bilateral transactions will be phased out during the coming years, the importance of the impact in terms of business organisation and operations leave firms with no choice but to design their future target operating model today.

These increased demands are coupled with changes such as limits on the reuse of collateral as well as new segregation requirements that increase the operational complexity associated with collateral management.

All in all, these different changes enlarge the market participants' focus on collateral from the sole management of assets for balance sheet purposes to a broader scope and consideration in the way the collateral is managed on an intraday basis. Moreover, these changes are driving innovation in the provision of collateral management services.

The liquidity coverage ratio requires firms to hold more high-quality assets on their balance sheets

Not only are the services changing, but also the range of users is expanding. Collateral management was mainly a sell-side business story where their systems provided solutions to enhance the use and optimisation (triparty repo services) of collateral. With the advent of central clearing and bilateral margining on derivatives transactions, buy-side participants are now looking more closely to help them managing their collateral obligations with maximum efficiency.

Collateral management is no longer a simple back-office function but is now a key function with close links to trading, treasury risk, liquidity management and capital optimisation.

The function will also need to be centralised within the market participant's organisation for meeting these challenges along the value chain:

- **Front office:** minimise collateral funding
- **Treasury:** minimise balance sheet impact while ensuring the most efficient use of collateral
- **Operations:** automation of daily process
- As an example, the custodian bank will have to adjust their framework offering both ways to match their client's needs and CCP requirements. In parallel, they will have to introduce control mechanisms aiming at:
  - Reconciling the collateral position deposited in the respective account
  - Verifying that the placed and received collateral is in line with the eligibility criteria (from the CCP or with the other counterpart)
  - Verifying the accuracy of the haircuts, especially in case of bilateral exchanges

Similarly, buy-side clients have also key transformations to manage in line with collateral in order to:

- Deliver accurate, timely, and appropriate segregation of exchanged collateral
- Set up individual segregation or omnibus accounts
- Maintain sufficient liquidity for placing as collateral (particularly during periods of financial stress)
- Apply risk-sensitive haircuts models
- Set up dispute mechanisms to resolve in a timely manner any discrepancy of collateral amount to be exchanged

Conclusion

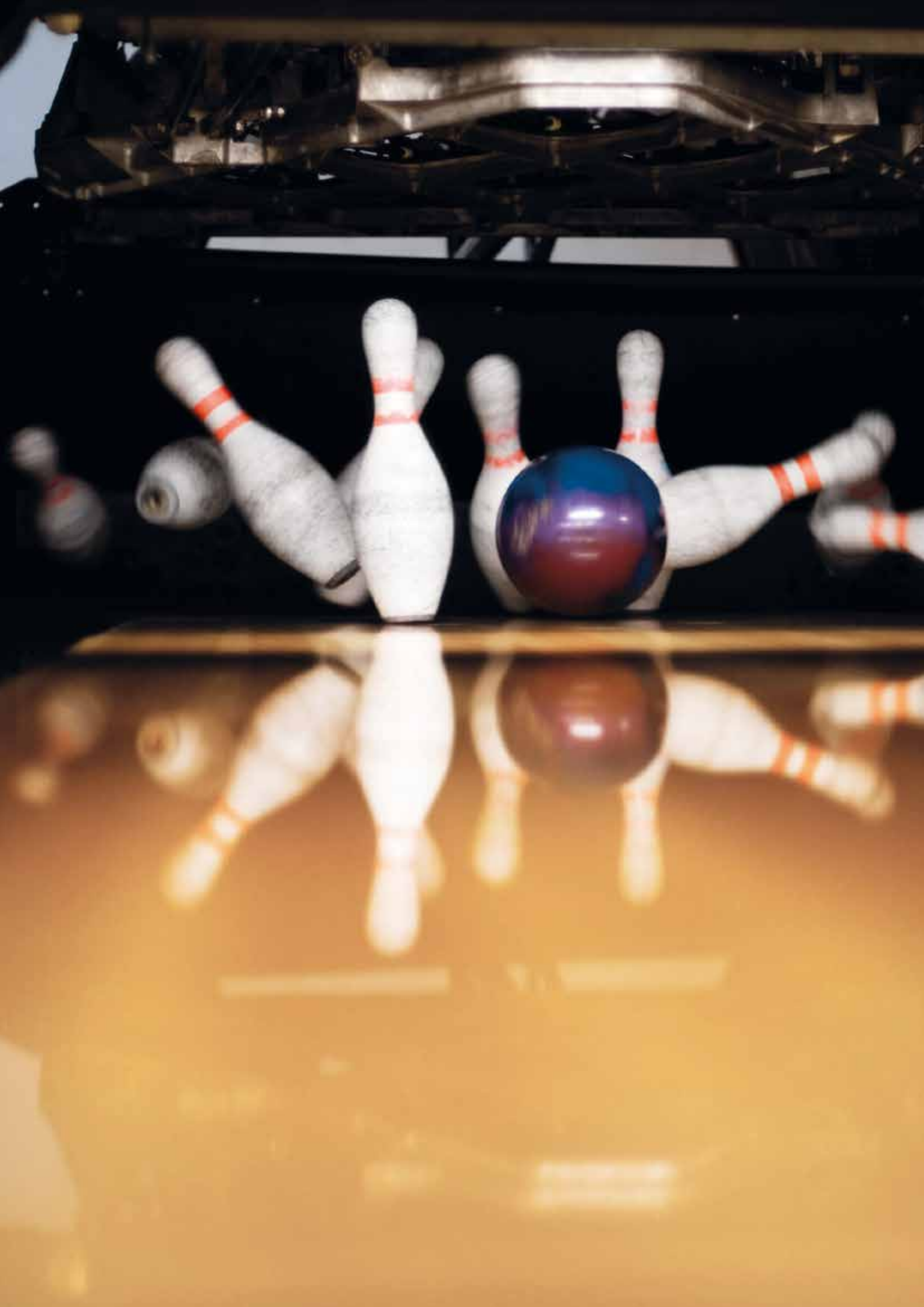
More than any other financial business, collateral management is impacted by the current and future regulations together with transformation of the European post trade environment. How the firm will use one or multiple custodians and/or (international) central securities depositories will have a significant impact on its collateral management activities.

Up until now, the information on collateral obligations and which securities can be used to meet these obligations has existed in fragmented form across securities desks or regions. This fragmentation of information is the result of collateral management not being the primary driver for the firm in the management of their service provision for securities.

Operations and organisations should have to be deeply reviewed and reformed, eventually supported by centralised market solutions, keeping in mind the objective of positioning collateral management as a key function with close links to trading, treasury risk, liquidity management and capital optimisation.

Tomorrrow's major challenges are not necessarily related to the scarcity of collateral assets, but much more to the access to collateral when it is needed. This is true not only for the sell-side but also for the buy-side firm wanting to reshape its collateral activity around four main dimensions:

1. **Organisations:** define strategic collateral model (including product strategy), assess collateral services solutions, evaluate financial impacts
2. **Operations:** manage both cleared and bilateral process, connect to market infrastructure (T2S/CSD), daily valuation and reporting, evaluate the margin requirements
3. **Needs:** anticipate and manage liquidity, optimise and transform collateral
4. **Safety:** review depositary bank responsibility and compliance, set up service level agreements and segregation of accounts, review rules on collateral eligibility and haircuts calculation, limits on reuse/re-hypothecation



BCBS 239 Operational impacts

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In January 2013, the Basel Committee on Banking Supervision published the BCBS 239 paper: "Principles for effective risk data aggregation and risk reporting".

Impacts of the implementation of such principles are significant for *"Global Systemically Important Banks"* (G-SIBs) as it defines strong requirements in terms of data management. The main objective of this reform is to ensure that data used for risk calculation and reporting have the appropriate level of quality and that the published risk figures can be trusted. This implies that not complying with these principles would jeopardise the trust of the regulators which could lead to capital add-on. At this stage, only G-SIBs are concerned but regulators strongly recommend to apply the same rules for Domestic Systemically Important Banks (D-SIBs), which may lead to wider scope of regulation. The timeline for expected implementation for G-SIBs is the beginning of 2016.

The requirements are based on 14 principles, organised in four categories, the fourth one being for the local regulators

Principles for effective risk data aggregation and risk reporting

01/

Overarching governance and infrastructure

1. Governance

- Governance rules for aggregation of risk data and risk reporting
- Data (quality) management as a responsibility of top management
- Clear roles and responsibilities on data and data quality for staff with IT, business and reporting expertise

2. Data architecture and IT infrastructure

- Extension and maintenance of documentation on internal data and IT- architecture
- Comprehensive support for aggregation of risk data and risk reports
- Capability of infrastructure to support risk data aggregation and reporting practices during times of stress and crisis

02/

Risk data aggregation capabilities

3. Accuracy and integrity

- Accurate and reliable risk data in normal and stress situations
- Largely automated aggregation for minimising the probability of errors
- Data (quality) management incl. data controls as robust as those applicable to accounting data

4. Completeness

- Gathering/aggregation of all relevant risk data over all group units
- Diverse reporting dimensions at group level (legal entity, business unit, asset class, industry etc.)
- Availability and flexibility of required and utilised reporting dimensions

5. Timeliness

- Generation and provisioning of risk data depending of criticality and volatility as well as based on the characteristic and overall risk profile of the bank
- Bank/business specific reporting frequency
- Generation of risk data while also meeting the principles relating to accuracy, integrity, completeness and adaptability

6. Adaptability

- Ability to respond to ad-hoc risk management reporting requests
- Adaptability in case of new assessment requirements during crisis/stress situations
- Flexible and efficient analysis architecture
- Simulation/forecast of risk information

03/ Risk reporting practices

7. Accuracy

- Accurate and correct consolidation of aggregated reporting data
- Processes to reconcile reports to risk data
- Data(quality) management
- Expectation of high reporting quality as the basis for critical and strategic business decisions

8. Comprehensiveness

- Coverage for all material risks
- Depth and scope of reports reflecting the type and complexity of businesses and bank's risk profile
- Reporting cover based on the requirements of recipients
- Forward-looking assessment of risks

9. Clarity and usefulness

- Clear and concise manner of reports for facilitating informed decision making
- Appropriate balance between risk data, analysis and interpretation as well as qualitative explanations
- Demonstration of the usability of reports for management decision making

10. Frequency

- Determination of reporting frequency based on recipient, risk and purpose
- Dependency on type and volatility of risks, the relevance to risk management and efficiency of decision making
- Increase in frequency in case of stress/crisis situations

11. Distribution

- To relevant parties
- Security on confidential material
- Relevant reporting procedures and access rights

04/ Supervisory review, tools and co-operation

12. Review

- Regular control and evaluation of compliance with the eleven principles of BCBS 239
- Test of conformity and reaction times on compilation of risk data and reports

13. Supervisory measures

- Introduction of measures to remove any deficits and shortages in achieving relevant capabilities for aggregation of risk data and risk reporting
- Allocation of target timeline by relevant regulator body for implementation
- Use of instruments for reducing risks under Pillar 2 (e.g. introduction and use of specific risk and acquisition limits)

14. Home/host cooperation

- Co-operation with relevant regulatory bodies for assessing the compliance with the requirements and by execution of relevant measures to remove any identified deficits regarding the principles

Expected operational impacts

Impact on CROs

Not surprisingly, Risk Management teams will be highly impacted by the new principles. If we take for example the concentration risk modelling, the principal role of Risk Management teams today is to build a model that measures appropriately the concentration risk for the organisation. Obviously, any model requires input data, and this is where BCBS 239 principles apply: ensuring completeness, accuracy and integrity will require clearly defining the data requests that are to be handled by the back office departments.

These definitions, as required per the model, will have to be formalised and documented by Risk Management teams. In addition to this, Risk Management teams will have to be ready to answer ad hoc requests from regulators. Obviously, they will rely on IT departments to support them in getting the data and implementing automations, but they will be responsible for the effectiveness of the control of the data quality in the end. This means that Risk Management teams will have to play a significant role in the Governance of the risk data. Risk Management will also be impacted as it must be able to face these new challenges with the appropriate skills, such as project management, requirements analysis and formalisation—skills that were not strictly needed before.

However, Risk Management will not be the only one impacted by the principles, other areas/departments in the organisation should also prepare for change.

Impact on COOs

Back office teams will also be impacted because they are the main data providers of the Risk Management. This means that they have to be proactively involved in the data governance and the data quality process in order to be able to anticipate data requirements or corrections to be performed. Moreover, they need to have the capacity to deliver accurate data in a timely manner.

Data requirements may lead to identification of gaps, as for detailed collateral data in the recent AQR exercise. Filling these gaps may induce significant workload in the back office teams to record this missing data in an electronic format. This will also probably have an impact on the underlying systems and tools that will require updates or new developments, which will impact the overall capacity of the teams as per their involvement in implementation projects. The COO will then face the choice of the automation level of the data management activities, depending on the target operational workload in the long run.

Finally, the back office function could be in a position of shared ownership for specific data. For example, client related data might be cross-functional in the organisation, and would require alignments from all departments to achieve unique, agreed and validated data structure and content.

Impact on CIO

Information technology departments will certainly be impacted in the support they provide to Operational and Risk teams. In addition to this, they are likely to be leaders in the technical and functional gap analysis to be performed on existing reporting chains (Basel III, for example) to identify gaps and propose resolution plans to meet the BCBS 239 requirements.

Impact on HR management

The impacts described above will lead organisations to look for different skill sets from the standard ones. Looking at the insurance sector and how Solvency II impacted it, we can clearly anticipate that banks will in turn look for new business profiles with experience in IT development projects, good knowledge of algorithm and automation, SQL and data modelling. These types of profiles will leverage technical and data skills to enhance organisations' efficiencies in the design of their risk models and reports. This means that HR functions will have to be able to detect and assess these new types of skills and competencies to include these in their recruitment plans.

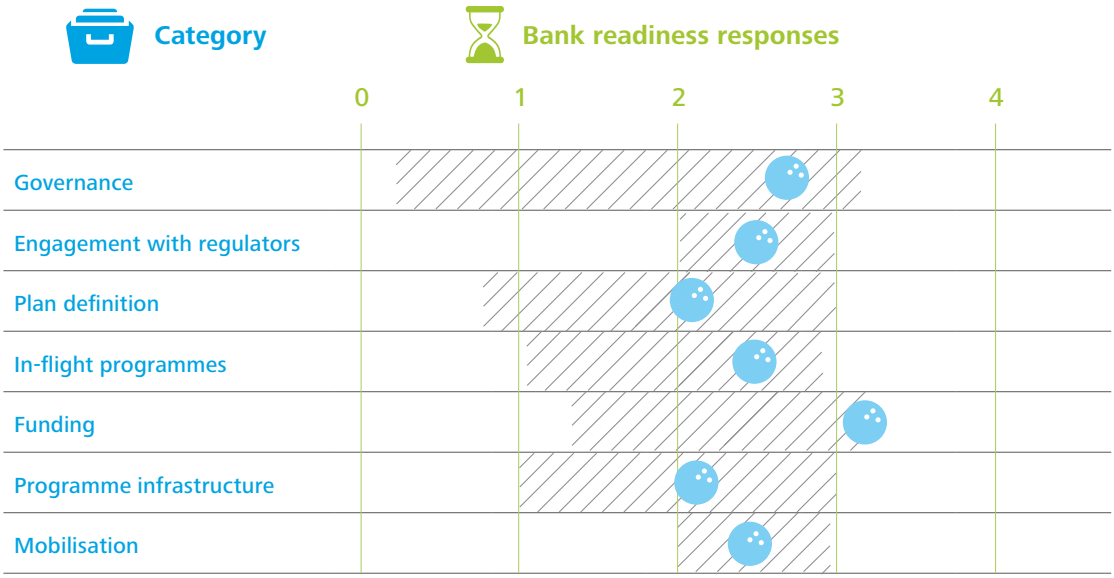
Market readiness

Every six months since December 2013, Deloitte has been conducting a survey on market readiness toward BCBS 239 among SIB's (note that for Luxembourg the list has not been disclosed at this stage). It focuses on two aspects of BCBS 239 for Banks: advancement of implementation project and compliance readiness. Results and trends presented hereunder reflect the declarations of respondents to the survey.

Implementation advancement

Most of the interviewed organisations have started the BCBS 239 implementation project.

The following tables show their own assessment of the advancement of the project:



0= No progress 1= Limited progress 2= Substantive progress 3= On-track 4= Already implemented

Answers status range

Advancement status average

Category explanations and observations:

Category	Observations
Governance • How are the different governance forums (Data, Design Authorities, Funding etc.) being brought together to support the governance of BCBS 239 delivery?	• Whilst the majority of programmes has set up governance, the integration to existing forums is limited • Governance is advanced around data management but not yet always integrated in the business or at management level
Engagement with regulators • To what extent has the bank engaged with respective supervising bodies and what are the remediation plans in place?	• Engagement varies depending on regulator/host regulator • Clear inconsistent approach so far, but this is likely to change soon
Plan definition • What is the state of preparation of detailed remediation plans?	• High-level plans are largely in place, but the level of underlying detail and understanding of dependencies is still lacking in some cases. Milestone tracking
In-flight programmes • To what extent are in-flight programmes being managed within, or as dependencies to, the BCBS 239 programme?	• Recognition that in-flight programmes are the best way to accelerate progress • Still unclear in some banks how in-flight programmes are governed and how the project portfolio is managed
Funding • To what extent is the funding case defined and does this include the requirement to support a multi-year programme?	• Significant investments in both IT and Finance related projects, however so far only allocated on an annual basis • Greater recognition that commitment to multi-year funding is required
Programme infrastructure • What consideration has been given to support infrastructure e.g. process mapping tools, data control tools, and data models to support the BCBS 239 programme?	• Limited focus on infrastructure, e.g. process modelling, data models • Some of the participants developed internal mapping tools and programme tracking models embedded within a centralised standard framework
Mobilisation • To what extent has the bank started to ramp up activity and how do they see resources being fulfilled- internally or externally?	• Project teams are being mobilised utilising a range of skills and sources • Some specifics functions are still affected by lack of budget and resources • Most of the banks interviewed anticipated that despite ramping up their resources, they will not be able to meet the deadline, and some are forecasting an additional 2-3 years of work

Compliance assessment

The following elements represent the vision of banks on their own current compliance status toward BCBS 239 principles.

Progress on governance
Most European banks declare advancement on governance from the mid-2014 survey. This means that governance principles have now been understood and are being implemented. However, reports are often pushed from the operational teams to the management, while the requirements should come from the top.

Data architecture and IT infrastructure are still weak points
If taken as part of larger scale transformation, banks can leverage BCBS 239 compliance to impact positively the whole organisation. The creation of a common data dictionary between Risk and Finance is still a distant target for too many firms.

Risk data aggregation capabilities do not demonstrate major advancement
The survey showed that banks are still struggling when it comes to defining and developing an approach to data accuracy and integrity as part of the compliance process. In addition to this, very limited progress has been made in documenting risk data aggregation processes.

Risk reporting practices reveal an approach to target compliance instead of transforming the organisations
Banks need to enhance their efforts to secure the fact that the current data, processes and systems ensure not only compliance with the requirements, but also a shift in the cultural approach to data.

From a 'tactical fix' to a 'strategic build' approach

In a strategic approach, BCBS 239 compliance is part of larger scale transformation projects that banks use as opportunities to leverage and that have significant positive impacts on the organisation.

1 Internal risk management

- Stress testing
- Internal risk modelling
- Risk reporting

2 IFRS 9

- Risk data quality
- Data availability
- Reconciliation risk/accounting

3 Capital

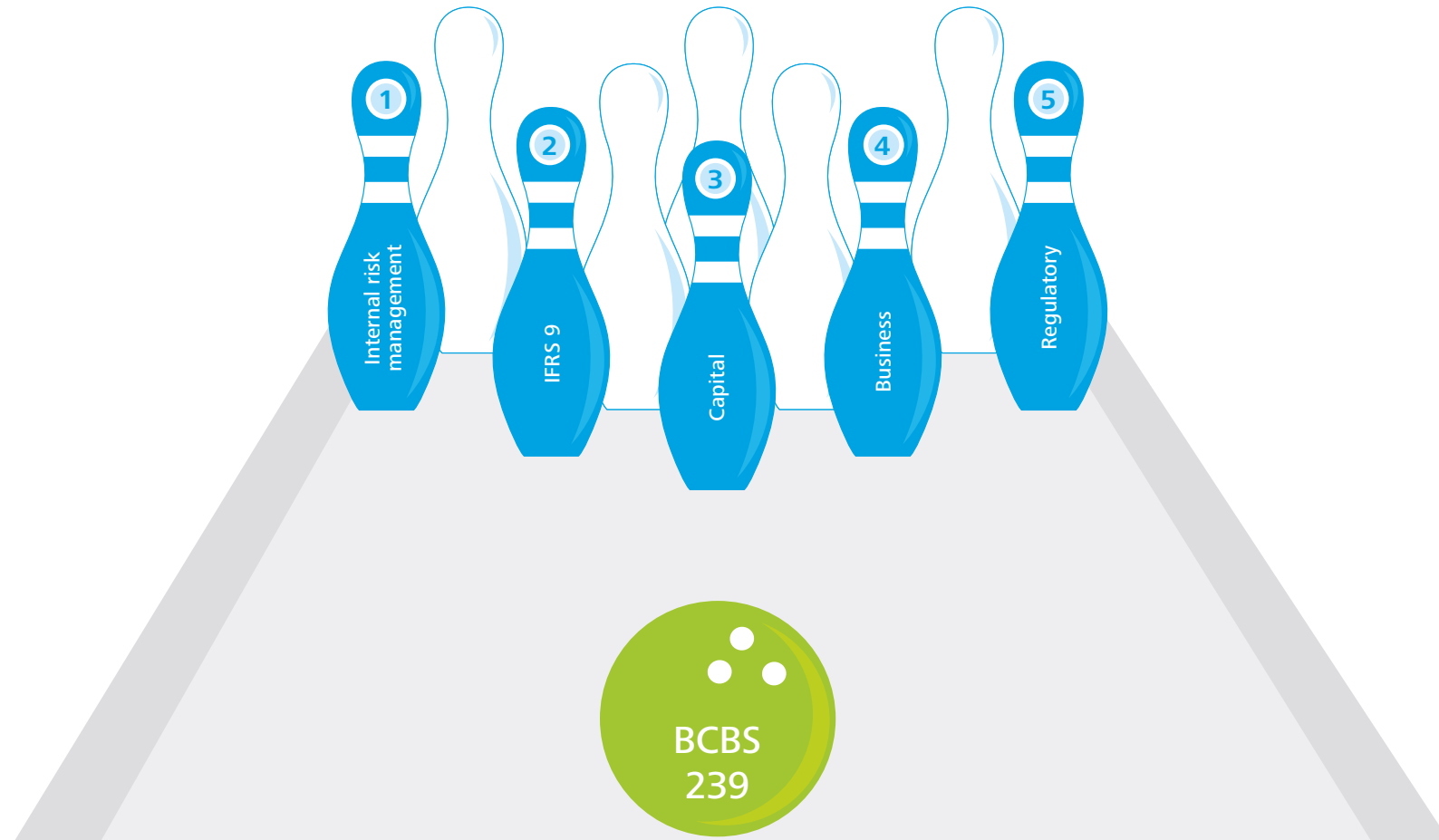
- Capital planning
- Risk bearing capacity
- Provisioning IFRS 9 impact during transitional period

4 Business

- Business Model
- New products
- Pricing
- Risk (appetite) framework

5 Regulatory

- Regulatory reporting
  - FinRep
  - Leverage
  - Unencumbered
  - Liquidity
  - Prudent value
  - Solvency
- Structure
  - Structural reforms
  - Resolution & recovery planning
- Adjustment of credit models
  - Widespread use of credit models
  - Fair value



Targeting the compliance should not prevent the banks from taking the small steps to high business value impact. Indeed, the adoption of a data management framework, for example, can help banks to leverage efficiently from regulatory obligations to operational gains.

In addition, transforming the whole organisation to be data driven and aware of the data quality at every process step will bring far more value than only focusing on risk data, e.g. when using client and contract data in customer next best action models.

Along with this, changing IT infrastructure and the applications landscape should lead to further reflections on the use of new technologies, such as digital channels enablers or data lakes. This will be a decisive factor for leading banks which aim at staying ahead of the pack in the future.

In most organisations, data architecture and IT infrastructure need to be implemented across the bank and not just for the risk function

Impact of digital transformation on Banking Operating Models

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‘Digital’ has been a common buzzword for several years now, but subject to a wide range of interpretations in terms of impact and debate regarding the ways of developing a so-called digital strategy in banks.

While digital disruption has an increasing impact for all industries, digital native generations are set to invade the professional world, and thus add to the volume and variety of digital habits and behaviour. When combined with the booming use of internet and smartphones in emerging countries, there is a lever effect, which consequences are difficult to anticipate for traditional financial institutions who are not ready or agile enough to adapt.

“Up to half of the world's banks will disappear through the cracks opened up by digital disruption of the industry” forecasts BBVA Chairman and CEO Francisco Gonzalez. Banks now need to define which operating model to adopt in order to benefit from digital disruption and convert the potential threats into opportunities.

Banks had different kinds of answers to the global digital disruption

Banks are now feeling the full force of digital disruption, which made its presence known a few years ago. The implications of such a revolution were unknown and there was no clear direction about the changes required to efficiently weather the transition into the digital world. Nevertheless, many banks tried to keep one step ahead and launched various initiatives of differing scales. A few years later, we are able to identify which initiatives can be deemed successful and explain some of the reasons why the others trailed behind.

In several cases, we observed that banks made massive investment in channels and mobile technologies to offer more client self-servicing functionality. The overall aim has obviously been to reduce the internal workload for recurring requests and to empower increasingly connected generations of clients, but this could be achieved only at high cost. Whereas the potential of smaller scale initiatives to improve their internal operational efficiency has been too often neglected.

Furthermore, the operations and processes impacted by the implementation of digital features have not been properly adapted to support and promote the related services and new functionality. This requires a deep review of Operating model in most of the cases, and since there is no single unique way of preparing for digital transformation, we will therefore explore the different options COOs should consider when setting up their digitally enabled organisations or transitioning towards the next level of maturity.

Finally, measuring the return on investments will soon become a critical issue for COOs in order to justify their budget and the expected return on investment in digital spend. They will have to use an increasing number of global cross-industry benchmarks and KPIs in order to evaluate their efficiency, alongside the need to ensure their organisation is more flexible and agile.
This short review of the current state of affairs will identify the main challenges that banks will have to overcome in the future to become leading actors of the digital revolution rather than its victims.

Outcomes and lessons learned from the first digital movers

Many banks may feel uncomfortable when confronted by a constantly moving and exponentially growing digital world, which brings together a universe of new consumer habits, competitors, technologies and solutions that would require a complete overhaul of their organisation to ensure it would be suitably flexible and agile to face this new paradigm. Among them, several were hesitating and slowed the pace of their digital transformation, while others who embraced a specific path are now assessing the results and taking stock of the first lessons learned. COOs need to be reassured; there are various ways of embarking on this journey of transformation with specific and focused initiatives adapted to their existing structure, internal organisation, customers and markets. Thus they must select the most appropriate path in light of their current level of digital maturity.

The difficulty of banking groups in recent years has been to understand the extent of the digital impact on their business, how they should adapt and what should be driving their transformation. Many of them first invested in new digital channels (e.g. customer portals, cockpits, online access to advisers and mobile apps) because these were visible on the market.
They addressed customers' growing need to have constant access to their data and to perform certain basic operations, and they ultimately were supposed to relieve the workload for relationship managers to free time for prospection and added-value sales activities. Only some years later, these have proved to be not entirely successful and the business case not wholly straightforward. Some major players have achieved great results through massive investment and making 'digital' the main focus for development in their business model.

For others, some time after their first initiatives went live, they now realise that not every digital move is the right and best move for their organisation or their market. Many are also beginning to understand that their organisation was not prepared for all of these changes to be introduced in one fell swoop, and far-reaching transformation of their culture and DNA was first required.

Measuring the return on investments will soon become a critical issue for COOs in order to justify their budget and the expected return on investment in digital spend

In the case of major transformation programmes, as for any other transformation, the human factor could well be one of the main reasons for failure. This is particularly true when those projects are introducing new technology, calling for changes to users' habits and processes and widening access to data previously restricted to the 'happy few', thus rebalancing powers within the organisation. Some recent examples include major investment in omni-channel strategy and tooling. However, there has been low return on investment owing to a lack of uptake of those new means—both internally and externally.

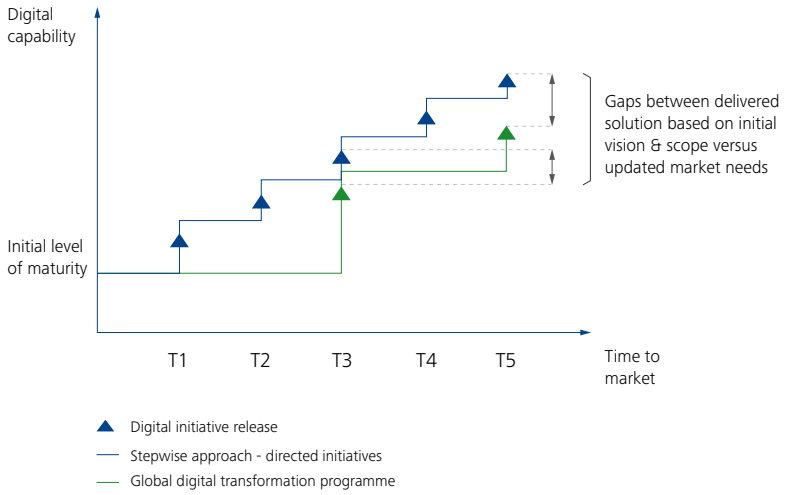
The crux of the matter is changing the way employees think and work in order to leverage new technology and become more efficient. It is also important to demonstrate that customers still need to be supported through their adoption of digital means, especially in the case of older generations. Indeed, they are keen to benefit from new online services, but they must be convinced that they can offer them added value yet with limited risk.

In both cases, the decorrelation between new 'best of breed' digital solutions, which require constant change and flexibility to adapt to new trends, and the existing format of highly administrative organisations will lead to inefficiencies and friction unless we are able to massively boost manpower and new expertise to have them working together. The truth for traditional banks is that previous organisational models are no longer suitably adapted or flexible enough to keep up with the incredible pace of the digital disruption.

The first challenge in this revolution is not providing existing customers with new innovative services and solutions, but rather convincing younger generations that a bank will be able to provide them with best-in-class services, while offering other additional features that could set them apart from other (non-banking) players. This means banks are currently up against global internet giants such as Amazon, Alibaba and Paypal, etc. and need to propose relevant offerings to ensure they do not lose their market share to them.

Agility a key ability

Where there was successful transformation on the market, those examples were led by strong sponsorship and underpinned by a dedicated organisation focusing on isolated capabilities. Traditional ways of driving multi-year programmes become obsolete from the kick-off date if there is no plan to deliver intermediary releases and build digital capabilities in an incremental way. Institutions need to put in place agile structures supporting those changes, with an ability to realign their priorities along the way and foster a spirit of innovation across the organisation.



Building and investing in a transversal digital strategy department might be one option if an organisation's business lines and functions require that kind of central body and are ready to welcome new initiatives and projects, which otherwise may not be initiated by their direct needs and teams. This entity would then act as market watcher, keeping banks abreast of new trends and competition moves and adjusting the digital strategy accordingly. This is also a great opportunity to generate synergies and set up a central digital governance body that will ensure overall consistency of the solution and data architecture.

In some cases, digital initiatives have been the most successful for organisations working in 'silo mode', meaning that they were originated from the floor, managed by their own teams, progressively building their expertise and monitoring their success. This strategy could be applied to end-to-end core banking processes for instance, such as loan origination with online capability aimed at reducing paperwork and overall time to market. Having a clear scope and measurable objectives is the safest path to success and allows other business lines to subsequently be 'evangelised' and for shared service centres to be built across departments.

For digitally more mature companies, however, this last scenario could rapidly lead to a myriad of small initiatives, technologies, expertise and best practices, lacking central coordination and governance. In this last case, banks should envisage building a central digital competence centre responsible for defining and governing an overall strategy.

Digital operating models for different bank structures and maturity levels

Undeniably, depending on the bank's organisation, services, markets, business lines and maturity, not all operating models are appropriate when a bank wishes to implement its own digital strategy. We will outline four models suited to different bank organisations, ranging from a lower level of digital enablement to a higher level:

1. **Federated model:** this type of model mainly applies to larger organisations starting their digital transition in different areas, but not in a top-down synchronised way; i.e. every business line/department may engage in digital initiatives to a minor extent and they manage their own project, related costs and resources, build their competencies and invest in required technology. This can be applied to many different cases and is the best way to garner employee involvement and commitment, thus making them the key actors of their organisation's digital transformation. Implementing a paperless process for customer acquisition and account creation would be a good example in such a context. Moreover, it could be rolled out progressively to other business lines and entities as they see the benefits of the change for their peers

2. **Shared services centre model:** when a firm has reached a minimal level of maturity with regard to its digital transformation and built up some internal skills and competencies, it is a good time to start sharing best practices across the organisation. This could be carried out for a specific field in order to benefit from past experience and existing in-house knowledge, as well as to leverage existing solutions and technology. At a certain point, this sharing even becomes mandatory for the sake of cost containment, as it would be illogical for each business line to select a different vendor, negotiate separately and contract, while another fitting solution is already in place. The aim of a shared service centre is therefore to capitalise on available know-how, harmonise methodologies, foster internal communication of service proposals to other departments and promote expansion within the company
3. **Strategic competence centre model:** as soon as the organisation has reached a certain degree of maturity, the different business and IT lines will demand more guidance on which digital priorities they have to implement and how. Having a central dedicated strategy body therefore becomes essential for supporting the application of the digital strategy across the organisation as a whole. It will leverage shared service centres that might already be in place and enhance central coordination among them, in addition to defining the strategic development priorities and tactical measures with regard to digital transformation. This central unit will identify the need for bringing in and developing new capabilities within the organisation to anticipate future market trends and position the bank as a leading actor in related fields. It will also facilitate the exchange among the various shared services. It could, for instance, provide recommendations and technology guidelines with regard to dematerialisation of processes, which should then be applied by the shared service centres through the whole organisation in various functional areas
4. **Core digital model:** this kind of organisation is suitable for fully digital companies (i.e. pure players) and/or profit centres that are organised around their digital core platform. The latter is their main differentiator and advantage over competitors, irrespective of whether they are also digital companies or more traditional players providing the same services and products. This is characteristically the case of pure online banks or mobile payment companies. In the course of their digital transformation, traditional banks will have to become efficient enough to compete with this kind of player. This will become essential for attracting the new generations of customers that will be less and less convinced they need a bank to perform most of their daily cash operations

Depending on the type of operating model selected, new functions and roles will also have to be created and assigned. It could be beneficial for instance to create the Chief Digital Officer (CDO) and Chief Innovation Officer (CInO) functions if the organisation is planning to implement one of the new operating models and run them efficiently. It also means that banks may have to attract and bring in new talent if it cannot be found internally.

Business case considerations for digital in the new global economy

When building a business case around a digital initiative, one must also consider which operating model would be the most appropriate for the related transformation and what the costs and prerequisites will be. The new operating model should be the driver of digital projects, not the other way around. In terms of costs, it is therefore crucial to identify the pre-required investments and agree on impacted budgets before project launch to avoid further discussion down the line.

During the development phase and once the project goes live, most of the typical industry KPIs may be considered for assessing efficiency and the return on investment in digital initiatives. In the context of the implementation of a new web application, it could be relevant to monitor the adoption rate of those new channels by clients or the increase in the number of new client account openings with the corresponding growth of assets under management. However, the referential and corresponding benchmarks have drastically changed.

As banks are now competing against new entrants from other industries and pure players, they will need to set their sights on being just as highly performing as them. Client onboarding, for instance, should take less than 30 minutes—as in the case for some online players—instead of several days in the traditional banking industry. Firstly, banks will likely need to measure the number of FTEs needed to manage one similar process (an easily quantifiable indicator) and make related benefits simple to evaluate. But this kind of improvement also represents a way to demonstrate to younger generations that banks can be just as competitive as the internet industry; yet, this changing perception will be difficult to evaluate. This is especially important in the context of an increasing number of young people that will not see the bank of their parents as a necessary intermediary for their day-to-day operations in the future.

By focusing on isolated processes/capabilities and directed investments, along with short time-to-market, banks will facilitate the assessment of projects' success and demonstrate the advantages of investing heavily in their digital transformation. This will nurture innovation and further push digital adoption among their staff, thus sharing new ideas and possible applications with other entities in the group.

A phased and incremental path towards digital transition success

When embracing the digital transformation challenge—supposing a global digital strategy has been developed—banks should first consider the current maturity of their own organisation. This will strongly influence the main areas in which they first choose to invest, or at least guide the changes they need to perform straightaway on their internal operating model. As demonstrated earlier, not all operating models are appropriate for all digital transformation initiatives.

Once the current state of maturity for digital enablement has been determined, banks will have two main options to execute their digital transformation,

which could also be performed in parallel:

1. Leveraging existing capabilities and operating model to implement the possible digital initiatives wherever it makes sense and starting to promote the related achievements across the organisation. This should likely be performed in contained areas for less mature organisations, with the aim of starting to expand their successes in a second stage. Some examples may include the implementation of paperless processes for client on-boarding, loan origination and evaluation, which could easily be rolled out to other departments or key principles and corresponding tools re-used for other processes
2. Starting to move towards the next operating model stage to enable enhanced organisational agility to implement major digital transformation projects. This can be performed through a Business Process Modelling exercise to restructure the operating model around the target digital capabilities. For example, when the bank is opening more channels with 24/7 access, they also need to provide the required level of support to customers, which would require the restructuring of several teams, the reorganisation of their duties and the implementation of new Service Level Agreements. Investing in front technologies and features might be worthwhile in terms of sales and revenue growth, but only if the organisation is ready to support it and cope with higher volumes of data and increased interaction with clients

Considering both options and the required level of investment and effort for each of them, COOs will see more tangible results with faster time to market if their bank start with smaller projects aimed at improving internal efficiency and consequently reducing costs. Moreover, the business case will be easier to demonstrate and will contribute to further vouching for the competitive advantage digital transformation can offer banks.

Thus, COOs will have evidence to support the development of larger programmes as soon as the maturity of the organisation allows. The Executive Committee will then start thinking about digital for achieving both efficiency and cost-reduction enablement, while positioning the bank well for the future, i.e. preserving their typical market shares by offering value-added, minimising the competitive advantage of new players and remaining attractive for younger generations.

Banks definitely need to push forward with their digital strategy, but they must do so wisely, supported by a reliable and scalable digitally enabled organisation, in order to be part of the of the leading banks having turned the digital revolution into a market opportunity.

Sources:

- http://www.finextra.com/news/fullstory.aspx?newsitemid=26965: Half of the world's banks set to fall by the digital wayside—BBVA
- http://www.mckinsey.com/insights/business_technology/the_rise_of_the_digital_bank
- 42nd Efma Congress—Multidistribution (Barcelona, Thursday 16 to Friday 17 October 2014)
- Harvard Business Review—The Reinvention of Business: New Operating Models for the Next-Generation Enterprise

Intelligent automation entering the business world

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Automation using artificial intelligence might be the next game changer in terms of process efficiency in the financial industry.

Robotic process automation or intelligent automation (the combination of artificial intelligence and automation) is starting to change the way business is done in nearly every sector of the economy. Intelligent automation systems detect and produce vast amounts of information and can automate entire processes or workflows, learning and adapting as they go. Applications range from the routine to the revolutionary: from collecting, analysing, and making decisions about textual information to guiding autonomous vehicles and advanced robots. It is already helping companies transcend conventional performance trade-offs to achieve unprecedented levels of efficiency and quality.

Until recently, robotics has found most of its applications in the primary sector, automating and removing the human element from the production chain. Replacing menial tasks was its first foray, and many organisations introduced robotics into their assembly line, warehouse, and cargo bay operations.

Now, tertiary sector businesses have already started to apply new technologies and the robotic paradigm to automate their processes and replace humans in low value-added activities. This is also the case in the financial services industry.

What is intelligent automation and to which processes is it applicable for bank, insurance or fund servicing industries?

Robotic process automation combines artificial intelligence—including natural language processing, machine learning, autonomics, and machine vision — with automation.

Artificial intelligence and automation are hardly new, but the technologies have progressed substantially in recent years. Advances in machine learning techniques, improvements in sensors and ever-greater computing power have helped create a new generation of hardware and software robots with practical applications in nearly every industry sector.

A useful definition of Artificial Intelligence (AI) is the theory and development of computer systems able to perform tasks that normally require human intelligence. Robotic Process Automation (RPA), a synonym to AI, is the application of technology allowing employees in a company to configure computer software or a 'robot' to reason, collect and extract knowledge, recognise patterns, learn and adapt to new situations or environments. RPA leverages recent software abilities made possible by breakthroughs in computing power, including natural language processing, machine learning, machine vision and speech recognition.

What is intelligent automation and to which processes is it applicable for bank, insurance or fund servicing industries?

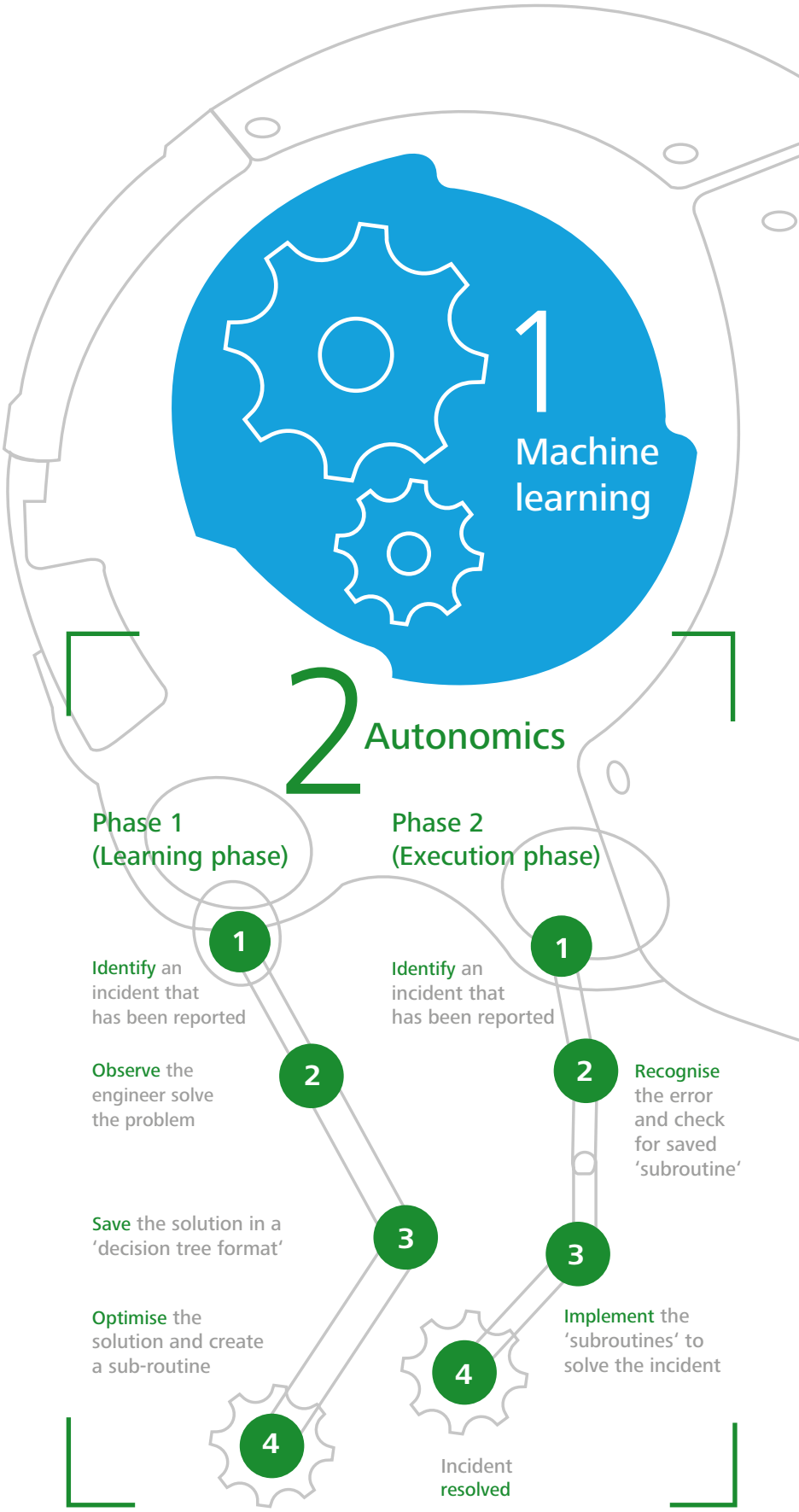
Machine learning refers to the ability of computer systems to improve their performance by exposure to data without the need to follow explicitly programmed instructions. At its core, machine learning is the process of automatically discovering patterns in data. Once discovered, the pattern can be used to make predictions.

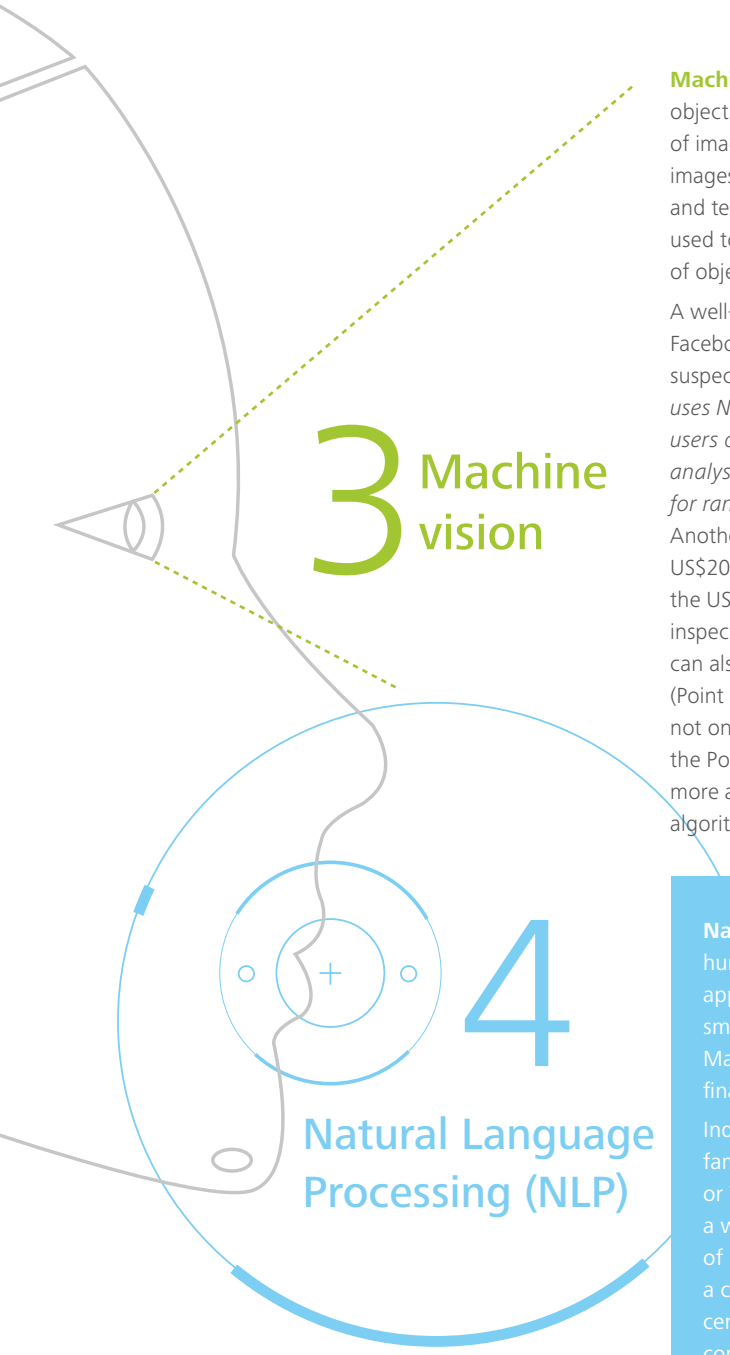
Applications of machine learning are very broad, with the potential to improve performance in nearly any activity that generates large amounts of data. Besides fraud screening, this includes sales forecasting, inventory management, oil and gas exploration, and public health.

For instance, presented with a database of information about credit card transactions, such as date, time, merchant, merchant location, price, and whether the transaction was legitimate or fraudulent, a machine learning system learns patterns that predict fraud. The more transaction data it processes, the better its predictions are expected to become, to the point where it can predict situations just before they actually happen. Computing power and in-memory technologies now even allow algorithms to be applied to individuals and can detect when behaviour deviates from their usual consumer habits.

Autonomics refers to systems that are designed to perform routine tasks and operations performed by humans. The technology interfaces with existing applications for processing transactions and triggering responses. They are machine-learning software programmes that 'observe' the way a trained user takes decisions or resolves issues and replicate the same 'decision making' process to manage similar decision points or troubleshoot similar issues in the future, thereby eliminating the need for a human operator. Autonomics can be useful in back-office centres performing high volume, rules-based work. It can perform these tasks round the clock at a fraction of the cost of a human resource without any manual errors, maintaining or mitigating processing risk. Industry analysts predict this technology will completely transform the Business Process Outsourcing (BPO) industry.

The system goes through two phases—the learning phase and the execution phase—as it learns to solve decision points and incidents. The diagram below summarises the steps included in these two phases.





3 Machine vision

Machine vision or computer vision refers to the ability of computers to identify objects, scenes and activities in images. Computer vision technology uses sequences of imaging-processing operations and other techniques to break the task of analysing images down into manageable pieces. There are techniques for detecting the edges and textures of objects in an image, for instance. Classification techniques may be used to determine if the features identified in an image are likely to represent a kind of object already known to the system.

A well-known use of computer vision is the face-recognition software used by Facebook to identify people in photographs, or by security and surveillance to spot suspects. *"Another example is the online rent out lodging platform Airbnb, which uses NLP to understand and analyse reviews, descriptions and interactions between users on the marketplace. Further it uses computer vision methods for image content analysis: classification, quality, attractiveness, similarity, and extraction of features for ranking models."*

Another example: to inspect the security features of new US$100, US$50, and US$20 bills such as micro-printing, watermarks and fluorescing security threads, the US Bureau of Engraving and Printing (Washington, DC) has implemented imaging inspection techniques to ensure the quality of the banknote printing process. Banks can also use the same techniques to detect forged notes deposited in ATMs or PoS (Point of Sale) terminals. This is just one step away from performing blacklist checks not on names but rather on scanned individual portrait pictures taken directly by the PoS terminal using a camera against a central picture database. This will be even more accurate than the existing name matching techniques largely based on fuzzy algorithms.

4 Natural Language Processing (NLP)

Natural Language Processing (NLP) is the ability of a computer to interpret human language and take appropriate action. One of the most well-known applications of such technology is Siri® for the iPhone, although other smartphone platforms also have their own equivalent mobile app, such as Maluuba for Android. Applications for this technology can also be found in financial services.

Indeed, considering that markets are greatly influenced by news from famous sources such as central banks, magazines and recognised bloggers or Twitter users, the financial industry has already started to consider NLP as a way to automate trading strategies. Specialised software analyses pieces of news such as announcements about corporate profits (or lack thereof), a change in corporate management, a change in monetary policy from a central bank, talk of a takeover, or any kind of event that could cause a company's share price to move wildly up or down. The software leverages the information and acts upon it by selling or buying the associated financial instrument.

Insurance companies also monitor social media to detect fraud. Information collected by NLP software is cross-referenced with claim reports to detect fraudulent accident declarations, for instance.

Autonomics can be useful in back-office centres performing high volume, rules-based work

AI is expected to have a major impact on the world of work. It can complement human input in complex work requiring creativity and judgement, and will likely increasingly act as a substitute for routine labour. We are beginning to see task assistants and associate systems that, with the right interface, allow humans to delegate work to a computer.

How can robotic process automation improve process efficiency in the financial industry? Which processes are the best candidates?
Business process management and rule engine software are the basis of most current process automation initiatives. These technologies enable organisations to model their processes and have a computer orchestrate them by taking decisions on where to direct flows at subsequent steps. These technologies are already quite powerful in terms of industrialising processes and managing business rules. However, they need to be configured, are very systematic and therefore cannot adapt to change. Any situation not accounted for during configuration is an exception requiring human intervention. With those technologies, you gain efficiency by having the process—or part of it—executed by a computer, making speed and most likely cost gains.

With intelligent automation technologies, processes become increasingly intelligent. They can adapt to change and become more precise with time and with the quantity of data processed to the point where human input is needed only in very exceptional situations.

Figure 1: Possibilities and limitations of current—AI technologies compared with more traditional technics

	Possible with current technology	Possible with artificial intelligence
Technologies	**Combination of:** • Business process management software • Rule engines software	**Combination of:** • Natural language processing software • Machine learning • Machine vision
Configuration	• Pre-defined	• Dynamically self-adaptable • Use only an initial set of rules to initiate the process
Human interface	• Uses forms to collect data	• Interprets human language (verbal or written) • Interprets pictures and videos
Scope	• Can cover the whole process as long as it is modelled	• Currently limited to specific portions of specific processes
Residual human intervention to handle exceptions	• Steady over time without reconfiguration	• Decreases over time

So what are the benefits for banks and insurance companies?

Banking and insurance are becoming commoditised industries. In order to attract and retain clients, banks and insurance businesses are focusing a lot of attention on the front-end and on improving the customer experience, deriving a single view of the customer and their transaction history, and ensuring that customer's interactions with the bank are satisfactory regardless of the channel.

However, back-end operations still require a lot of human support, despite not being revenue-generation areas. There is obviously room for improvement here, especially considering that, in essence, back-office tasks do not require direct interaction with customers and can be performed more efficiently and effectively off-site or by robots.

Why have back-office processes not yet been automated? Mainly because banks and insurance companies have rarely taken the time to review their procedures and have built complex core transactional platforms. Also traditional V-model software development methodology and the software architecture onto which those legacy platforms are based do not allow for the quick introduction of new artificial intelligence technologies.

However, back-office is not the only area where intelligent automation can play an important role by helping to reduce costs and risks, and by performing more efficiently.
Machine learning software such as feedzai supports client onboarding, transaction monitoring, and fraud prevention by identifying patterns in behaviour that could indicate fraudulent payment activity. Speech recognition technology such as Fonetic is used to automate customer service telephone interactions and to verify the identity of callers.

NLP software such as FinGenius can also be used to interpret employee or client questions—asked by text or voice—about transactions, compliance, software support or any other area of expertise, with the software proposing an answer.

Artificial Intelligence Research (AIR) applies AI techniques to solve policy portfolio optimisation problems for the insurance industry using a branch of AI known as Reinforcement Learning (RL). As the examples above show, the potential business benefits of artificial intelligence technologies are much broader than the cost savings that may be implied by the term 'automation'.

They include:

- Faster actions and decisions (e.g. for fraud detection)
- Better outcomes (e.g. for portfolio optimisation)
- Greater efficiency (i.e. better use of highly skilled people or expensive equipment)
- Lower costs (e.g. reducing labour costs with automated telephone customer service)
- Greater scale (i.e. performing large-scale tasks impractical to perform manually)
- Product and service innovation (from adding new features to creating entirely new products)

Some case studies on the use of intelligent automation

Genworth Financial[1]

Automates the underwriting of Long-Term Care (LTC) and life insurance applications by relying heavily on artificial intelligence techniques. A fuzzy logic rules engine encodes the underwriter guidelines and an evolutionary algorithm optimises the engine's performance. A natural language parser is also used to improve the coverage of the underwriting system.

UBS Group AG[2]

Uses artificial intelligence for help when delivering personalised advice to the bank's wealthy clients by modelling 85 million Singaporean individuals' behavioural patterns. Fine-tuned for financial services, the technology allows Sqreem (Sequential Quantum Reduction and Extraction Model) to build a profile of an individual showing potential match-ups with different types of wealth management products.

Goldman Sachs[3]

Has entered a strategic partnership to use Kensho's real-time statistical computing and analytics technology across the firm. Kensho's intelligent computer systems are capable of answering complex financial questions posed in plain English, and in real-time, achieving speed, scale, and automation of previously human-intensive knowledge work.

BBVA[4]

Selected Fonetic to support their Trading Record Keeping Compliance solution. Other banks also use NLP software to monitor internal communication and identify potential misconduct. According to a report by the Financial Times, some banks have also begun monitoring traders' performance against the number of times they use internal communications systems in order to identify whether traders are covertly contacting clients and illegally profiting from doing so.

1 *AI Magazine Volume 27 Number 3 - Automating the Underwriting of Insurance Applications*
2 *http://www.bloomberg.com/news/2014-12-07/ubs-turns-to-artificial-intelligence-to-advise-wealthy-clients.html*
3 *http://www.prnewswire.com/news-releases/goldman-sachs-leads-15-million-investment-in-kensho-300000102.html*
4 *http://fonetic.com/customers/*

How can your organisation apply cognitive technologies?

As we have seen, the range of business problems to which intelligent automation can be applied is expanding as technologies for voice recognition, natural language processing and machine learning improve and become usable by non-specialists. These technologies are increasingly available as open source or low-cost products or cloud-based services. However, for the most part they can only replace humans in tasks peripheral to the core processing platform.

For back-office operation, banks and insurance companies have very few options; they can only replace or heavily overhaul their core legacy platform. Both alternatives are long-term propositions but are necessary to ensure the organisation benefits from RPA at the core of its transactional platform.

If they choose to replace it, they should carefully select an appropriate solution that can be easily integrated with RPA technologies using some kind of service layer. In order to benefit as much as possible from the new system as regards automation, they will also have to adapt the processes to it rather than adapting the new system to the old way of working.

If they choose to overhaul it, they should componentise the architecture, factorise the components, review the processes, isolate, simplify and reduce the transactional platform to its core, and introduce a secure yet high-performance service layer to integrate it with peripheral systems and RPA technologies.

RPA technologies can and will be used in a lot of different process areas but there most probably will still be domains where software cannot replace humans, i.e. areas where a significant amount of creativity or intelligence are required, such as deal structuring. When regulations require that a human be in control of the financial review process, for instance, RPA can assist humans but will not take over. Obviously, RPA will not totally replace humans, as clients will be driven away if they can only interact with machines - or perhaps it is simply a question of attitudes and time.

The potential business benefits of artificial intelligence technologies are much broader than the cost savings that may be implied by the term 'automation'

Conclusion

- Automation using artificial intelligence is made possible by the combination of new types of software and recent breakthroughs in computing power
- Machine vision, speech recognition, natural language processing, machine learning and autonomics technologies can be combined to automate processes by interpreting facts, taking decisions and adapting to change
- These technologies are just beginning to emerge but are already available to replace humans in various tasks
- Business benefits are much broader than cost savings and include better use of highly skilled people or expensive equipment, faster actions and decisions, better outcomes, product and service innovation, etc.
- To benefit as much as possible from this technology, front to back, legacy core platforms will likely need to be overhauled or even replaced

Mastering the distribution chain and related operational challenges

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The success of the UCITS product, which has become a worldwide, widely recognised brand, is a result of its high quality, strong investor protection and clear regulatory structuring. These features paved the way for UCITS funds to be distributed globally. The recently implemented AIFMD follows on from this and lays the groundwork for alternative vehicles and their cross-border distribution.

There is no doubt that one of the key elements of successful distribution is having a solid distribution network. The dependency of asset management firms on these counterparties is considerable since they are the main channel through which the target investors can be reached. Hence, the initial selection of distributors and the ongoing monitoring of their activities is of vital importance.

Furthermore, the risks associated with distribution in conjunction with applicable regulatory requirements and oversight of delegated functions cannot be neglected, and it is worthwhile to have a closer look at these challenges and the means required to address them.

This article focuses on the due diligence aspects of distribution and the diligence required of distribution delegates.

The burden of oversight

Typically, distribution oversight is associated with Anti-Money Laundering (AML) and Counter Terrorism Financing (CTF) requirements for end investors, while monitoring the counterparties bridging the gap between the investment fund and the end investor is often neglected, if not forgotten. It is important, therefore, to put in place adequate measures to ensure distribution does indeed enable commercial success, while at the same time managing its risks.

CSSF circular 12/546 of 24 October 2012 is very clear about the obligation a management company (or a self-managed SICAV) has to monitor its delegates on an ongoing basis, including the distribution network. Moreover, it also stipulates that management companies must actually have a deep understanding on how and by whom their funds are being sold.

This sounds easier than it is. In many cases, management companies appoint or act as a global distributor, who then in turn appoints sub-distributors. However, the management company's monitoring does not stop at the global distributor level.

Roles and responsibilities for the due diligence of sub-distributors can certainly be entrusted to the global distributor. But are these requirements clear, and does the management company ensure they are actually applied if the global distribution function is delegated? How does, for example, a management company make sure that throughout the distribution chain, the distribution licenses given to a particular fund are actually complied with? Can it really be sure that an Alternative Investment Fund not registered for sale to retail investors in France, for example, is definitely not sold to retail investors in France?

In fact, distribution and related due diligence tasks are much more of an operational challenge than a legal or compliance issue. The latter two set the rules and guiding principles, but taking the step down to the machine room actually shows how risks are managed and the workload optimised.

As a matter of fact, the fund distribution model and the wide variety of actors it involves both have a considerable impact on distribution, irrespective of whether we are looking at an asset manager selling its own products to the market, or a Registrar and Transfer Agent that handles daily transactions of shares and units of investment funds.

How to address the operational challenges

'Know and monitor your delegates' is a leading theme that is at the core of management company activities and at the top of regulators' agenda. As the distribution network grows and becomes more geographically spread, companies are facing multiple challenges to effectively monitor all the entities.

We will consider the following holistic four-layer approach to mastering operational specificities, embracing delegates' cultural specificities and ensuring compliance with local and global rules and regulations in order to meet the expected service level requirements.

Distribution dynamics and associated risks

COUNTERPARTY RISK

- Financial soundness
- Ownership structure
- License type
- Market share and book of business
- Quality of service

COUNTRY & REGULATORY RISK

- Political stability
- Supervisory quality
- Economic and business environment
- Local marketing rules

DISTRIBUTION CHANNEL RISK

- Product misselling
- AML and CTF policies
- Infrastructure stability
- Remuneration policies
- Client classification & data protection

REPUTATIONAL RISK

- Brand perception
- Market position
- Regulatory fines

The four dimensions address different dimensions of distribution, and management companies' risk appetite and monitoring requirements shall be defined separately for each layer.

From concept to implementation

Conducting initial and ongoing due diligence on a large number of distributors can be a time-consuming administrative task. One can estimate that, on average, a full-time employee can cover the due diligence of 200 distributors throughout the year, and reports progress and issues to the conducting officers.

Our experience clearly shows that due diligence has a lot of room for optimisation. Many management companies do not actually apply a risk-based approach to due diligence, nor do they set priorities as for the extent of the due diligence. Just sending out the full due diligence questionnaire again to distributors might seem like the best way, but does this make sense in all cases, and who evaluates the responses afterwards?

Does it make sense to treat a large EU banking group in the same way as a small distributor in a non-equivalent country?
These examples seem easy and straightforward on the surface. In reality, however, we observe quite the opposite.

Conducting risk-based and 'smart' due diligence saves on workload, manages risks, and spares precious resources by 50% (on average), and the benefits do not stop there.

Many organisations do not set clear rules on who—and which function—actually owns distribution. The more parties and responsibilities are involved, the more coordination is needed (and the weaker the actual monitoring task over the distribution network usually becomes).

We have shown in the preceding graph a four-dimensional approach to distribution. But do asset managers and asset servicers actually face the same types of operational challenges in relation to distribution? To a large extent they do, by being complementary and leaving some ground for synergies, especially in larger groups that combine both service types under a single, corporate roof.

Asset managers and asset servicers: key priorities to keep distribution under control

Asset managers	Asset servicers
Risk Intelligent approach for selecting and monitoring distributors	Strong compliance monitoring process for distributors and investor instructions
Clear governance encompassing the distribution process and the network of distributors, as well as distributor selection and monitoring (incl. sub-delegates)	Focused relationship management and communication platform with key actors within the distribution chain
Complete service documentation governing each distributor relationship	Operational documents defining the roles and responsibilities, as well as relevant KPIs
Definition of scope of distributor marketing activities (website content, distributor's marketing materials, promotion of asset manager's brand name)	Proper identification of underlying investors and leveraging on initial controls performed by the distributor
Clear and up-to-date distribution matrix	Clear overview of the asset manager's counterparties
Know your distributor: document gathering, handling, storing and maintenance	
Capacity planning of resources dedicated to monitoring distribution	

Consider revisiting your operating model

The use of automated solutions and shared resources dedicated to the due diligence process may significantly reduce the costs of due diligence on third parties and increase efficiency. We believe the time has come to bring this activity to a global level within organisations and look for opportunities to optimise tasks.

Capacity planning combined with a pragmatic approach and the right tools will ease the burden imposed on asset management companies and asset servicers. Further consolidation of the process within larger groups by building up a centre of expertise supported by an adequate data management system can maximise the positive results while keeping costs low.

It is only a matter of time before we see specialised entities emerging, providing due diligence services that allow for complete and large-scale outsourcing of the process. The ultimate responsibility for any delegated activities, however, will always remain with the management company.

Distribution and the related monitoring processes, networks and delegates require more attention, and although they do receive it, this is not always in an optimal and optimised way. Distribution due diligence is not only a synonym of AML and CTF obligations even though it is often perceived as such.

It is time to embrace distribution and its complexities and turn them into an advantage. Hence, defining a robust, flexible and efficient process will help to leverage distribution, while ensuring the necessary compliance with the regulatory environment.

Business Process Outsourcing on the rise in wealth management

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Business Process Outsourcing (BPO) is at the top of the agenda of many COOs of wealth management institutions—defining the scope, identifying the right model, building the case and assessing the opportunity.

According to a recent Deloitte European survey[1], the focus of wealth management institutions is becoming increasingly customer-oriented: 79% of respondents agreed that their focus is on client relationships rather than on executing back office processes and activities in-house.

Thus, COOs are now looking beyond how well they can run their back office processes and activities in-house. The issue to be considered is whether managing these functions internally is part of the core strategy of the business, or whether a business process outsourcing solution would be appropriate for the majority of operations and IT or for certain processes.

Recent estimates and market analysis indicate that around 30%[2] of Luxembourg wealth management institutions are prepared to consider outsourcing operations and IT in the future. Business Process Outsourcing is thus about to become one of the key topics on the agenda of many COOs.

On the supply side, the BPO solutions currently offered in Luxembourg remain very limited, with only a few players providing such services for wealth management institutions. The relatively low level of maturity will need to be taken into account when identifying the right BPO model.

Despite the numerous advantages of BPO, this opportunity must be carefully assessed, and the right model needs to be selected to ensure that BPO meets the expectations of your organisation.

In this article we will look at the activities that can be outsourced, and those that should be kept within the firm. We will then describe the different models a COO can consider for these activities, look at how to build the case, and finally, suggest how to assess the opportunity.

Defining the scope—should you outsource all processes or keep them all in-house?

There is no easy answer. A key element of a BPO project is to identify the activities you want to outsource, and those that should be retained internally. Identifying the right scope of the project is essential to all the steps that will follow and above all to the success of the project.

1 Wealth management and private banking—connecting with clients and reinventing the value proposition, Deloitte, Efma 2015
2 Deloitte market analysis 2014

Figure 1: Activity analysis and defining the scope

An analysis of the level of differentiation and business specificity of all the activities of your organisation that may come under the scope of a BPO solution is required. The activities can then be split into two main categories:

1. **Strategic activities**—these activities are differentiating and mainly business-specific. Generally, these are the core competencies of the wealth management institution and have a strategic significance for the organisation. Business relationship entry, digital channels or portfolio management are typical examples of the strategic activities of wealth management institutions. Strategic activities should always be kept in-house, and not be part of the outsourcing.
2. **Generic activities**—these activities are non-core and non-differentiating for the organisation. For a wealth management institution, these may be data management and pricing, for example, or IT services. An outsourcing solution may be an option for generic activities.

If you consider Business Process Outsourcing for your organisation, you should ensure that only generic activities are included in the scope.
Failure to properly define the project scope will make your organisation overly dependent on the BPO provider. Furthermore, your organisation risks losing its competitive advantage, as its business processes will be shared with your potential competitors. It is crucial to keep full control over core/strategic activities.

For example, if one of the main differentiators of a mid to large wealth management institution is its leading position in digital innovation, it should not outsource any digital strategy-related activity, in order to protect its competitive advantage. However, smaller institutions that are unable to keep pace with digital developments might opt for full outsourcing of such activity, thereby gaining access to leading-edge technology without having to invest in it themselves.

Identifying the right model—there is no 'one size fits all' BPO approach and the model you select will ultimately impact the future of your organisation

Once you have performed your activity analysis, the various transformation options can be considered, depending on the type of your activities.

Although outsourcing is not recommended for strategic activities, if your objective is to improve quality and efficiency, you may decide to:

1. Transform the activity locally, e.g. by renovating an existing platform
2. Transform the activity by creating a Shared Services Centre (SSC) or Centre of Excellence (CoE) at group level to bundle activities and share best practice

If you decide to investigate the BPO options for your generic activities, you have the choice between two basic strategic options:

1. **Transformational outsourcing—the 'divest completely' approach**
   In this case, the activities identified as being best managed externally are outsourced permanently to a BPO provider that will take care of the transition and transformation phases.
   The key requirement for this option is a proven, experienced service provider. Unfortunately, a very limited number of such providers are currently available to large wealth management institutions.
2. **The creation of a joint venture as a first step towards outsourcing—but retaining a degree of control**
   In this alternative option to the straightforward form of transformational outsourcing, an organisation can create a joint venture with a partner that has the requisite knowledge to manage BPO activities. The organisation can decide to stay in the joint venture and transform a cost centre into a profit centre or disengage at a certain moment in time.

The main advantage of the creation of a joint venture is that you share the risks and keep control. Both parties commit to the success of the BPO project. If the BPO deal fails to meet the initial expectations, both sides lose, while a positive performance will bring about a win-win situation. For the wealth management institution, the joint venture may even represent an additional source of revenue. Furthermore, this option enables the wealth management institution to keep partial control over the outsourced business processes in the short, medium or in the long run. As resources will be provided from both sides, this is also a major opportunity for a wealth management institution to mitigate the HR impact of a BPO project.

The joint venture option is especially relevant when the provider market has a low level of maturity, as it allows the wealth management institution to retain control, manage risks more effectively and gain first-mover advantage.
In any event, a cost-benefit analysis (qualitative and quantitative) should be performed to identify whether a joint venture or transformational outsourcing approach is the right solution for the organisation.

Figure 2: Transformation models

Building the case for BPO—the business case is a crucial element

The project scope will serve as a baseline for the business case you will need to build to assess the financial advantages of BPO. It should be clearly defined and documented to ensure a proper and common baseline.

To build the business case, two aspects will be evaluated: transformation costs and the BPO running costs/savings.

To assess the transformation costs, a detailed analysis of the technology, migration, legal, change management and HR costs is required. The transformation costs have a significant impact on the net present value of the overall project.

For the assessment of the running costs/savings, clear visibility on the organisation's costs, volumes and structure, as well as appropriate forecasts, is key. In addition, the main levers for variable and fixed costs should be identified and the impact of additional volumes, new clients, products, etc. on the current variable and fixed cost base should be evaluated. This is often more challenging than expected.

Based on this assessment and the project scope, the areas that will be impacted by the BPO project can be identified. This will allow the potential operational cost savings to be identified and compared with the cost of the BPO project. The resources needed to manage governance aspects and the relationship with the provider—which represents an additional overhead—also need to be taken into account.

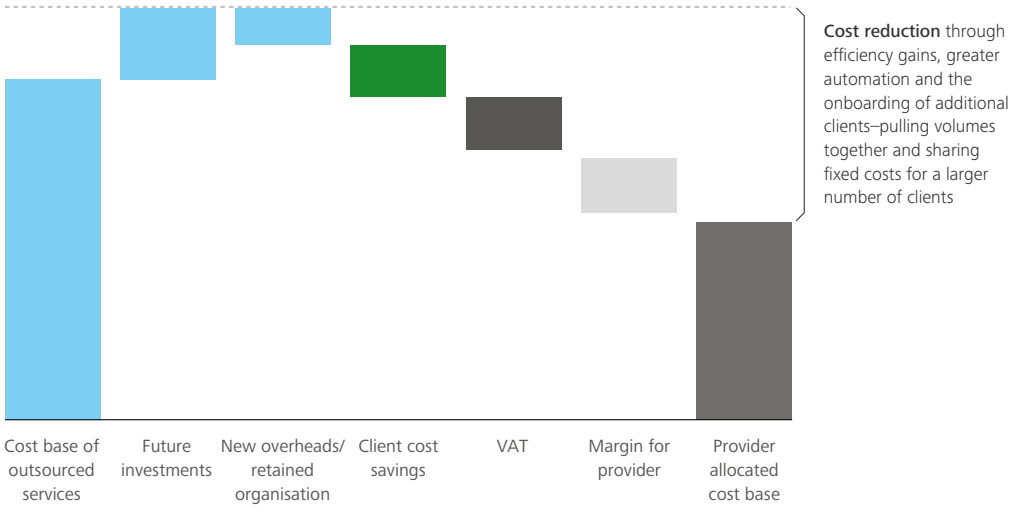
The business case must be made in order to assess the BPO opportunity. A solid business case requires that you (non-exhaustive list):

- Clearly define and document the project scope and assumptions
- Ensure budgets (and the business case) have scope and time contingencies
- Integrate specific provisions for unclear elements
- Formalise commitments from the beginning and link them to assumptions

Depending on the starting position, creating a cost advantage for the client and a margin for the provider can be challenging. To ensure the attractiveness of the BPO deal for the client, the BPO provider needs to significantly reduce the client's current costs. This can be achieved mainly through efficiency gains, greater automation and the onboarding of additional clients—pulling volumes together and sharing fixed costs for a larger number of clients. The provider will need to take into account its actual costs, its margin and the VAT to be applied in its pricing model. The difference between the price and internal costs will represent the cost savings of the client.

The avoidance of potential future investments will also need to be considered by the client when evaluating the BPO opportunity.

Figure 3: Cost structure in business process outsourcing



Assessing the opportunity—business process outsourcing is about more than cost reduction

However, BPO is not only about cost reduction—it is about strategic impact. The business case is one element that will enable you to make the right decision for your organisation. Other objectives and aspirations, such as increasing flexibility or service quality have to be taken into account when deciding whether BPO is the right solution for your organisation. Furthermore, you will need to assess other operational, HR, legal regulatory and tax implications to conclude whether BPO is an opportunity you should take forward.

If you decide to embark on this path, you will be at the beginning of a long journey. The next challenge will be to identify the right provider, so that you can plan all the underlying aspects of the transition and transformation in detail.

Post-Merger Integration

How to achieve quick wins and successful long-term strategy at the same time?

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Following the merger between Fortis and BNP Paribas in 2009, the newly formed entity BGL BNP Paribas S.A. - carried out a very important merger integration programme involving the business and technical platforms of the former BGL and BNP Paribas entities in Luxembourg.

From 2010 to 2012, different projects within this large programme were designed to support the integration of BNP Paribas and BGL. Generally speaking, the strategy of the programme relied on 4 principles:

1. The integration effort should be transparent for the customers of the new entity
2. Organise the commercial business lines of BGL BNP Paribas along the BNP Paribas model: Retail Banking (RB), Wealth Management (WM) and Corporate and Investment Banking (CIB)
3. The technical part of the merger had to go 'live' in a 'big bang' modus (on a three-day holiday weekend)
4. An extensive re-use of existing platforms, which in this case meant pre-existing BGL platforms (with the notable exception of the CIB business line)

To illustrate the complexity and potential pitfalls of the technical part of a merger, we focused on the programme coordination team (CIT) and CIB projects of the programme, largely because the latter proved to be the most complex to implement given the short timeframe.

Time over money

Post-merger integration risks are related to uncertainty and resistance to change. Involvement of the whole organisation through concrete actions will make the process quicker and less painful as each stakeholder is called for contribution. From a 'change management' perspective, it is essential to keep integration efforts in a very ambitious time box. While a complete analysis and design phase is mandatory, overly extending a programme rollout can hinder people buying in, which again could balloon costs, especially if integration teams are frequently changed during the project. In this sense, it is good practise to prefer 'time over money'.

The tactical approach was to identify projects that could result in quick wins which build up morale and the future operating backbone of the bank. For the CIB business line, this meant migrating BGL's treasury from the legacy infrastructure to the CIB BNP Paribas Group platforms in September 2010. Like for the other business lines and functions, this was followed by the global 'fold-in', i.e. the complete integration of both BGL and BNP Paribas Luxembourg on 1st November of the same year.

The CIT acted as the single point of contact among all stakeholders of the various projects and ensured there was no gap in the whole chain of tasks to be carried out

Achieving a quick integration means being well-prepared, involving the right people from both organisations in core business tasks (communicating, planning, decision-making and assembling) and having a strong dedicated core integration team.

Operational rollout should be championed by strong leaders within both organisations, i.e. key resources from both entities who were appointed to run the integration programme. Of course, direct access to the top management is of paramount importance in defining the operational and business strategy as well as the way/phases through which to achieve it.

Those managers have the overall operational responsibility for appointing the key stakeholders/experts who will support them on the project, reviewing and managing time schedules, defining priorities, initiating projects and change management, monitoring the implementation of planned activities and handling post-merger related issues as they arise.

The local governance of this large programme was built on a classical programme management structure:

- A local integration committee functioned as the main steering body on all local pre- & post-merger efforts (Luxembourg integration committee)
- A programme steering committee *(Comité de Pilotage)* governed all the technical and operational aspects of the merger programme. It mainly supervised the GAP bridging projects (IT projects to adapt target IT system) and data migration projects (projects aiming to realise the fold-in)
- The Luxembourg integration governance reported to the BNP Paribas Group Integration Structure steered by a group integration committee which followed all integration programmes in each country/domain
- Local operational committees on the various projects of the programme managed day-to-day decisions on project level
- The merger strategy was based on a 'big bang' approach in three steps:
    1. Migration of the customer database and contracts and management of intermediate period (as the databases were migrated one month before the balance sheet)
    2. Migration of the balance sheet, e.g. accounting data (customer products, positions and bank's positions)
    3. After-care period to follow up pending issues or post-fold-in activities

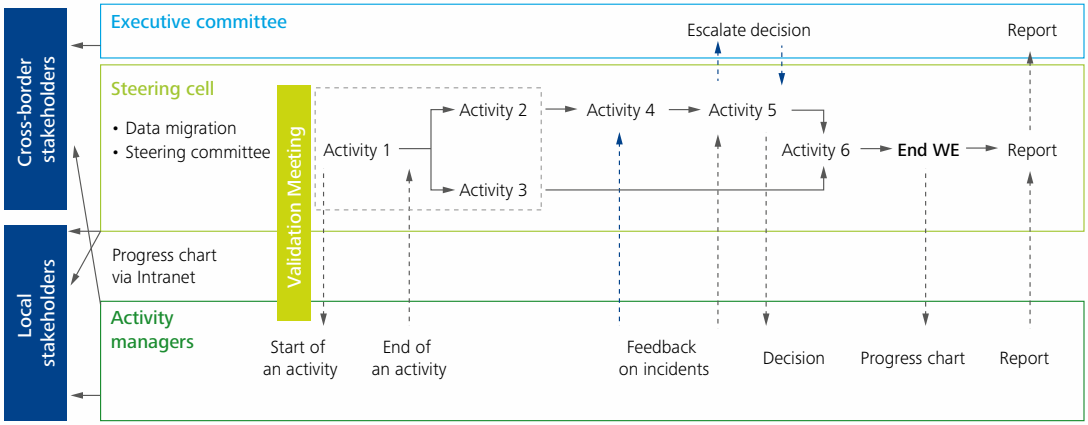
To manage and pilot all these works consistently, from an end-to-end point of view, a Central Migration Team (*Cellule de Pilotage*) was put in place to monitor and pilot the sequence of project go-lives during the merger weekend. The CIT acted as the single point of contact among all stakeholders of the various projects and ensured there was no gap in the whole chain of tasks to be carried out. The CIT verified and challenged the migration strategy for each product and item, and checked if each migration project took into account all end-to-end aspects, more precisely the:

- Coverage of total scope of the migrated balance sheet (take into account all customers and all concerned products)
- Product mapping: for each data type or product, verification of the existence of a similar product/ item within the target IT system. In case of GAPs, the team assured that a GAP bridging project took into account the adaptation of the target IT system in order to secure its migration. It was not allowed to keep items in the original system or to change the customer conditions in its disfavour
- Customer data mapping: specification of customer data (addresses) and contracts (terms & conditions) database to assure that the bank will be able to respect all the contract items after the migration
- Operational data and accounting data
- Impact on treasury positions
- Respect of legal constraints (e.g. timing of legal merger important for the planning)

Figure 1

Planning	Under responsibility	Purpose
Planning central (consolidation)	CIT	ROAD-MAP including all migration activities and its interdependencies to manage the following items: • The duration of each activity • The timing for each activity • The responsible person of each execution • The global elapse time of the migration • The logistics needed to support all works
Planning by project	Migration/project managers	Each project has its own detailed tasks planning ITs global execution tasks (activities) are aggregated in the central planning

Figure 2



Key success factors

- **The project team location:** all people involved who are part of the integration management have to work physically in the same office for the duration of the project implementation, testing and Go-Live phases. This is an important consideration and eases communication pertaining to task start and completion and towards the resolution of any issues that may arise
- **The project team communication and coordination:**
  - Tasks are centrally managed by the CIT coordination team who build up a bank-wide micro plan as the definitive task list in a consistent task scheduler. The schedule tool takes into account all technical and operational constraints in order to execute the migration activities in a consistent way (mange order of all IT, manual and control process steps)
  - The CIT team acted as a control tower on an airport. Only a formal GO given by the CIT team could give the authorisation to execute, hold or restart tasks. CIT was in charge of officially reporting task completion, calculation of total elapsed time and evaluation of the execution quality (KPI & control report after completion of each task). An official and formal escalation process was defined to use if alerts appeared (e.g. non-respect of timing, lack of quality, etc.). All these aspects were trained three times in a 'dress rehearsal mode'

As a support, a dedicated scheduling tool was implemented to support the work of the CIT—the Web Action Inventory Follow-up (WAIF)—whose role was to gather all the tasks required for the operational 'fold-in'. This inventory was fed by the CIT during the preparation phase of the project based on the detailed planning defined by all the streams within the bank (Retail, Wealth Management, Corporate and Investment Banking, Operations, HR, etc.). This planning assured a consistent migration execution process, mainly in order to sort the different IT jobs, manual interventions and controls. It also put in place 'roll-back' security mechanisms and fixed the latest possible 'point of no return'.

This tool did help make interdependencies apparent by linking all activities required for the integration together. It helped to share the reviews and corrective action after dry runs.

This finally allowed to bridge gaps and identified potential grey areas or weaknesses in the whole integration process, and helped the management to balance competing interests and objectives.

Long-term vision

- Tool for defining, testing and monitoring operational integration plans
- A global plan is deployed for each migration, led by data migration coordinators (based on identified activities)
- Detailed planning (of activities) are managed by each project

Employee buy-in enables the transition from the intense pressure of the quick wins period to the time for a sanity check and consolidation of structural solutions

Most managers hope that the integration will be carried out as quickly as possible so that they can focus completely on the operational business. However, post-merger integration also needs time to strengthen the newly defined operating model, fine-tune the systems and optimise the new organisation.

Measuring and communicating the integration's implementation and its milestone successes are also crucial to the long-term vision and strategy of the bank. By keeping these results visible, employees can experience the effectiveness of their collective efforts.

Employee buy-in enables the transition from the intense pressure of the quick wins period to the time for a sanity check and consolidation of structural solutions.

Based on the interviews of project and programme managers involved in 2010 in the integration projects for the 'fold-in' of BGL BNP Paribas and complemented by the bank industrial plan, additional projects were initiated in 2011 and 2012 to complete the post-merger integration process and enable more operational efficiencies, i.e. alignment of processes as well as front and back-office platforms with the group standards.

Conclusion

Those projects aimed at simplifying the operating model based on a harmonisation of platforms and a mutualisation of front and back-office teams in order to serve all the clients of the bank thanks to a simplified and integrated architecture.

- Quick operational integration is a requirement for buy-in. Involvement of each party is key (Business, Operations, Finance, Treasury). Terminology consistency is also very important, as the same word does not always mean exactly the same from one entity to another or in different departments
- Strong and consistent governance with clear rules needs to steer all activities
- Long-term vision and clear industrial plan need to be brought at the same time to give people visibility and confidence in the future operating model
- The buy-in of operational insiders is key. As the actual users of the existing applications and procedures, they will bring the technical expertise to the future organisation. Ideally, they should participate in the definition of the target operating model
- Senior-level leaders should encourage cross-organisational reflections and establish 'one company' measurement processes to minimise the natural tendency to stay cloistered within functional silos

Sources:
[Materials from BGL BNP Paribas from the Integration Project]

Transforming the HR function through better business partnering

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HR has a mission: to be 'high impact'. A new operating model for HR is emerging

What is holding HR back from making the impact the business expects? Three main factors have come out of research carried out by Bersin by Deloitte and our experiences with complex clients in the field:

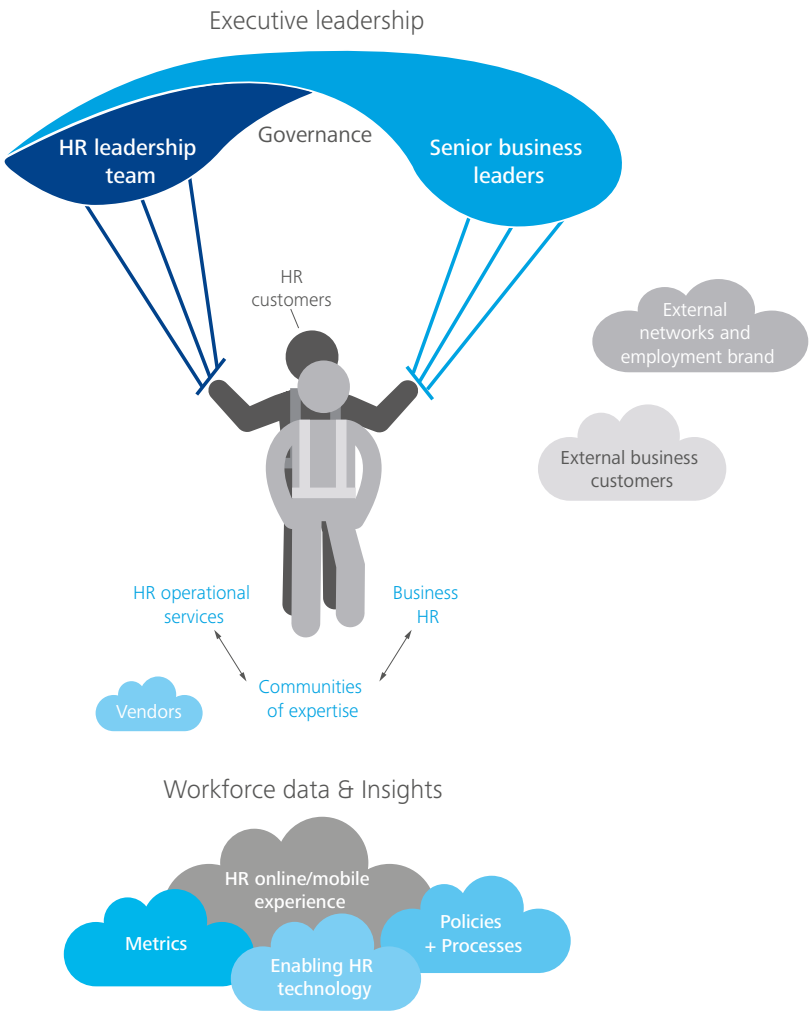
1. The traditional definition of the business HR role no longer meets the business and workforce challenges of the 21st century. Business leaders and sometimes the HR function itself have a dated view of HR's strategic and business potential
2. Business HR roles have often been left to evolve organically in the hope of becoming more strategic merely by centralising some activities within a traditional HR administrative group and implementing HR technology. Changes of this nature, or the use of titles such as HR Business Partner have not provided business HR teams with the tools, training or infrastructure to attain the elusive goal of 'getting strategic'
3. Specifically in Luxembourg, the typically small size of organisations means that local administrative roles are combined with a more strategic role, which further undermines the job content of the business HR professional

Despite the best of intentions, in many organisations today's HR 'business partners' are yesterday's 'generalists', without much more than a new title, some new automation, and the removal of some administrative work. HR leaders tell us they still find it difficult to drive new outcomes when the HR professionals closest to the business are still doing the same things as before.

One of the major shifts involved in implementing the Deloitte High-Impact HR (HIHR) Operating Model is taking the role of business HR to the next level—creating expert consultants close to the business. Yet, despite the widespread adoption of a business-focused HR role, organisations indicate that they are not achieving the anticipated impact and return on investment from the change. In fact, a large portion of the HR work continues to be administrative and transactional in nature.

The HIHR Operating Model places HR customers in the centre, with business HR positioned closest to the customer to drive strategic business objectives and enhance business performance by working in partnership with leaders of people and the business, applying increased HR agility, flexibility, coordination, networking and alignment.

Figure 1



Business HR roles

New era. New challenges. New business HR role.

Two significant changes differentiate the role of business HR in the High-Impact model:

- First, business HR roles must operate day-to-day as part of the business leadership team and take responsibility for driving and owning business outcomes (Figure 2)

  In earlier models, the HR business partner was designed and positioned to be an 'outside' role looking to 'partner' with the business. In High-Impact HR, business HR roles are embedded within the business and work directly with line leaders. Business HR professionals are trained and rewarded to meet business objectives and work on the business agenda. They not only service the business, they also take ownership of real business issues as collaborative members of the business leadership team. In this way, they identify issues, diagnose root causes, provide insights, offer recommendations and deliver solutions to solve some of the most pressing business objectives through the talent lens. Their focus on the business-specific people challenges in the organisation creates a healthy tension or balance between them and the objectives and roles of the HR 'communities of expertise', which push a more standardised, company-wide agenda

- Second, achieving High-Impact HR through business HR roles requires a continuum of business HR roles, thinking more broadly than in the past. Some models suggest establishing 'HR business partners' as the one role that services the business. Our research and experience shows that actually there are two: one to operate on a strategic level and another to operate as an advisor tasked with designing and implementing solutions, collaborating with HR shared services and other specialists available.

Depending on the complexity of the HR service delivery model in a company, we may see a larger number of sub-roles emerging around the business HR job family. Examples can be found in recruitment, where an organisation can have dedicated recruiters embedded in the business, or in training, where specialised development consultants are present within the firm.

- In the High-Impact HR Operating Model, business HR is divided into two primary roles: HR Business Partners and HR Business Advisors. The HR Business Partner primarily focuses on strategic business challenges, while the HR Business Advisor mainly looks after business manager support and development, and the coordination of local HR service delivery. Both roles are closely connected to the Communities of Expertise (CoE) and HR operational services. Together, these two business HR roles are better positioned to provide value to the business by more realistically positioning business HR to provide the wide range of strategic services, consultation and locally-based delivery that businesses require.

Figure 2

In earlier models, the HR business partner was designed and positioned to be an 'outside' role looking to 'partner' with the business

The HR Business Advisor focuses on local business operations with an eye to manager development, localised solutions and support

New challenges, new work

Experience shows that business HR can have the greatest impact on business results by:

- Working with line leadership to understand business and talent pressures in detail
- Translating the business strategy into a business-specific HR approach
- Shaping global projects and initiatives that are normally CoE driven to address business- specific needs
- Providing data-driven people and organisational insights for decision-making
- Developing and implementing a workforce strategy
- Expanding managers' leadership and management capabilities
- Creating harmonisation and consistency on how HR is delivered to the business at global level

The HR Business Partner works with business leaders and remains laser-focused on strategic business objectives and the most critical business challenges, providing macro-level solutions that have business-wide applications. The HR Business Advisor focuses on local business operations with an eye to manager development, localised solutions and support.

Working together, they form a stronger Business HR team which:

- Creates value as human capital experts implement people strategies and solutions to drive business-specific strategy and objectives
- Coaches and develops leaders and managers to deliver people management capabilities
- Diagnoses and solves workforce business problems and challenges
- Leads initiatives that build trust, employee engagement, leadership effectiveness and workforce productivity
- Mitigates organisational risk and increases business and HR process compliance
- Accesses and analyses workforce data to support people insights and recommendations
- Scans and understands the business environment, sharing insights and trends from the business with HR CoEs and HR operational services
- Partners with CoEs to implement workable business-oriented solutions that meet the distinctive challenges and needs of the business
- Collaborates with HR operational services to provide high levels of service delivery

A new skills profile

A refreshed set of knowledge, skills and capabilities is required for these professionals to thrive; the HR Business Partner has deep expertise in talent strategy, organisational effectiveness, data analysis and business acumen, whereas the HR Business Advisor has functional and broad knowledge of HR practices. Dave Ulrich laid the original foundation for the HR Business Partner skill set, proposing that the HR Business Partner capabilities include: Credible Activist, Cultural Steward, Talent Manager/Organisational Designer, Strategy Architect, Business Ally and Operational Executor.[1] Many of these capabilities are still relevant today, but we have learned that they need to evolve to meet 21st century needs. Business HR activities require enhanced skills that include business acumen, data analysis, relationship building, consulting, project management, systems thinking, change management, coaching and collaboration.

1 *Ulrich, D, et al (2007), "Human Resource Competencies: Responding to Increased Expectations", Wiley Periodicals, Wiley InterScience www.interscience.wiley.com*

Beyond enhancing skills, there is a new way of working for business HR to deliver the value of High-Impact HR:

- **Driving employee and leadership engagement** remains as important as ever. With long-standing studies having proven the link between employee job satisfaction and tenure and customer satisfaction, engagement often remains an elusive goal and, therefore, a critical focus for business HR today and in the future
- **Identifying and growing organisation-specific employee skills** that drive distinct competitive advantage for the organisation in its marketplace and support the continued growth of employee capabilities
- **Moving beyond the four walls of HR and the organisation** to collaborate with business and other support functions, provides insight and understanding around the talent needs and opportunities for a business. Furthermore, connecting and working with professional business organisations, industry associations and the communities local to a business provides a broader market and competitive perspective, creating opportunity for business HR to better meet the complex talent needs of the organisation and enhance its differentiation from competitors
- **Working with a multi-generational workplace** to drive practice approaches to workforce management and work environment design that integrate and balance the often competing needs of the business and workforce
- **Applying social savvy** to harness the power of social tools (both technology and traditional networking) as part of the day-to-day work of helping employees to better connect with each other, their customers and the marketplace
- **Incubating a culture of innovation and customer satisfaction** by driving recognition mechanisms and opportunities for employees across functions to bring forward ideas targeted towards improving products/services, the customer experience and the workplace itself

- **Driving the right level of localisation** for content and programmes required to achieve the delicate balance between business and enterprise needs. Fully standard for the enterprise is rarely right in an era of mass customisation; however, in most cases, there is no longer any need for business HR to create fully customised policies, programmes, processes and technologies under the banner of 'meeting business needs'
- **Equipping the organisation with strong project management capabilities.** As companies move from a static organisation to a more agile, project-driven structure, there is an expectation that HR will adopt a similar model. The project management skills will determine how quickly HR can reinvent itself and adapt to changing internal and external factors

These new and emerging capabilities and skills are not only being identified from our client experiences; they have also been recognised by thought leaders[2,3]. For those HR organisations looking to innovate and refresh, this new human capital skill profile is a reality today.

Implementation of business HR

Getting it right the first time

The High-Impact HR Operating Model roles for business HR are a next-level evolution, building on the work guided by previous models and research that many organisations have already undertaken. Establishing and enhancing business HR capabilities to achieve High-Impact HR is not an overnight activity. In many organisations it will take a significant effort to create the necessary capabilities, experiences and development opportunities. Moreover, organisations need to consider refreshing recruiting strategies to attract the right type of business HR talent and internal development programmes to build the capability of the new skill sets that are required.

Redefining business HR roles is an excellent start, however, to help maximise the impact, the business HR roles need to be implemented appropriately. Based on lessons learned and diagnostics from multiple implementations, there are activities an organisation can undertake to develop and deploy HR Business Partner and HR Business Advisor roles. These activities include:

1. Gaining executive sponsorship and driving change management throughout the business and existing HR organisation
2. Getting beyond simply shifting high volume tactical and administrative tasks to traditional shared services and broadening HR operational services to better provide specialised support across processes and allow even greater focus by business HR on truly strategic, business- impacting activities. Having clearly identified business HR roles is only possible if the HR administration role embedded in the business is also plainly defined

2 Boudreau, J, et al (2014), 'What is the Future of HR', http://www.workforce.com/articles/20179-what-is-the-future-of-hr
3 Ulrich, D, et al, J, et al (2012), 'HR from the Outside In Six Competencies for the Future of Human Resources', New York, The McGraw-Hill Companies

3. Fostering the meaningful involvement of business HR in initiatives from strategy through design as participants in HR Communities of Expertise
4. Increasing adoption of self-service tools to empower employees and managers and motivating business HR to coach managers, while generally move away from involvement in day-to-day administrative interaction with employees
5. Participating in development programmes related to business acumen, data analytics, consulting skills, workforce productivity, leadership development, change management and organisation effectiveness
6. Building a compensation and reward system based on the updated job profiles that is aligned with key success metrics
7. Ensuring a clear governance structure that allows the business HR function to provide feedback to other HR functions, as these represent the real voice of the HR programme customer
8. Optimising and formalising interactions or interfaces between the business HR function and the rest of the HR organisation

Companies that have undertaken activities such as those described above are better positioned to deliver High-Impact HR. Today's HR generalists cannot become tomorrow's HR Business Partners and HR Business Advisors without real organisational change. Organisations must invest time and resources in redefining roles, implementing the required infrastructure, changing their organisational structure, hiring the right kind of talent, providing the enabling tools and developing employees.

The journey is not over

The HR function has been on an evolutionary journey to create more business value, but the journey is not over. It is time to take the business HR job family to the next level.

If HR is to meet new business expectations and achieve High-Impact HR for their organisations, we must create a new mindset for the whole of HR—and the role of business HR is instrumental in this objective. The business of HR must simply become the business, and the historical HR Business Partner concept that brought us to where we are today will not sustain us tomorrow. The business HR of the future is positioned to turn business challenges into tangible results—becoming the credible, business-oriented solution provider and trusted advisor that organisations require.

Redefining business HR roles is an excellent start, however, to help maximise the impact, the business HR roles need to be implemented appropriately

Sources:

Harris, S (2011), *"Creating a strategic and business-oriented HR business partner"*, Bersin by Deloitte, Research Bulletin 2011 6(10)

Geller, J, et al (2013), *"Resetting Horizons: Human Capital Report Trends 2013"*, New York, Deloitte

Major HR challenges in FSI for 2015

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The financial services industry is facing numerous talent challenges: what should CHROs focus on in 2015 to maximise their business impact? Deloitte's research on key HR trends for 2015 suggests that talent acquisition, employee engagement and corporate culture transition should be at the top of the agenda.

Over the last few years, the financial sector has experienced significant transformations pressing CHROs to face up to strategic talent challenges, in particular in the areas of talent acquisition, employee engagement and corporate culture transition.

Indeed, regulatory pressure on remuneration, combined with a damaged sector reputation, is limiting companies' ability to attract and retain key people. The Deloitte 'Talent in Banking'[1] survey reveals that banking is no longer a top career choice for GenY students, who are attracted by sectors perceived as more dynamic and innovative. Since this generation will represent 75% of the global workforce by 2020, financial sector companies will need to adapt their talent acquisition strategy and employee value proposition. In addition, fundamental changes to business strategy as well as organisational restructuring both create and require a change of corporate culture.

To support their efforts in talent acquisition and employee engagement, CHROs may also consider revising their HR technology strategy and upgrading the skills of their HR teams to reinforce their analytics skills and integration with the business.

Exploring four of the ten trends identified in the recent Bersin by Deloitte report 'Predictions for 2015'[2], this article provides CHROs in the financial sector with insights into the following key dimensions: talent acquisition, employee engagement and culture, HR technology and reskilling of the HR function.

Talent acquisition in 2015

To address talent acquisition requirements in 2015, companies will need to rethink their sourcing approach, enhance their employment brand by delivering a great candidate experience and improve employee engagement.

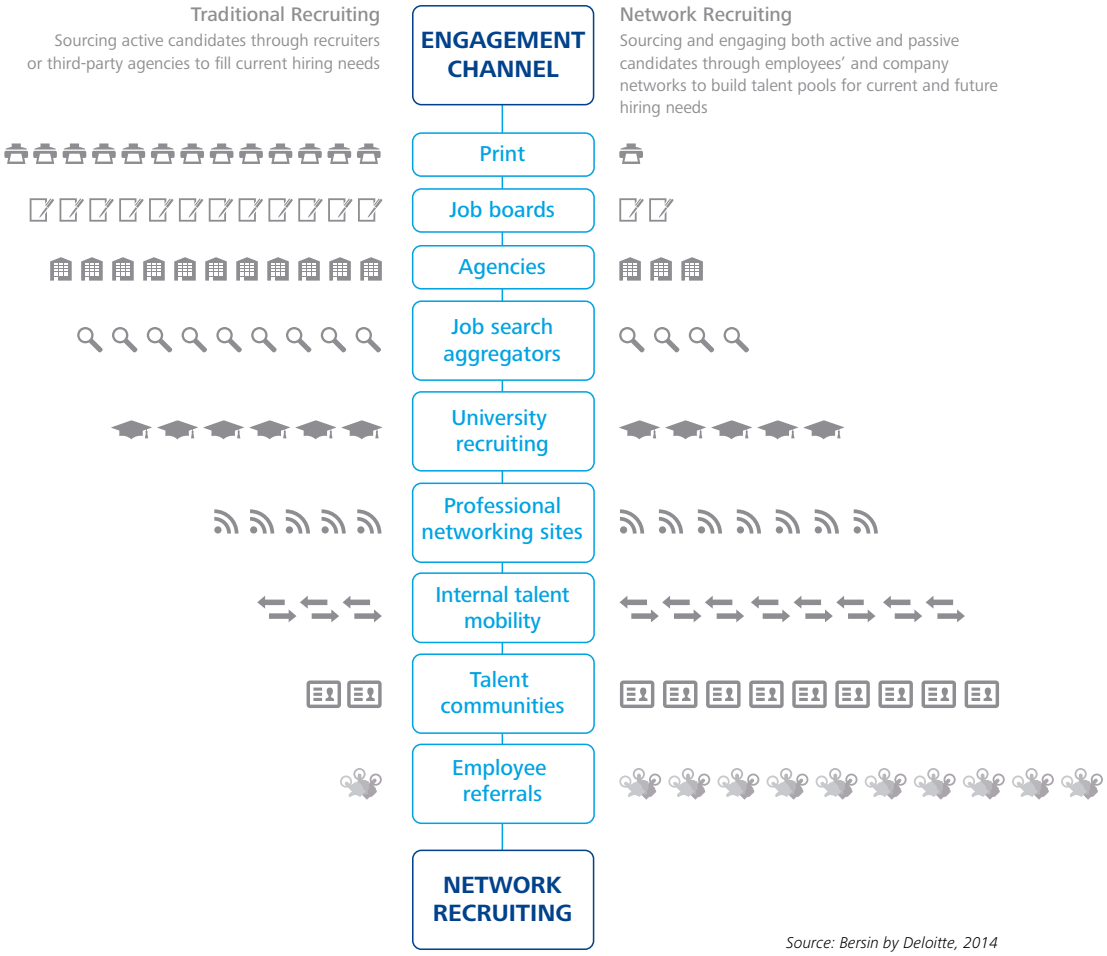
Rethinking the sourcing approach

Companies are encouraged to look at new channels and consider a wider pool of potential talent. Indeed, recruitment has evolved from traditional sourcing channels to 'network recruiting', which is based on the development of candidate pools through, for instance, employees referrals, professional associations and internal mobility (as illustrated in Figure 1).

1 *Source: 'Generation why? Attracting the bankers of the future', The Deloitte Talent in Banking Survey, 2013*
2 *Source: 'Predictions for 2015 – Redesigning the Organization for a rapidly changing world', Bersin by Deloitte, January 2015*

Companies are encouraged to look at new channels and consider a wider pool of potential talent

Figure 1: How recruiting is evolving[4]



Source: Bersin by Deloitte, 2014

In particular, employee referrals represent the new area of candidate management. In fact, according to many studies, referred candidates are two to three times more likely to be successful.

Network recruiting can be implemented by using a number of programmes and tools to communicate with and attract candidates. Social media can represent a significant part of the sourcing strategy. This channel can be used not only to attract candidates, but also to assess what people say about the company and use this information to draw executives' attention to potential issues.

In addition, graduates, prospects, competitors, alumni and freelancers – to mention but a few – are all part of the talent network that should be maintained by companies. People move more freely from one role to another across organisational and geographic boundaries[3]. Therefore, the current source of talent is even wider than companies tend to think.

When searching externally, organisations should not forget to consider internal candidates, promote internal mobility and offer training and development opportunities. Not only are internal candidates a better investment, but the benefits of this strategy to employee engagement are huge.

Enhancing the employment brand through candidate experience and employee engagement

The employment brand is not limited to recruitment campaigns or marketing and communication programmes. Indeed, candidates and employees are the front line for promoting companies' employer brand.

Delivering a great candidate experience is important and can be achieved by simplifying the recruitment process and making it more efficient, while ensuring applicants are left with a positive impression. Indeed, candidates will hold on to and promote a positive image of the organisation, and even if they are not recruited immediately, may become part of the future talent pool.

With the boom in social media and collaborative websites such as Glassdoor, employer brand has become synonymous with employee engagement. Corporate information is no longer controlled by institutional communication programmes; employees, candidates and even potential clients communicate and give their opinions on organisations' remuneration, work environment, culture or leadership through these platforms.

Employee engagement and corporate culture

Adopting an integrated approach

The Bersin by Deloitte report 'Predictions for 2015'[5] highlights that the holistic nature of the employee engagement topic requires an integrated approach. Indeed, employees are looking for a combination of five major elements: meaningful work, great management, a fantastic environment, growth opportunities and trust in leadership.

Therefore, reinforcing employee engagement cannot be achieved through isolated programmes but should rather be at the centre of all HR strategies, such as employer branding, performance management, learning and development, internal mobility and leadership development programmes.
In addition, the way employee engagement is monitored and measured is evolving. Annual engagement surveys will be replaced by new approaches and tools (such as pulse surveys) enabling managers and leaders to obtain real-time feedback on employee satisfaction and identify actionable items.

Keeping this in mind, HR leaders in the financial sector will likely have a greater impact on employee engagement by focusing on two challenges this year: the alignment of business strategy and corporate culture, and management of 'overwhelmed employees'.

3 Source: 'The open talent economy, People and work in a borderless workplace', Deloitte Consulting, 2013
4 Source: 'Predictions for 2015 – Redesigning the Organization for a rapidly changing world', Bersin by Deloitte, January 2015
5 Source: 'Predictions for 2015 – Redesigning the Organization for a rapidly changing world', Bersin by Deloitte, January 2015

Aligning business strategy and corporate culture
In the context of strategic and organisational changes in the financial sector, one key driver of employee engagement is the alignment of corporate culture with business strategy, in particular with a view to maintaining trust in leadership.

Although leaders are aware that implementing a new strategy may require changes to corporate culture, they often find it difficult to assess the existing culture and identify shortfalls with respect to the corporate culture required for enabling the strategy. In addition, moving from a product-oriented to a client-oriented organisation, for instance, should be addressed through a structured culture transition approach and according to a timeline not always compatible with the business objectives. Therefore, business leaders may also need to consider revising their strategy to integrate the culture change imperatives.

HR leaders can play a significant role in supporting and enabling this change through sustainable culture transition programmes and close monitoring of the outcome.

Managing 'overwhelmed employees'

Employees take on too many tasks at once, find it difficult to disconnect from work and feel overwhelmed. Deloitte's research on human capital trends[6] shows that finding solutions to this issue was one of the biggest challenges for HR and business leaders in 2014 and it remains an attention point for 2015. Besides traditional time and stress management training courses, companies are now increasingly offering self-awareness and relaxation sessions and even integrate them into their leadership development programmes.

The issue of overwhelmed employees can also be addressed through redesign and simplification of the workplace. This will mean reviewing practices in terms of flexible working conditions, open offices and well-being programmes to ensure they address the right issues and actually help to create a more humane yet productive work environment.

6 Source: 'Global Human Capital Trends 2014: Engaging the 21st century workforce', Deloitte Consulting LLP and Bersin by Deloitte, Deloitte University Press, April 2014

Key enablers

The HR technology plan

Efficient and relevant HR solutions rely more than ever on an appropriate HR technology strategy. Initiating a plan to replace and upgrade HR systems is important in order to shape an attractive 'system of engagement' for managers and employees. Engagement is also part of the technology. Indeed, the value of a system today is the level of engagement its products get from users. The HR information systems of 2015 are highly flexible, innovative and cloud-based software.

In addition to the core HR and talent management products a firm needs (e.g. recruiting, learning management, succession process, remuneration, and performance management), the vendor has to offer analytics features in order to support the organisation's long-term analytics strategy.

Another important selection criterion is the major investment in mobile apps and mobile HR applications planed by the software vendor. The employees themselves ask for tools that are easier to use and more flexible, as they will be performing an increasing number of HR operations on the road.

These new tools include, among others, the possibility to assess the company's culture, have integrated network recruiting and candidate relationship management, increase social recognition, and gather real-time employee feedback and engagement sensing. Small vendors usually offer these services. Therefore, the HR technology strategy for 2015 is to combine systems from big ERP providers and small vendors.

Upgrade the skills of your HR team

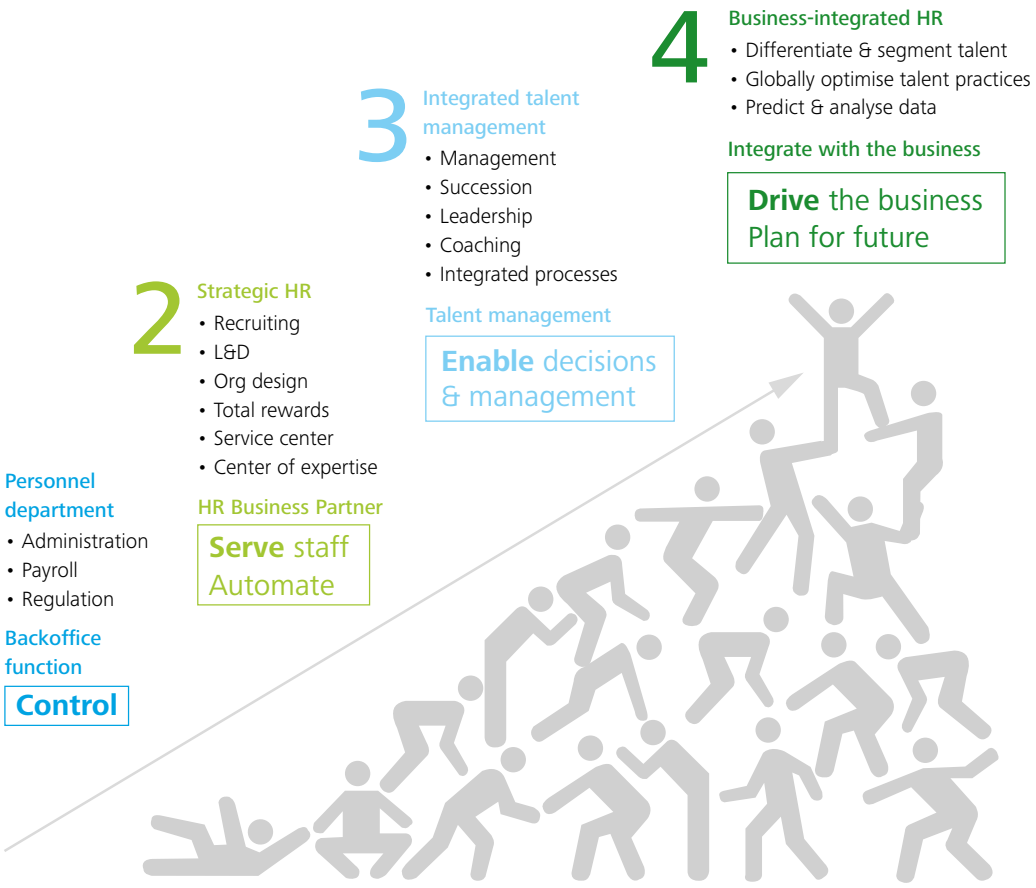
The HR function has evolved significantly over the last 30 years, moving from a control function to a business-integrated function (as illustrated in Figure 2). Today, HR professionals need to operate as skilled consultants: This year represents an opportunity for HR to boost its role and bring real benefits to top management.

In this context, today's HR professionals must understand technology, statistics and business in addition to HR. This requires HR leaders to invest in research, benchmarking and professional development to allow HR professionals to continue to innovate and stay on top of market trends.

Moreover, HR specialists should be increasingly encouraged to function with 'networks of expertise' (instead of 'centres of expertise') bringing, for example, recruitment, training and employee relation specialists together. This will allow for a better connection between HR areas and integration with the business. Both the upskilling of HR professionals and new HR governance would support the shift from the delivery of HR services to the delivery of business-integrated HR solutions, which is needed for HR to drive the business plan of the future.

Figure 2: The evolving organisation of HR[7]

How the HR Function has evolved over the last 30 years



Source: Bersin by Deloitte, 2014

Conclusion

Considering the challenges and transformation of the financial sector, HR leaders should focus on the following areas to increase their impact:

- Talent acquisition, with a focus on sourcing strategy and employment brand
- Employee engagement and culture transition, to support the business strategy
- HR technology, skills and governance to enable the shift to a solution-oriented and business-integrated HR function

Although HR trends and predictions for 2015 remain consistent with 2014 challenges, HR leaders will more than ever be expected to think and act differently, try innovative approaches and deliver different solutions.

7 *Source: Predictions for 2015 – 'Redesigning the Organization for a rapidly changing world', Bersin by Deloitte, January 2015*

Deloitte TMT Predictions 2015

The future of smartphones, mobile payments, the Internet of Things and technological innovation

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Deloitte Touche Tohmatsu Limited (Deloitte Global) has been publishing its annual predictions for Technology, Media and Telecommunications (TMT) for 14 years now.

The report analyses the main TMT market developments, with the aim of providing a 12-18 month outlook on key trends. It is based around hundreds of in-depth meetings and interviews with leading TMT executives and commentators, as well as Deloitte member firm clients, Deloitte alumni, TMT analysts, thousands of TMT practitioners and Deloitte's proprietary research programmes, with tens of thousands of consumers from all over the world.

This year's edition of the TMT Predictions, the 14th of its kind, will give you a deep insight into the new TMT trends surging onto the market, such as the Internet of Things (IoT), drones and 3D printers, while looking at the continuing domination of print books and the rise of contactless mobile payments.

Technology

In the area of technology, the following trends are expected to impact the marketplace this year:

- *The Internet of Things (IoT) really is things, not people*—1 billion wireless IoT devices will be shipped in 2015. Enterprises will buy, pay for and use 60% of all wireless IoT devices, despite all the media excitement around consumer uses for the IoT. 90% of the services revenue generated will be from enterprises, not consumers. Why? For consumers, the Internet of Things, also referred to as Machine-to-Machine (M2M), usually solves only one part of the problem. For example, a device may allow you to turn on a washing machine remotely and being notified when the cycle is finished, but the clothes still have to be sorted before washing and taken out of the machine afterwards. The direct benefit to most consumers is likely to be marginal. Most IoT items are selling in their hundreds of thousands to consumers as connected devices, sensors or controllers, while enterprises are buying and using hundreds of millions of IoT devices.
- *Drones: high-profile and niche*—in 2015, drones will have multiple industrial and civil government applications, in addition to the many uses they already have. Drones generally have two main uses. The first and most common use is for observation: aerial inspection with the ability to transmit real-time footage to ground staff. The secondary use of drones (or unmanned aerial vehicles) is for transporting goods. The active base of non-military drones costing US$200 or more should exceed 1 million units in 2015, with projected sales for the year of about 300,000 units, generating annual revenue of US$200-400 million. Although the majority are bought by consumers and prosumers, most of the real value will come from business use.
- *Smartphone batteries: better but no breakthrough*—longer battery life is likely to remain a key factor for consumers choosing their next smartphone. The rechargeable, lithium ion (Li-ion) battery technology used in all smartphones will improve only modestly in 2015, with the unit charge or milliampere hours (mAh) no more than 5% greater than a 2014 model of the same dimensions and voltage.

- *Click and collect is booming: popular with consumers, but challenging for retailers*—the number of click and collect locations in Europe will reach half a million in 2015, a 20% increase on the previous year. Click and collect provides shoppers with the option to pick up items purchased online from locations such as a special section in a store, shopping mall or secure locker in a train station, car park, etc..

Other areas of technology reaching the market in 2015 will be the 're-enterprisation of IT', nanosats and 3D printing. Further details on all subjects can be found in Deloitte Global's 2015 edition of TMT Predictions.

Media

Turning to the media, the following trends are likely to have an impact on the marketplace:

- *Print is not dead, at least for print books*—a decade after the launch of the e-reader, print continues to dominate book sales, even in markets with high digital device penetration. Sales from print books will be five times the sales of e-books. In 2015, print will represent more than 80% of all book sales worldwide. Millennials appear to have an antipathy to physical CDs, DVDs, print newspapers or magazines, but this is not the case for books. They prefer print books over e-books because they like to collect books, like their smell and want full bookshelves. Another key value of print books appears to be their covers. E-books are not replacing print in a big way, unlike other digital form factors. Print is likely to generate the majority of book sales for the foreseeable future, as e-book sales volumes seem to have hit a plateau.
- *The 'generation that won't spend' is spending on TMT*—North American millennials will lead the way in 2015 and spend an average of around US$750 per person on media content: a total of over US$62 billion from 83 million North American millennials. The biggest media expenditure for most households in North America is pay-TV. It turns out that 18-34 year-olds contribute significantly to media sector sales.

Telecommunications

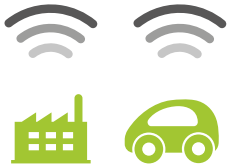
Finally, 2015 seems promising for the area of telecommunications:

- Contactless mobile payments (finally) gain momentum—the end of 2015 will mark the tipping point for the use of mobile phones for in-store payments around the world. It will be the first year in which the multiple prerequisites for mainstream adoption—satisfying financial institutions, merchants, consumers and device vendors—have been sufficiently addressed. In 2015, about 10% of the base of smartphones worldwide will be used to make an in-store payment at least once a month, compared with less than half a percent (led by early adopters in Japan) of about 450 million smartphones in mid-2014.
- For the first time, the smartphone upgrade market will exceed 1 billion—1.4 billion smartphones will sell worldwide in 2015, but over a billion will be upgrades—new phones for those who already have one. Deloitte predicts that this landmark of a billion upgrades in a single year will generate over US$300 billion.

In a nutshell, the key points of this year's TMT Predictions are:

- Print books will continue to dominate the publishing industry
- Smartphone upgrades are set to reach one billion in 2015, showing that the market has not yet stagnated
- Organisations are showing a growing interest in new products such as 3D printers, drones and IoT devices. They are adopting new technologies faster than consumers, which puts them back in the forefront of innovative technology

01/
The Internet of Things really is things, not people



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