

RISK IMPLICATIONS IN THE AGE OF TECHNOLOGICAL DEVELOPMENTS

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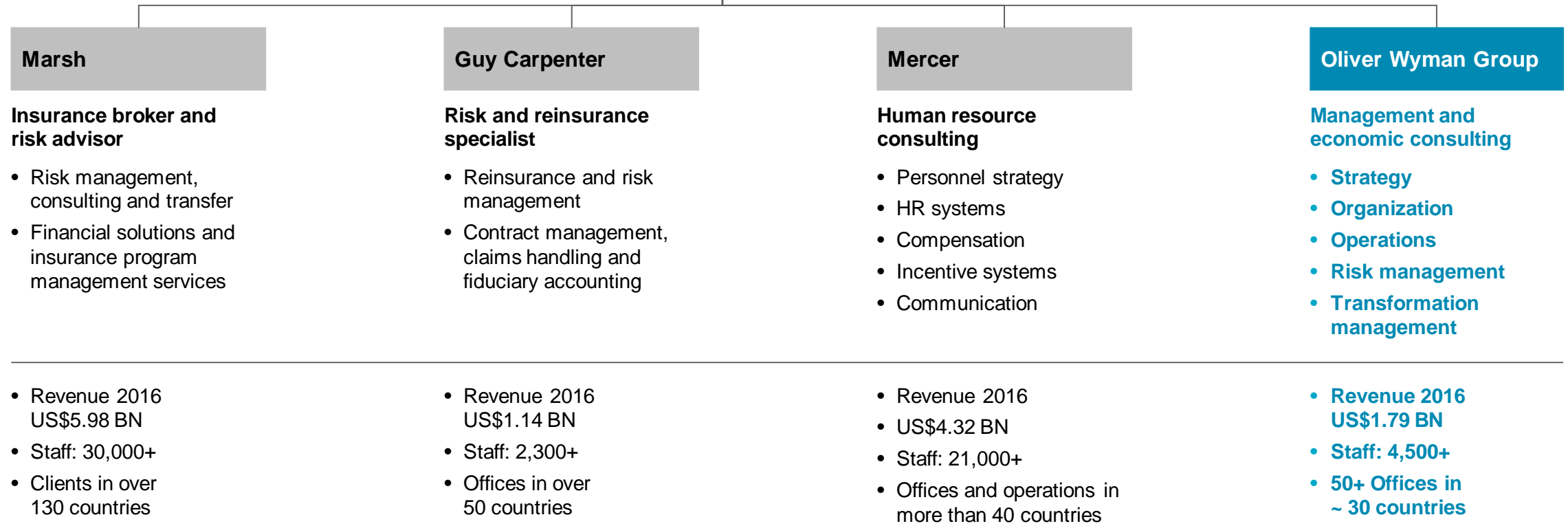
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- Staff: 60,000
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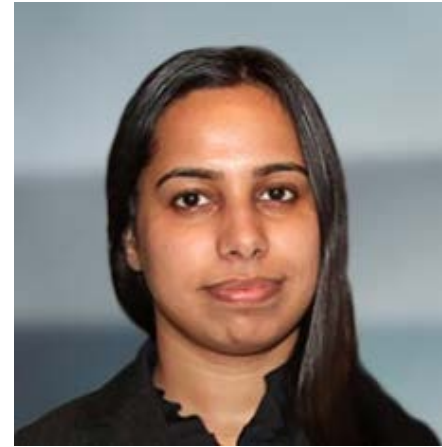
Presenters



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Financial services industry has experienced rapid changes and new trends with the onset of digital technology era



Analytics

Advanced analytical tools (e.g. AI, machine learning, cognitive computing) integrated into **client engagement** and **product development**



Data

New **online digital data sources** (e.g. social media, mobile usage) for more insight into customer behavior/preferences

Existing **internal data leveraged** more



Infrastructure

Automation of manual processes (e.g. RPA)

Decentralization of legacy IT infrastructure

Platforms and open APIs integrated with IT system



Regulations

Increased **prudential regulation** (e.g. new and refined capital requirements)







New **accounting standards** (e.g. mandate to upgrade systems, data, reporting)

Data regulations with increased scrutiny

In face of business model disruption, there are 5 critical areas of focus for Risk leadership



1 Dramatic shifts in technology have resulted in emerging risks, increasing pressures on risk functions

Type of risk	Description
 Technological risks	Operational tech risks (e.g. 3 rd party risks), IT risks (e.g. cybersecurity threats)
 Strategic risks	Threats of disintermediation with FinTechs disrupting traditional financial services value chains
 Systemic risks	Large volume of data entails unprecedented scale in case of failure (e.g. takedown of single cloud provider = \$50-120BN in economic loss)
 Talent risks	Increase in talent/workforce requirements beyond traditional risk activities, while competing for talent with FinTechs
 Socio-political/privacy risks	Growing use of unstructured data sources (e.g. social media, mobile usage) results in risks of social exclusions and privacy issues
 Regulatory risks	Evolving regulatory requirements imposed on traditional banks for transparency, auditability, and completeness

1 Process digitization poses new risks/challenges that need to be managed

Example: Frontline process digitization

Applications moving to digital channels

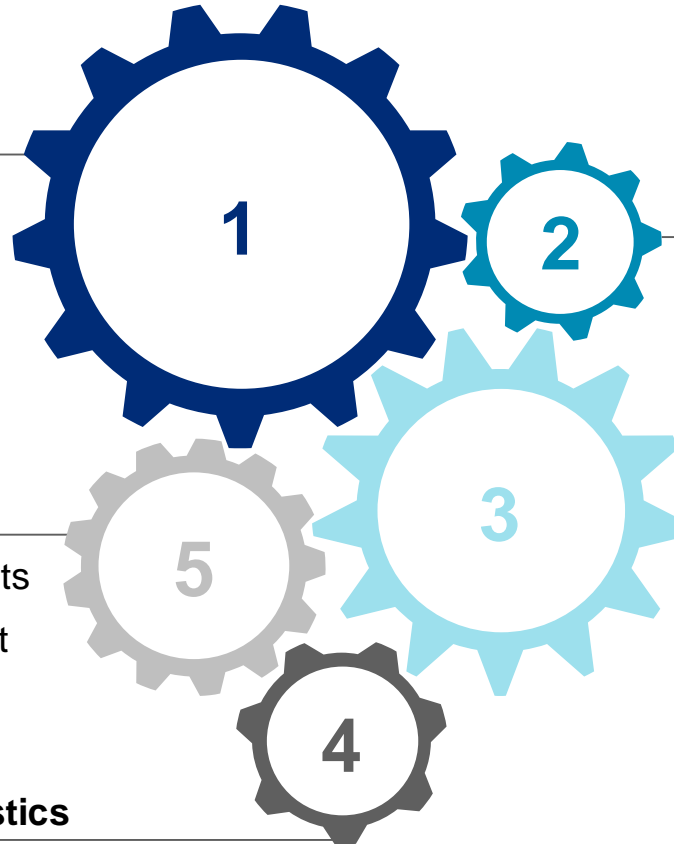
- Challenges in new types of fraud
- Difficulties in compliance with KYC
- Lack of personal review and dependence on analytics

Client servicing

- Ensuring that clients understand products
- Meeting regulatory requirements without undue red tape

New products with unknown characteristics

- Deposit “stickiness” of online products
- Much faster payments leading to potential counterparty risks



Storage of data now electronic

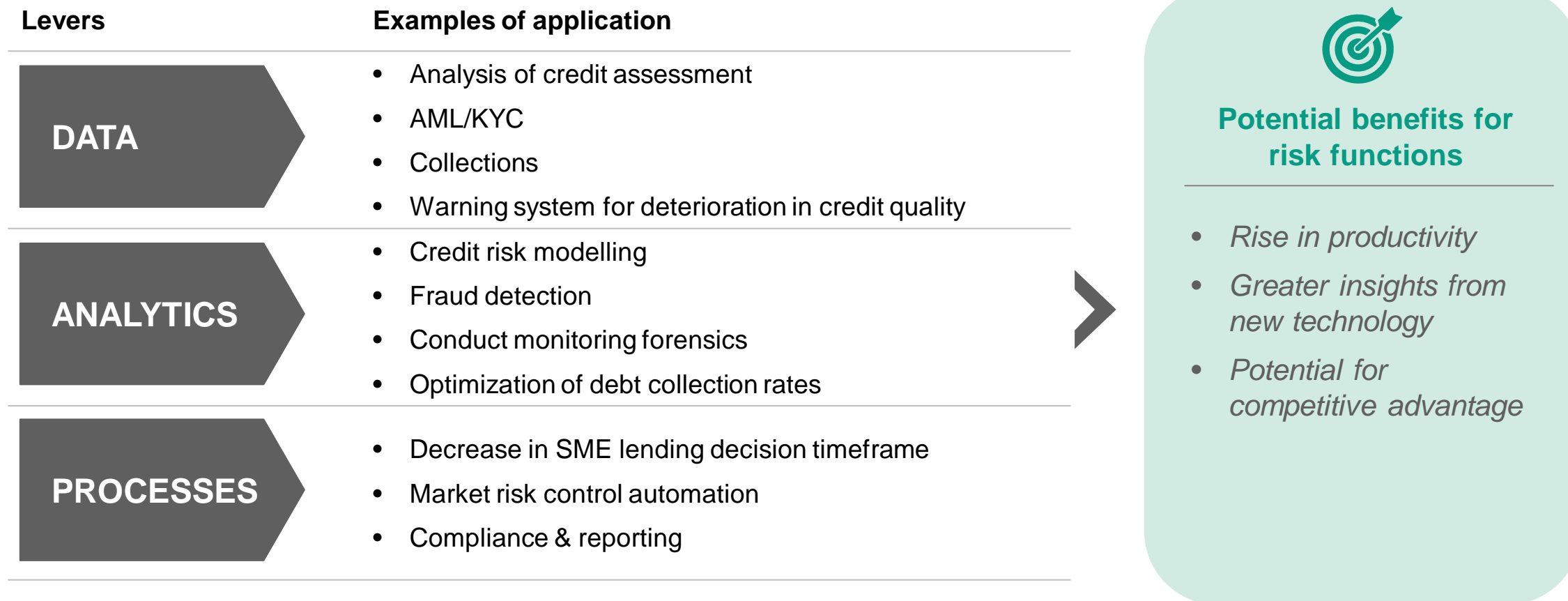
- Material cyber risk of data breaches
- Dependence on systems – leading to operational risk exposure

Agile development of new products

- Need to be very quick – risk management a dynamic partner
- Transitioning risk to more “test-and-learn” environments

- 2 While tech development poses challenges, risk managers can gain large dividends by leveraging innovative technology to be part of the solution

Opportunities for tech application across three major levers

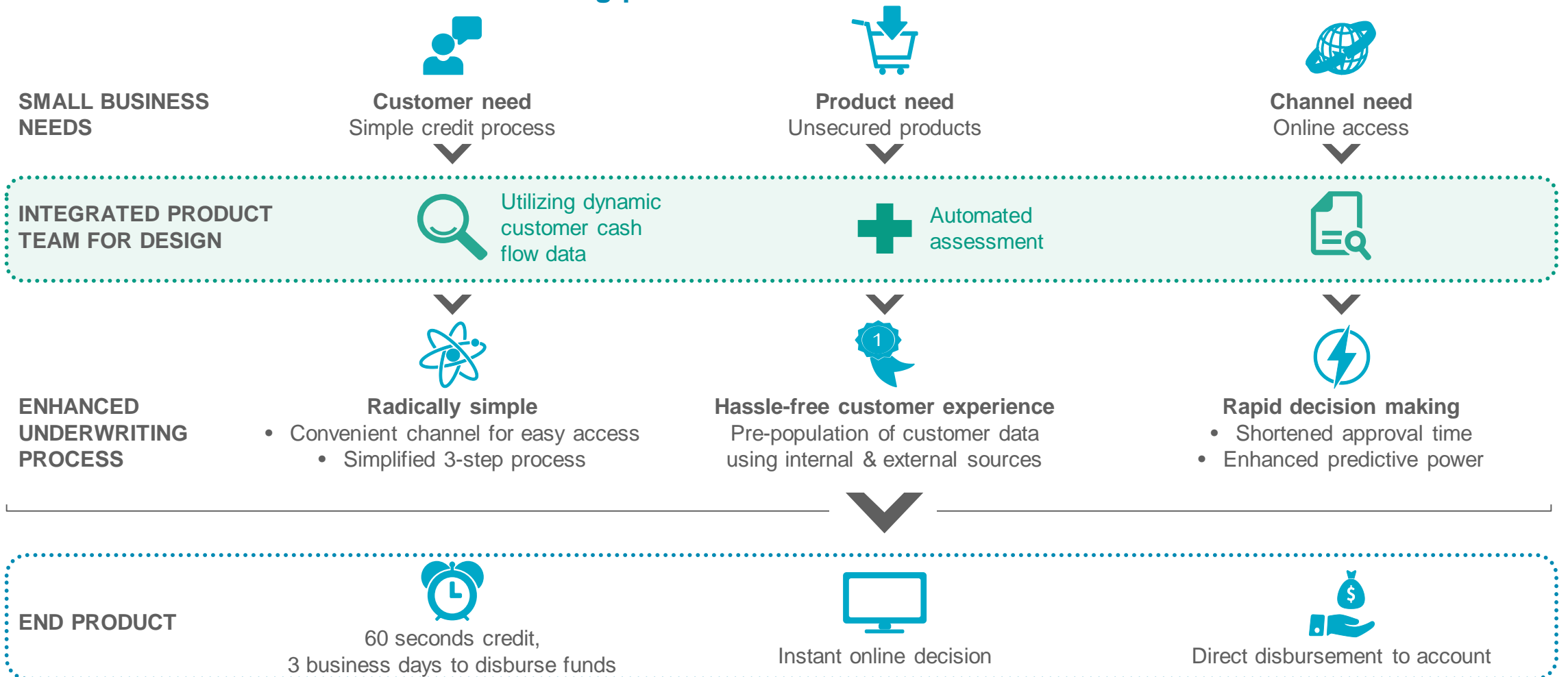


Source: MMC analysis

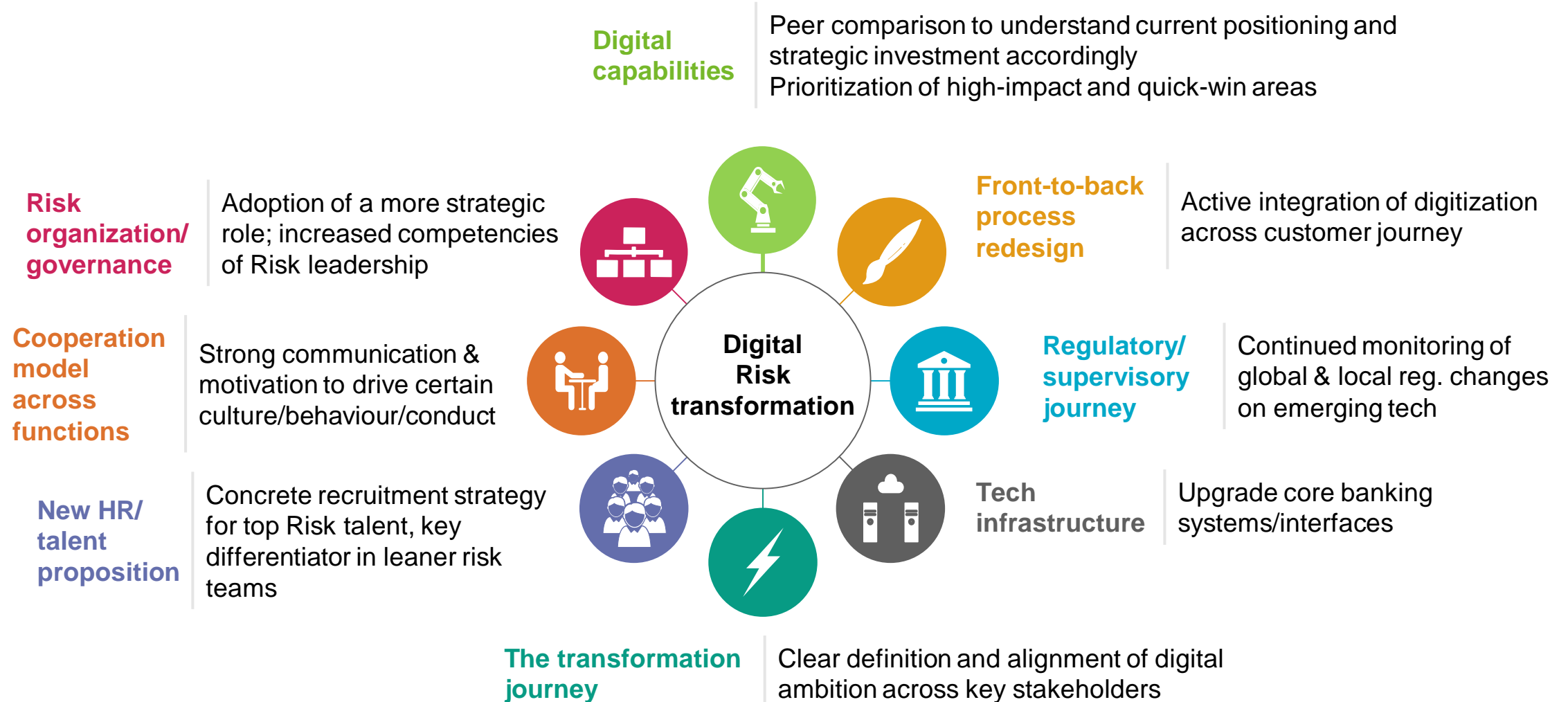
2 Case study

Digitise loan applications process via advanced credit underwriting procedure

Automation to enhance credit underwriting process:



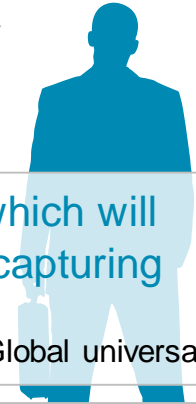
3 As technology disrupts the industry, risk managers need to define their digital ambition and concrete measures to become a robust “risk function of the future”



4 A fundamental shift is required in capabilities of risk function & leadership to drive innovation and be strategic advisor

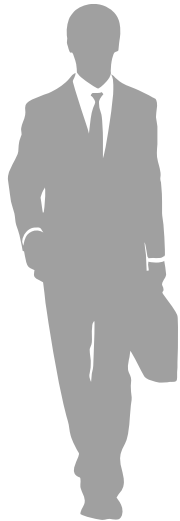
“We need to move from people-based decision-making to machine-based decision-making. Only the right use of machines and digitization will help us to succeed.”

– CRO, Regional universal bank



“Steering the Risk function through digitization has become an existential question which will completely change who we are and how we work. Today, we are not even close to capturing what that means.”

– CRO, Global universal bank



“Talent management has historically been underemphasized – particularly in Risk. If we do not invest today and up our game, we will have structural problems in the near future. In particular, we find ourselves competing with a set of new market participants, which historically weren't relevant for us, amongst them FinTechs and technology companies such as the Googles and Apples of this world. The skills are essentially the same.”

– CRO, Regional retail bank

“Efficiency is key. And efficiency can only be achieved through new technology – no doubt about that. In order to cope with that, we need to disrupt our talent, our talent management, and our recruiting. If we do not hire the right people today, we will have lost in five years' time.”

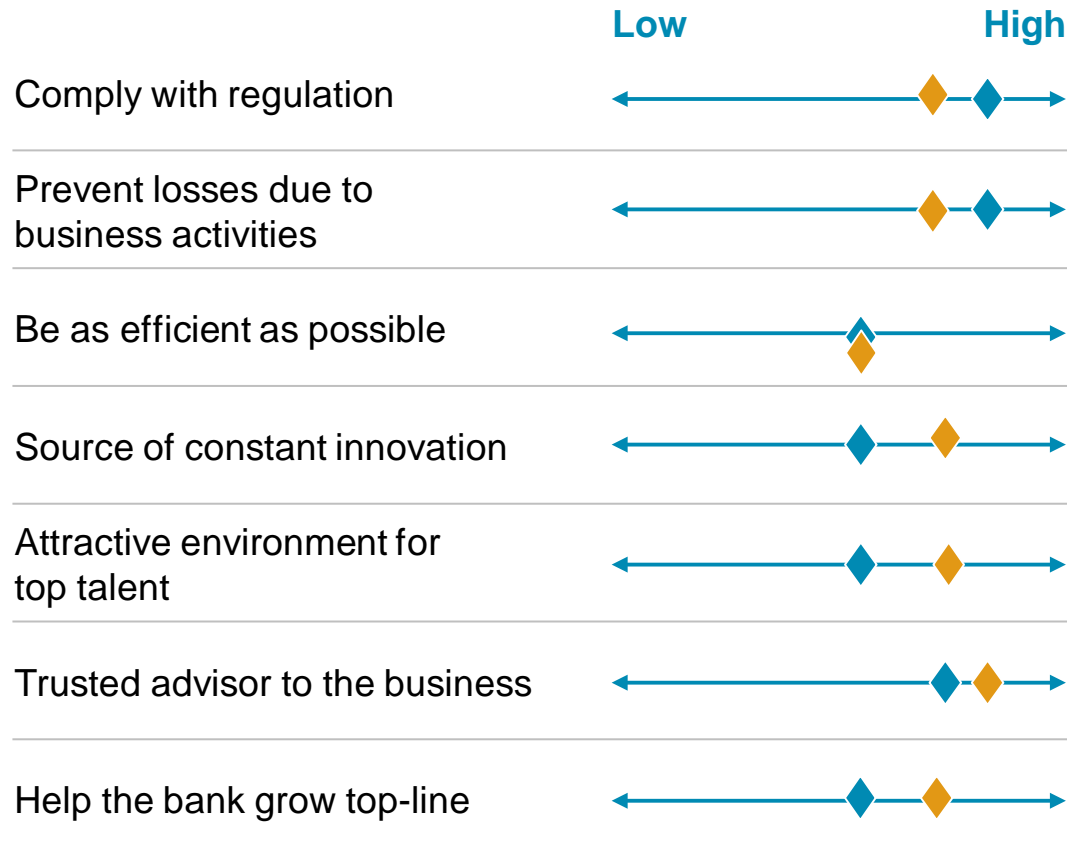
– CRO, European universal bank



4 We see a shift in the priorities and resource allocation towards methodological innovation, ad-hoc analytics and front line advisory activities

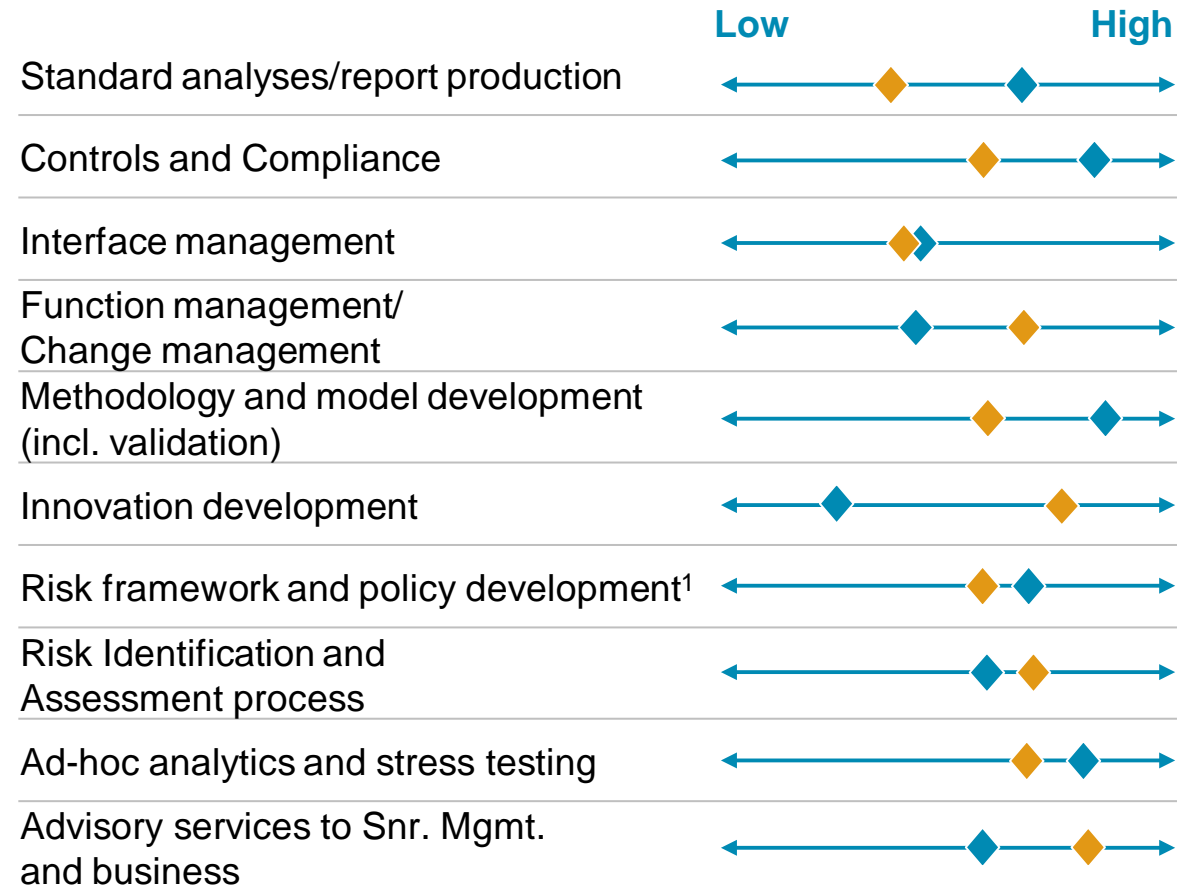
Priority focus (industry average)

Current (◆) vs. in 5 years (◆)



Resource focus (industry average)

Current (◆) vs. in 5 years (◆)



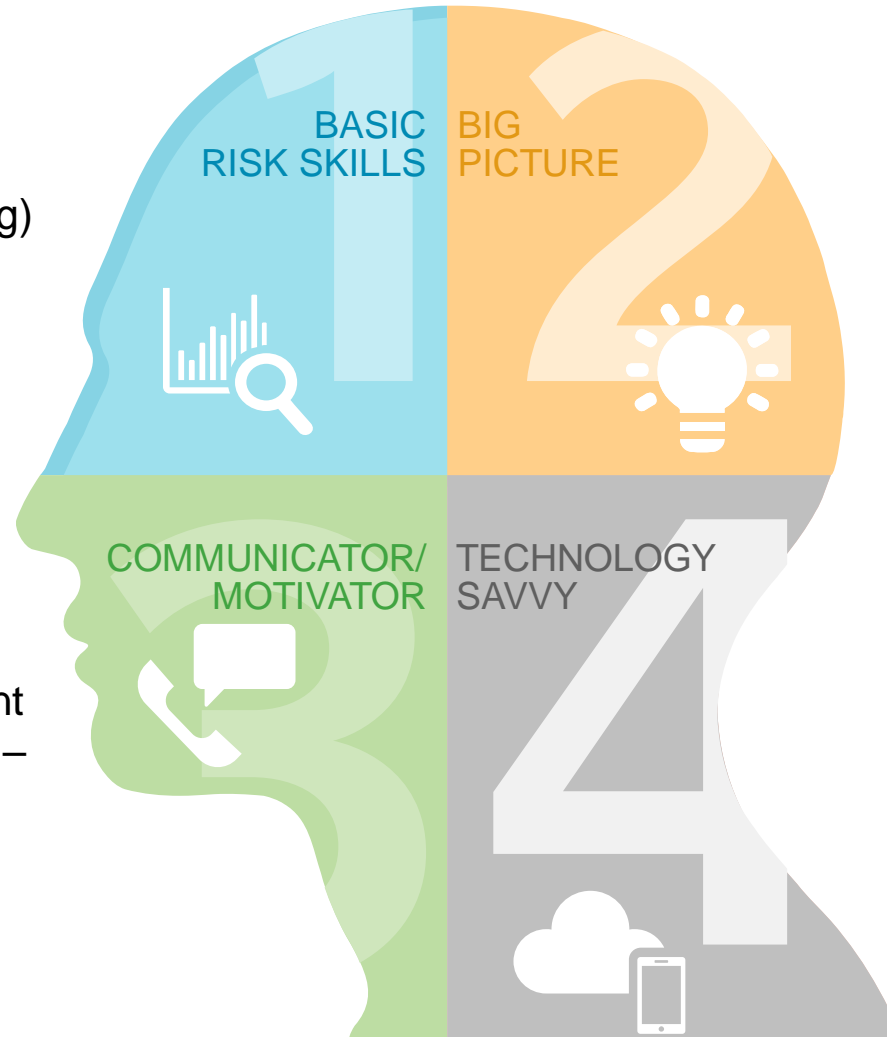
4 Risk leaderships needs a fitting competency profile that would allow them to lead the Risk function of the future

Basic risk skills

Have a detailed understanding of day-to-day risk tasks (e.g. risk measurement & monitoring) even if they don't perform them

Communicator and motivator

Be effective communicators and exercise a motivational management style that encourages collaboration – crucial for shaping the risk culture of the bank



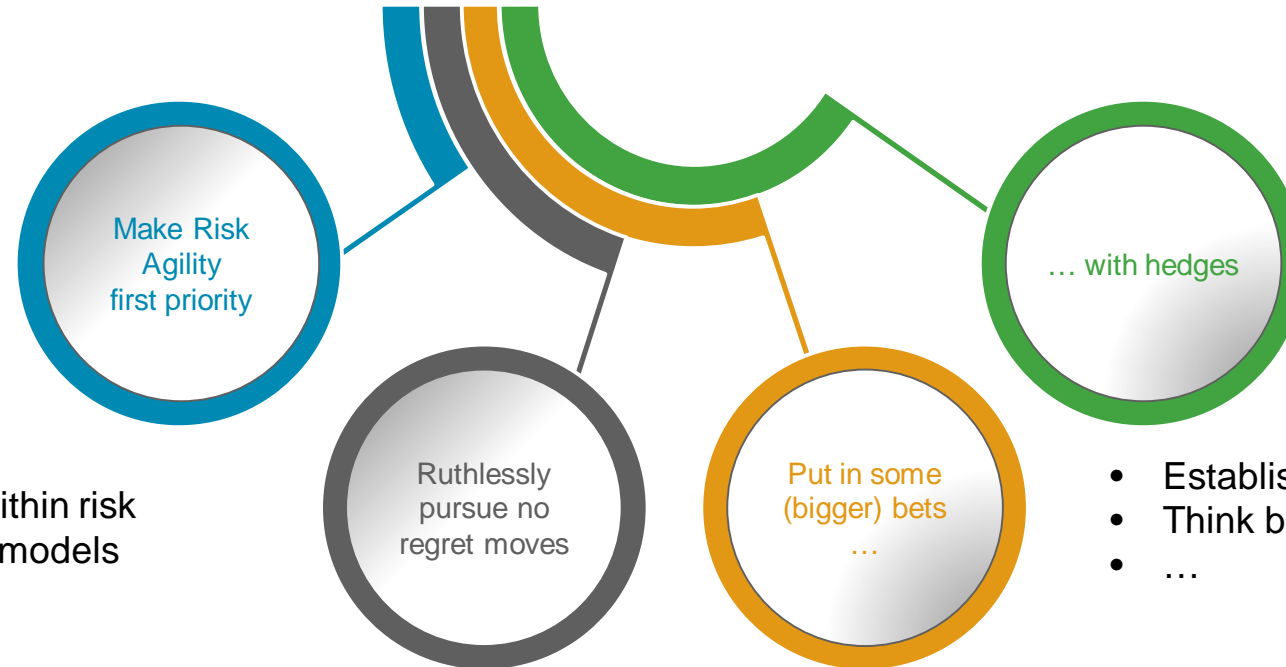
Big picture

Understand risks incurred in the banks' various lines of business and their interactions (e.g. key economic drivers of P&L in major BUs) to advise CEO and business heads on risk-return optimization and strategy

Technology savvy

Take a keen interest in tech developments, looking for opportunities to improve risk assessment and process efficiency

5 Any roadmap to being future proof risk function should include four elements



- Leadership stimulation
- Capabilities build-out within risk
- Flexible organisational models

- Establish a “portfolio of plays” approach
- Think big – start small
- ...

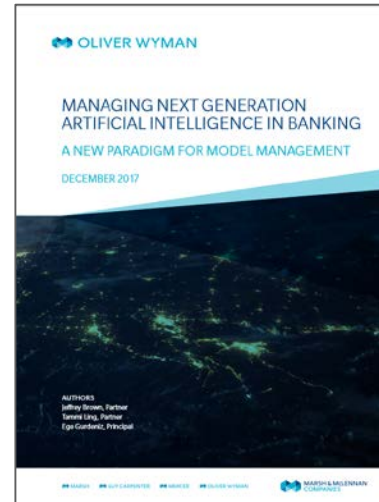
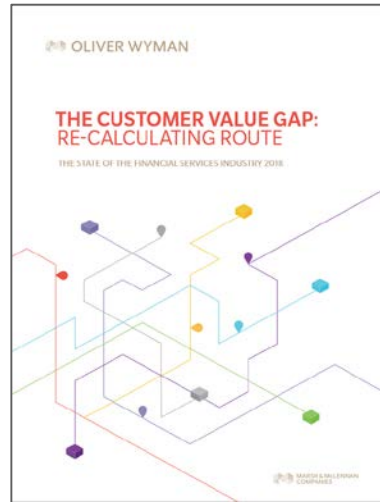
- Pull all traditional Risk efficiency levers
- Establish a scenario-mindset
- Build Risk Incubator/Labs type setups
- Upgrade Risk talent proposition
- Enforce Risk culture enhancements

- Experiment with technology, big data and analytics in key tech areas ...
- ... and beyond the obvious!
- Try to leapfrog traditional optimisation with technology in at least one area
- Launch utility experiment minimum one key area

Any questions?



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