OLIVER WYMAN

Financial Services

POINT OF VIEW

PITY THE CIO

THE CIOs DIGITAL PREDICAMENT IN BANKING

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Achieving the business digital ambition without fully controlling the means to deliver is the CIO predicament. Five key challenges must be addressed collaboratively to resolve this predicament.

THE CIOs DIGITAL PREDICAMENT

Banks that get Digital right can transform their economics. They can drive greater loyalty and share of wallet, new customer acquisition and diversification to entirely new product offerings. They can reduce risk by using improved customer information for superior credit decision making and active portfolio management. Finally, they can improve the customer experience and significantly reduce costs.

Despite its many benefits, Digital has become a predicament for many bank Chief Information Officers (CIOs). The CIO wants to be responsive to the heightened enthusiasm for digital but, to deliver, must overcome significant challenges, many of which are outside their control.

While almost all banks recognize the need to change in theory, most are ill-prepared to do so in practice. Too many see the first steps – such as adding mobile channels, revamping marketing to include digital channels and social media – as the whole journey. These banks are unlikely to be among the winners as the industry reshapes.

Oliver Wyman has identified the five key challenges that CIOs must address in the Digital predicament (Exhibit 1):

- How to make the business case work? The CIO needs an attractive business case to secure the investments to make Digital happen. This means getting the senior team to commit to drive changes in customer behaviour, monetisation of features and improvements in front-to-back efficiency and effectiveness.
- How to get the strategic capability sequencing right? The CIO needs to get convergence with the business on where to invest in innovation versus playing catch-up. They must also have the product and technology management discipline to develop a commercial roadmap for capability rollout and monetization. Making this happen means getting as good as digital leaders like Amazon and Google at treating Digital as a business.
- How to create the Digital delivery workforce? The Digital aspirations of the business can only be

Exhibit 1: The five major challenges of Digital

DIGITAL BUSINESS STRATEGY

1 MAKING THE BUSINESS CASE WORK

Value from digital
- Proliferation of features
- Managing substitution

Enterprise transformation view
- Transformational business case
- Front-to-back impact measurement

2 GETTING STRATEGIC CAPABILITY SEQUENCING RIGHT

Digital capability strategy
- Digital strategy – 1st mover vs. follower
- View on capabilities to support digital

Digital Commercialization
- Strategic view on build vs. buy
- Product management discipline

3 CREATING THE DIGITAL WORKFORCE

Digital skills and competencies
- Digital skill gap
- Digital DNA gap
- Rapid development skills

Digital operating model
- Duplication of efforts

4 FREEING UP FUNDING AND RESOURCES

Regulatory overload
- Regulatory/mandatory work squeezing out digital

Efficiency Squeeze
- RTB expense reductions require CTB spend

Change indigestion
- Not enough capacity to support change

5 OVERCOMING LEGACY CONSTRAINTS
- Complexity
- Integration issues
- Support insights

DIGITAL IT STRATEGY

realised if the bank has the right business model innovation, engineering skills and "Digital DNA" across the organisation (i.e. functions, channels, products and segments). The question is: why would anyone with those skills join your bank?

- How to free up the funding? Even if the business case works, competing for budget is tough when a large portion of the change funds are locked-in for regulatory requirements and ongoing remediation, and the emphasis on change-the-business (CTB) spend is on driving efficiency in run-the-business (RTB). Even with funding, getting access to the right delivery resources at the right time will be a challenge.
- How to overcome the legacy constraints? Behind the scenes, the CIO must still invest and update inflexible infrastructure and systems that are ill-equipped for the evolving requirements of data integration and processing volumes at high velocity. Of course, a CIO will need a plan to re-platform and stabilise the core, but they will also need to upgrade the skills of key architects and subject matter experts (SME) while infusing new talent for the future.

Addressing these issues may seem straightforward in articulation. However, it is difficult in execution. Bank Executive teams demand digital results yet don't fully understand the issues and withhold the means for resolution. Resolution requires the CIO's team to build a shared understanding of the issues, work collaboratively with the business and secure the means to deliver. Ultimately, the CIOs Digital predicament will only be resolved when it becomes the bank's predicament.

We devote the rest of this *Oliver Wyman Perspective* to understanding the CIO's predicament, to show why so many banks are finding it so difficult to get Digital right and to provide best practices to do so.

MAKING THE BUSINESS CASE WORK

As the "integration point" for developing digital capabilities across functions and businesses, the CIO must ensure that the business case stacks up. That requires an enterprise-wide view. An investment that does not promise sufficient returns when looked at in isolation may well be warranted when seen as part of a major digital transformation of the business.

This requires the CIO to influence key stakeholders, sharpening their understanding of how digital will create value and strengthening their commitment to achieving digital goals. Yet the CIO is often seen as an "order taker" who should simply receive and fulfil requests from the business lines. As a result, digital initiatives frequently fail to deliver the returns hoped for.

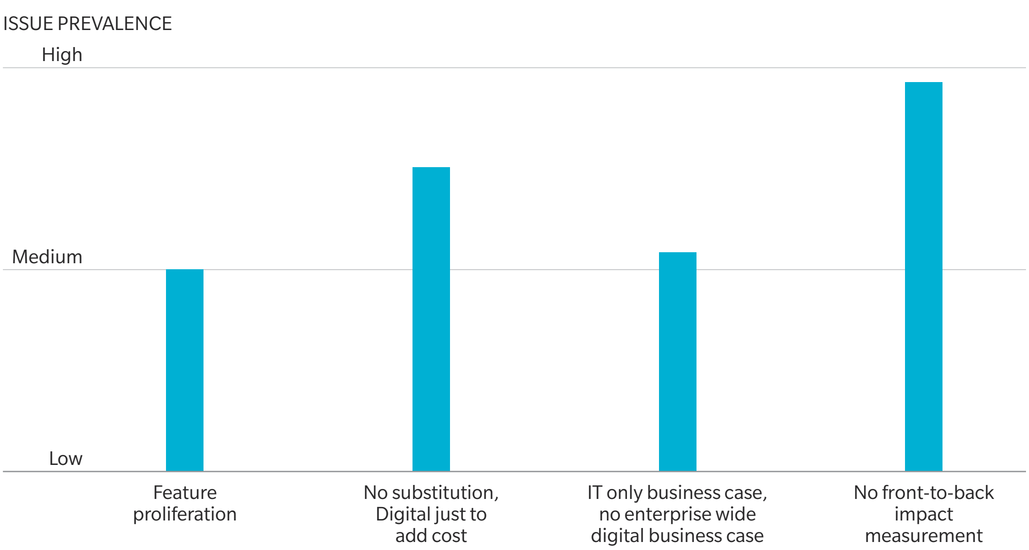
Feature proliferation. Feature proliferation is a common cause of disappointing returns from digital investments (see Exhibit 2). It occurs when managers adopt a "me too" approach, for example, seeking the latest mobile applications or social media-based customer communications for the simple reason that competitors have them. Over time, it is easy to spend heavily on feature proliferation under the banner of "enhancing the customer experience" or "ensuring competitive parity". In the absence of a rigorous value-based dialogue between the business and the CIO's team, the result can be an expensive portfolio of projects with little effect on profits.

Insufficient substitution. Insufficient substitution is an even more common failing in digital initiatives. It occurs when new capabilities are developed but the expected migration from the old to the new never quite materialises. For example, investments in online and mobile channels are usually intended to result in the migration of customers from high cost/low convenience channels to the new digital touch-points. A common outcome, however, is that while some customers use the new channels, many keep on using the old channels, including some of those who have adopted the new channels. The result is additional cost and complexity.

The CIO has little ability to drive the necessary changes in customer behaviour or business behaviours. For example, they cannot reduce full-time equivalent (FTE) in branches. Nevertheless, the CIO is likely to be held responsible for low substitution rates and increased costs.

IT-only business cases. Digital can improve results across the value chain: for example, in acquisition, customer experience, pricing, risk, unit cost, retention and relationship deepening. An IT-only business case will not take account of all of these benefits. Yet many business cases are IT-only (Exhibit 2) because broader, enterprise-transformation business cases are challenging to develop. They require cross-functional collaboration and precision around apportioning which returns come from current business and which from the investment in Digital. A careful balance is called for. Too much optimism leads to low-return investments; not enough transformational thinking will lead to under-investment in Digital.

Exhibit 2: CIOs must manage both IT and business issues to develop an enterprise-wide business case for Digital



Source: Oliver Wyman's assessment of issue prevalence in banks.

No front-to-back framework. Finally, most banks treat the visioning process as a "once and for all" exercise and fail to measure ongoing front-to-back impact (Exhibit 2). Business cases must be made before investments. However, transformation programmes take years and can be accelerated, slowed or re-directed as they progress and information about their impact becomes available. Yet few banks monitor the impact of their digital initiatives on the drivers of profit, such as operational efficiency, channel usage, price realisation and customer retention. Not only do most banks have no clear idea of where they intend to arrive with their digital strategy but they have no idea of the progress they have actually made. Without a framework of front-to-back KPI measurement and management, the bank will be effectively flying blind.

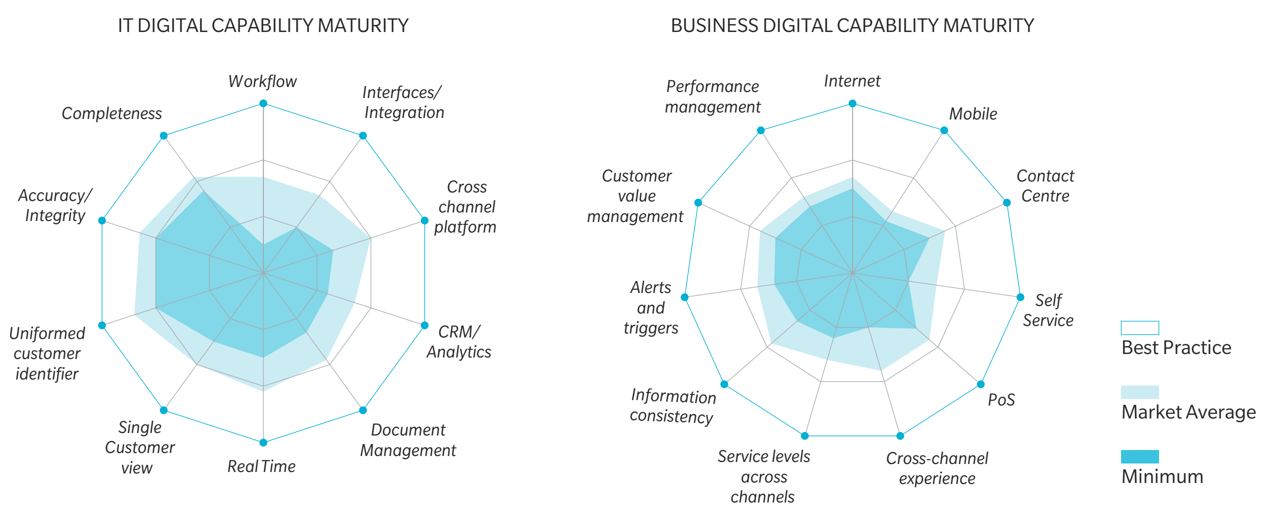
GETTING STRATEGIC CAPABILITY SEQUENCING RIGHT

Even if the business case for Digital in the end-state is robust, the CIO still needs to get the capability sequencing right. This means ensuring there is a strategic view of digital capability sequencing (which capabilities are delivered and when) as well as digital commercialization: which is, how capabilities are best packaged, priced and delivered.

Yet, to get the sequencing right the CIO will need answers to commercial questions that banks are not used to thinking about – especially not at the behest of the technology organisation.

Digital capability strategy. While much of the focus of Digital is on developing the initial tranches of next generation "Business" capabilities, the CIO must also build foundational digital "IT" capabilities (Exhibit 3). We see many gaps that hinder banks from developing a robust digital strategy, such as lack of understanding of the digital IT capabilities required and no sequencing road map for digital in place (Exhibit 4).

Exhibit 3: It is critical to continue the devepopment of core IT and business-enabling digital capabilities



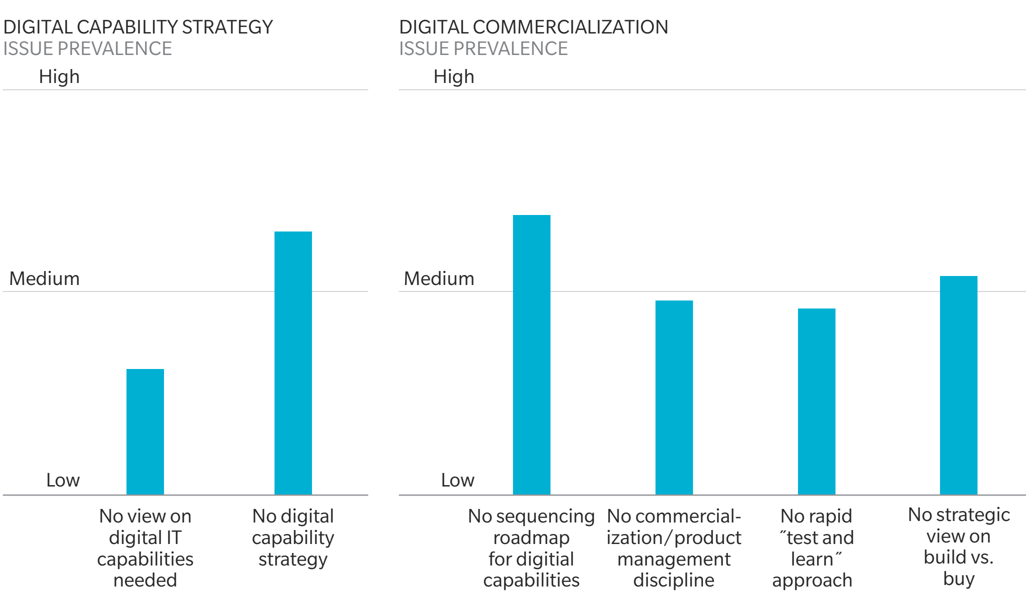
To develop a digital capability strategy, the strategic importance of various digital capabilities must be assessed. This will allow banks to decide how advanced they should aim to become, how much they should be willing to invest and how quickly they should aim to get to market. Being best-in-class and "first mover" are not always worth the cost and risk.

Again, the CIO is in a difficult position. Although their team needs to drive the discussion and, in some cases, challenge the business and their requirements, much of the relevant product and market insights – for example, concerning consumer behaviour, competitive intensity and product economics – will be outside its purview.

Digital commercialization. Having a strategy for capability sequencing is not enough. A plan for commercializing those capabilities is also needed.

Deliberate product planning to drive the sequenced commercialization of new capabilities has become standard practice in the hi-tech and online sectors. It is now common for products to be defined and priced based on the bundle of features or service levels they deliver. Apple has used capability sequencing to drive product management and commercialization, most notably for its iPhone range. Capabilities are marketed as features and then drip-fed through successive models, with loyal customers dutifully re-purchasing every 18 months. This contrasts with banks, who have raced to offer their core products and services for free.

Exhibit 4: The CIO must champion the development of a strategic view on digital capabilities and commercialization



Source: Oliver Wyman's assessment of issue prevalence in banks.

The CIO can only help define sequencing, product planning and commercialization with the collaboration of the business. While online service companies such as Amazon charge for quicker delivery, airlines for choosing a seat, and even parking apps for sending a text message, banks are at the beginning of this journey of commercialisation, value and pricing of features. In the long run a failure to plan commercialization will increase the CIO's risk of having to justify a large low-returning portfolio of digital capability investments.

Having developed a strategy for digital capabilities and a commercialisation plan, the CIO is then in a position to develop a strategy for digital capability sourcing. Build versus buy decisions can be made on the basis of which capabilities are strategic and which are commodities, the degree of strategic control necessary and the key capability imperatives (such as cost, quality, speed, flexibility). The CIO can dynamically manage a large portfolio of partners as the digital strategy evolves.

CREATING THE DIGITAL WORKFORCE

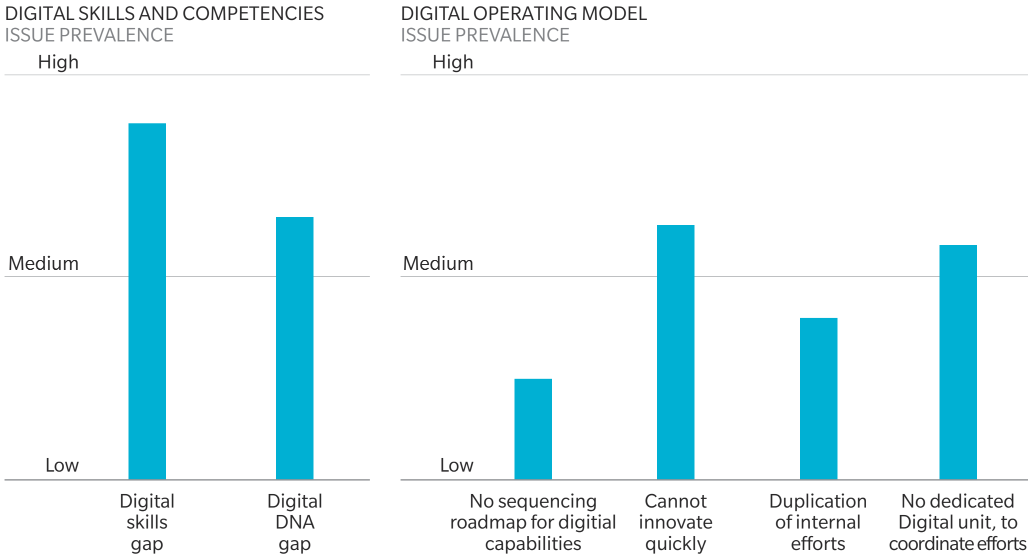
Even if the CIO can collaborate with the business to get the business case and sequencing right, the real work of delivery has yet to begin. This can be made difficult by a shortage of the required digital skills. The CIO must try to attract hi-tech talent away from sectors with better wealth creation and innovation opportunities. And they must make the best allocation of their limited resources across lines of business who will each want their own dedicated digital innovation resources.

Digital skills and competencies. Banks often have a digital skills and "Digital DNA" or mind-set gap (Exhibit 5). Instead of attracting and retaining graduates of top universities and staff with deep experience at digital leaders such as Google or Apple, banks too often rely on competent but unimaginative staff and contractors.

Banks have always competed with tech giants, blue chips and start-ups for the best programmers and IT experts. Of late, however, the challenge has expanded both in scope and in difficulty. CIOs must access a broader range of skills, including data science, product and customer analytics, social media and digital marketing expertise as well as securing access to experts in emergent technologies. Nor are the raw skills enough; team members must also have the mind-set, passion and experience necessary to be credible with the business and drive business model innovation "Digital DNA". The challenge of recruiting such staff has been exacerbated by the financial crisis, which damaged the reputation of banking, not only among consumers but also among prospective employees.

The CIO must craft an employee proposition aligned to the bank's digital ambitions. Majoring on short term or deferred employee value is core for recruiters at the elite investment banks and at fast growing start-ups with equity options. An employer brand or culture aligned with the life and work style expectations of many technology graduates have been important for technology giants Google and Facebook. More recently, mission-driven value propositions have emerged, exemplified by the UK Government Digital Service which promises an opportunity to pioneer new ways of working and make a difference for the

Exhibit 5: The CIO needs to build digital capability and upgrade the operating model



Source: Oliver Wyman's assessment of issue prevalence in banks.

community. Despite this range of proven approaches, bank CIOs are often unable to win the support of other stakeholders in the business when trying to offer employee propositions appealing to the target recruits.

Attracting raw talent is just the start. The second challenge is empowering high quality individuals to deliver on opportunities across the organisation in collaborative, innovative and efficient ways. The conventional plan-build-run model of the IT organisation does not work for digital execution. However, removing organisational barriers and rewarding good behaviour are difficult to deliver in the complex and regulated environment of the bank. Of course, the absence of a working environment in which people of the required skills will thrive is also a hindrance to attracting and retaining them.

Digital operating model. The CIO must develop a digital operating model that maximizes the value of the talent they are able to attract. However, issues can arise in creating a digital operating model, some of which include duplication of efforts, slow innovation and poor coordination (Exhibit 5).

The digital operating model must deploy technology and business-model engineers across functions, working in integrated teams to influence segment, product and channel owners to drive digital transformation. Businesses will be inclined to seek "captive teams" to help drive innovation. However, the CIO will need to balance these demands against the need to get the most group-wide value from their scarce resources. CIOs might consider pooling experts in Centres of Excellence with a mandate to develop the digital offering and capabilities from initial idea to launch. Besides making better use of scarce digital talents, this improves quality and avoids duplication of effort in different parts of the business.

FREEING UP RESOURCES

Even if a CIO is able to develop the right digital strategy and sequencing and secure the appropriate digital skills, competencies and partners, they will still need to free up and deploy the required financial and human resources.

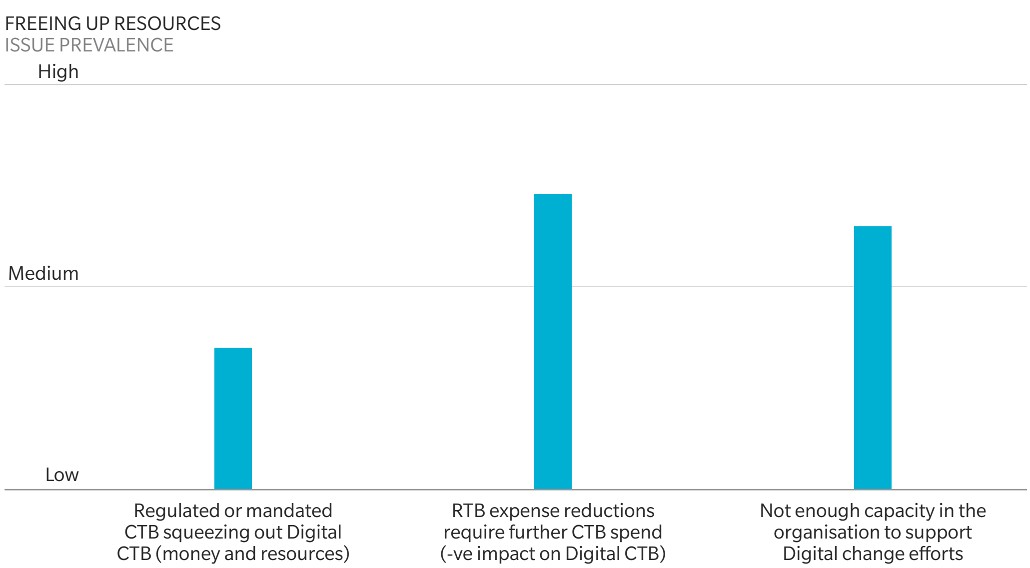
Regulatory overload. New regulations have consumed a large portion of CTB resources, in terms of both staff and investment capital. Worse: the new Basel 3 rules require more capital to be available as a risk buffer and hence limit what is available for capital spending. Much of a bank's capacity to support change will be engaged in complying with regulatory demands (Exhibit 6).

Efficiency squeeze. Whilst still dealing with the burdens of a large regulatory change agenda, many banks continue to feel the pressure of change-the-bank (CTB) needing to drive run the bank (RTB) efficiency (Exhibit 6), or have reached the limits of their ability to support the delivery of business and technology change.

Most banks require their CTB spend to reduce their RTB expenses. CTB spending can be increased only if it is "self-funding" and will reduce RTB expenses by at least as much, perhaps through operational efficiencies or channel substitution. Getting the numbers to work is the magic trick the CIO needs to learn (Exhibit 7).

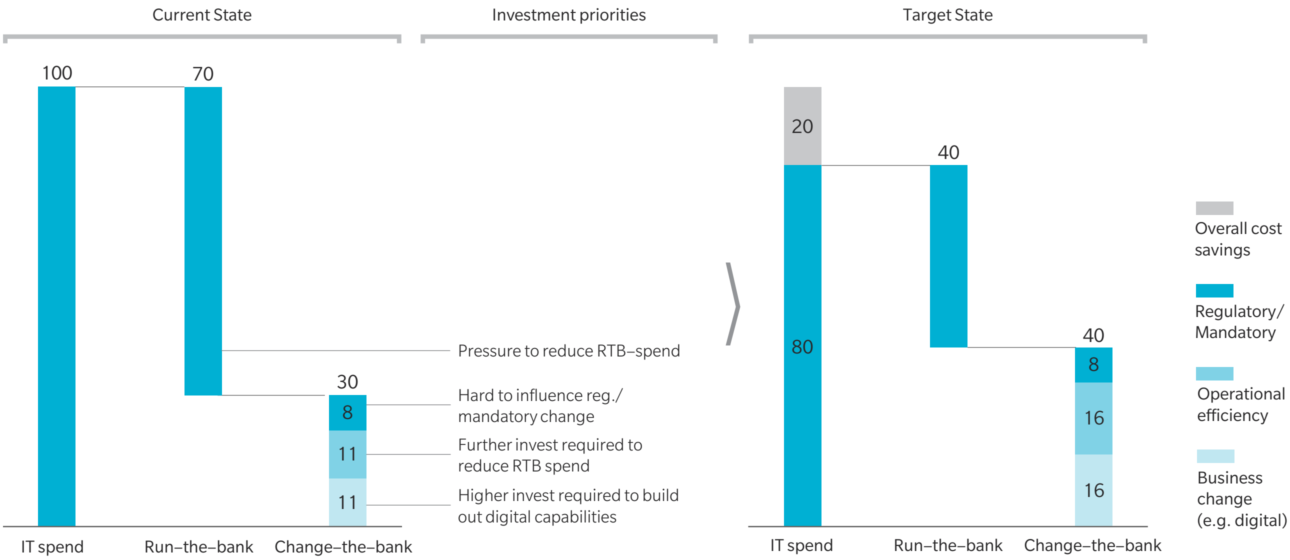
Change indigestion. Even when investment capital is available, the extraordinary current demands for CTB work at banks create change "bottle necks" within the business. Banks lack the technical and change management staff required to execute all the projects that are

Exhibit 6: The CIO needs to work with the business to tackle key Digital funding and resourcing issues



Source: Oliver Wyman's assessment of issue prevalence in banks.

Exhibit 7: The CIO must work with the business to transform the cost structure



queuing up to be done. It is always the same SMEs and high performing business managers who get pulled into competing change efforts. No amount of staff augmentation and outsourcing can address this "change indigestion". What little end-to-end change capacity is available needs to be subject to detailed change capacity planning and release management.

OVERCOMING LEGACY CONSTRAINTS

On top of the difficulties mentioned above – the lack of a clear strategy or business case and shortage of talent and funding – the CIO must usually build the bank's digital offering on the foundation of legacy systems ill-suited to this purpose (and often ill-suited even to their initially intended purpose). Many players suffer from complex legacy infrastructure, poor integration of channels and data and an inability to support data and analytics (Exhibit 8).

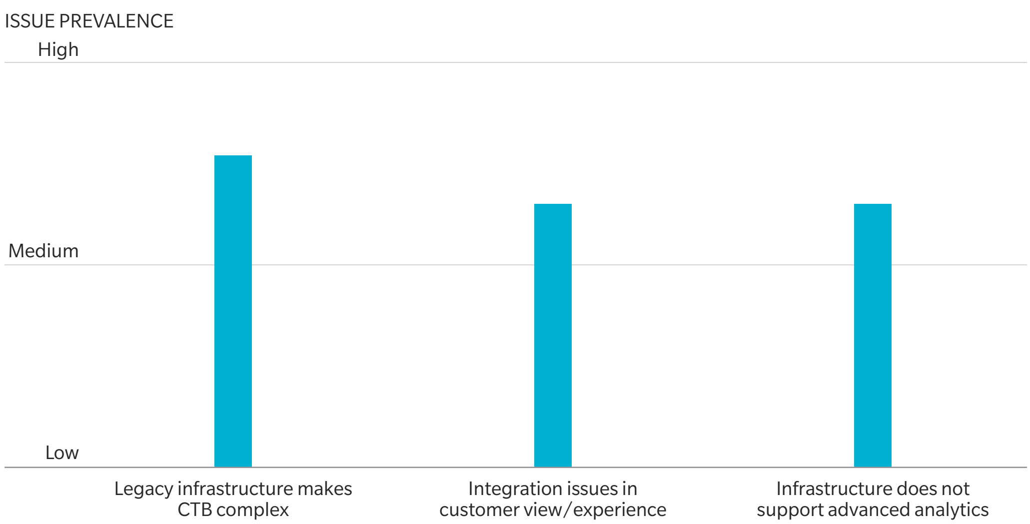
Complexity of legacy infrastructure. Many banks have not yet upgraded the legacy processes and infrastructure that support their core banking functions. The banking processes remain inflexible and the IT infrastructure remains overly complex and costly to operate and modify. Most large banks maintain several overlapping customer facing systems, core systems (e.g. payments, lending, core banking), operational processes and data warehouses. Upgrading and integrating these legacy core systems requires new modules to be built in a range of coding environments (e.g. COBOL, C, and C++). These "improvements" in turn add yet another layer of complexity.

Integration issues. As the number of access channels to the core banking system has increased from branches only to browsers and mobile devices, it has become clear that point-to-point integration technologies are insufficient. "Middleware" continues to be required to integrate all access channels with back office applications and data. Middleware is also used to control who has access to which application – a key requirement for complying with regulations, ensuring data privacy for customers and minimising the risk of fraud.

Supporting insight generation. Bank infrastructure is currently not equipped to support insights generation. Deriving value from Digital requires strategic and transactional decision making that is based on advanced data analysis. New technologies, such as Hadoop and 'NoSQL' databases, are drastically reducing the cost of storing and managing data. However, such technology cannot overcome the problems created by the use of multiple product or channel-based databases that give partial and inconsistent views of customers. Integrating data in the way required for "Digital decision making" can require enormous information sets to be transferred from one part of a bank to another. This can create massive bottlenecks when moving loads and volumes that legacy systems are ill-equipped to process.

Building on legacy systems will always be a challenge. It will require the CIO to continue upgrading the skills of their most experienced architects while identifying the next generation of architects and business analysts.

Exhibit 8: The CIO must continue to upgrade and renew to overcome legal constraints



Source: Oliver Wyman's assessment of issue prevalence in banks.

CONCLUSIONS

The challenge of Digital cannot be met by CIOs alone. Realizing the very significant potential of digital will take more than an injection of digital capabilities to the current offering. A fundamental reconfiguration of the bank will be needed: new product sets, new channel configurations, new customer segmentations, new approach to sequencing and commercializing.

Bank Executive teams demand digital results yet don't fully understand the issues and withhold the means for resolution. The CIOs Digital predicament will only be resolved when it becomes the bank's predicament:

- How to make the business case work?
- How to get the strategic capability sequencing right?
- How to create the digital delivery workforce?
- How to free up the funding?
- How to overcome the legacy constraints?

We hope this *Oliver Wyman Perspective* will serve as the foundation for building understanding and consensus around the key issues. We trust that it will be a wake-up call for executives who sometimes demand results but withhold the means. And, perhaps over time, we would like for it to be the catalyst for collectively addressing not the CIO's but the bank's digital predicament.

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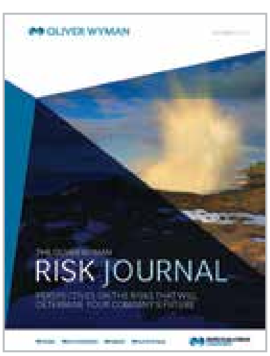

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