Virtuelles Investmentforum 2020:

Facing disruption: The evolution of the risk function

Break-Out-Session

Heiko Christmann
Dr. Philipp Schröder
Dr. Tim-Oliver Müller
Rick Zeckai

16. Juni 2020

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Agenda

1

The evolution of the risk function at asset managers – PwC Survey

Asset Management is going through unprecedented change

Across the sector, competition, client demands and changing regulatory expectations are putting asset managers' margins under severe pressure

Buyers' market

The entire industry is facing pressure to reduce both fees and costs. Fees are being pushed down as increased regulation, competition and new entrants disrupt traditional value chains. Meanwhile, institutional investors now have the tools to hand in order to differentiate alpha – for which they'll pay more – from beta, for which they won't.

Digital technologies: Do or die

Firms are beginning to harness the power of new technologies to help them across the value chain – this includes new client acquisition, customisation of investment advice, research and portfolio management, middle and back office processes, distribution and client engagement.

Outcomes matter

Investors are demanding tailored solutions to address specific needs - this trend has seen active, passive and alternative strategies become building-blocks for multi-asset, outcome-driven solutions (which will increasingly include environmental, social and governance (ESG) outcomes).

Funding the future

Asset managers were the first movers in providing capital in areas short of funding, due to banks' regulatory and capital limitations following the Global Financial Crisis. They are becoming more involved in new – and in some instances more available – asset classes, including peer-to-peer lending, trade finance and infrastructure financing.

According to PwC's **22nd Annual Asset and Wealth Management (AWM) CEO Survey:**

20% is the expected cut to fees on an asset weighted basis across the mutual fund industry by 2025.

29% of CEOs said they expect to merge with another firm in the coming 12 months.

41% of firms are seeking strategic alliances or joint ventures to remain competitive.

Readiness of Asset Manager's Risk functions

As the industry strives to navigate this evolving landscape, we believe few firms have fully considered how their Risk function will need to adapt

The speed and scale of the industry's transformation is creating particular challenges for Risk functions:

- The risk profile of firms is changing with business model shifts creating new risks;
- Non-financial risks are becoming more prominent; and
- Regulatory scrutiny is focusing increasingly on AM firms with personal accountability rising up the regulatory agenda.

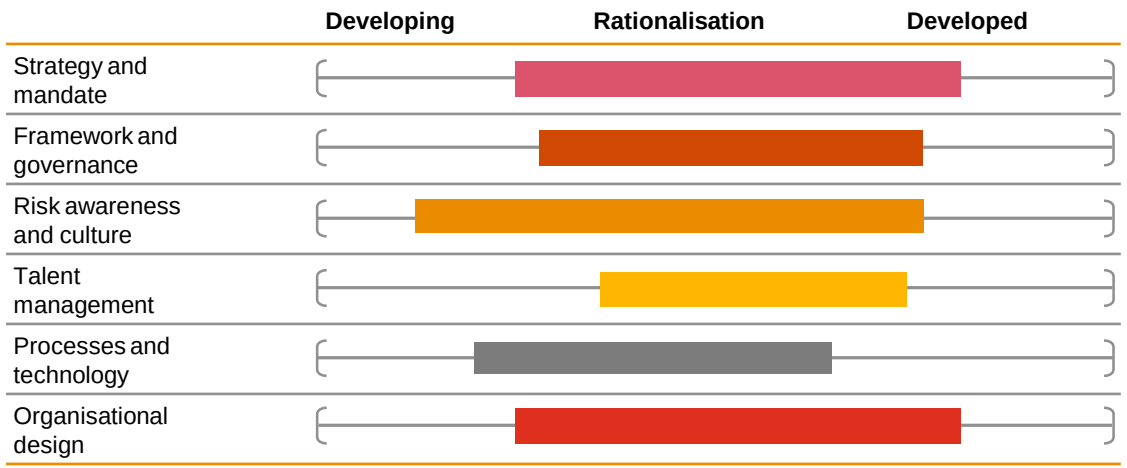
In order to respond to these changes, the Risk function must adapt.

Our observation – based on our client discussions and data collected by surveying CROs across leading UK asset managers – is that Risk functions are currently at different levels of maturity across the six dimensions of the operating model (Figure 1).

The majority of firms are in the 'rationalisation' phase as they reassess their operating model, driven by the need to clarify their mandate, find cost saving opportunities and improve efficiency.

In the next section, we set out the results of our CRO survey in more detail to explore where Risk functions are today.

Figure 1: Firms' current state of maturity across the six operating model dimensions



Key:

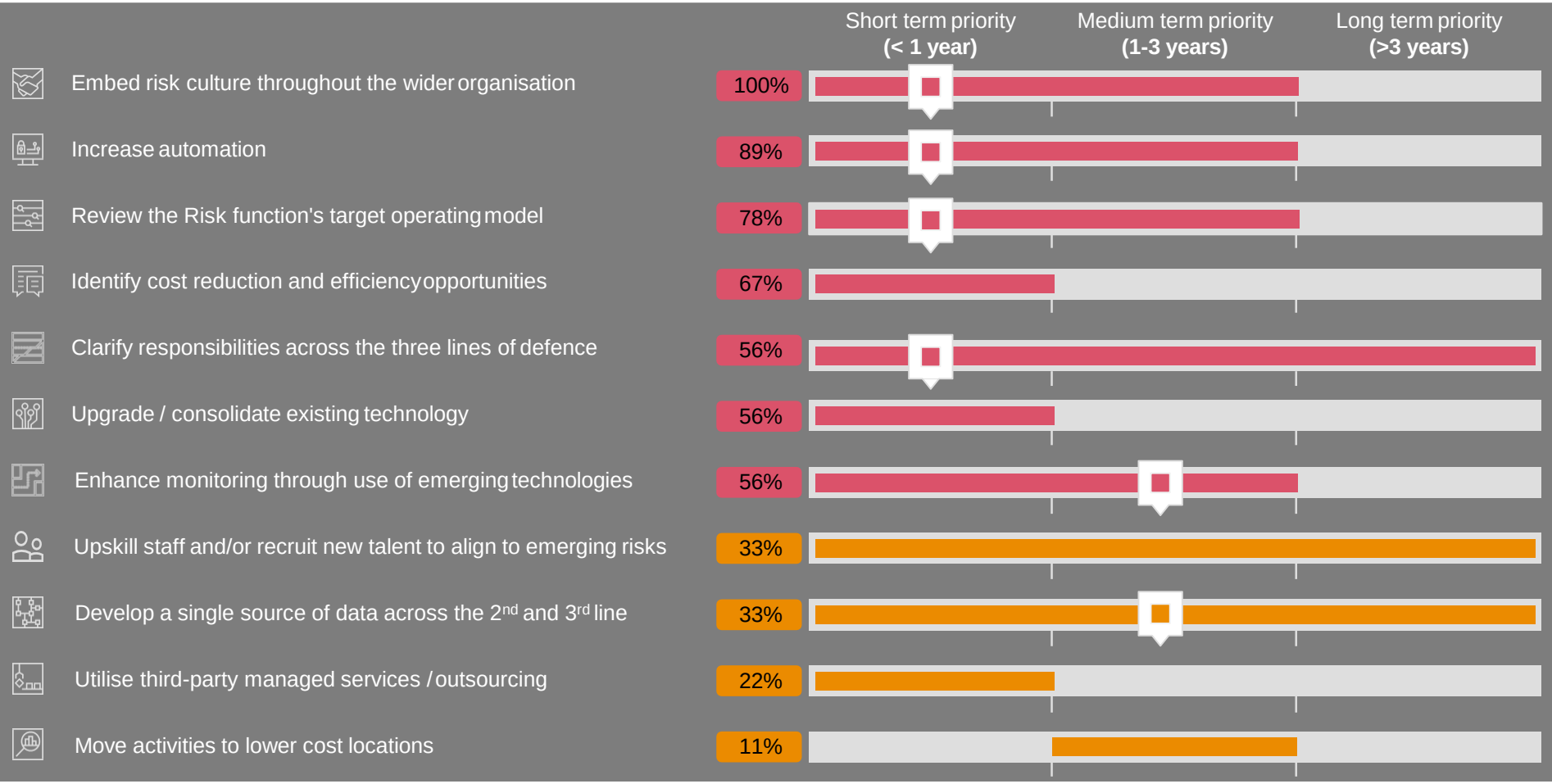
Developing – Current state has gaps e.g. policies on culture exist but not embedded

Rationalisation – Initiatives underway to upgrade or redefine what has already been developed e.g. rationalisation of the various tactical technology solutions developed over the years

Developed – Fully developed environment aligned to current aspiration e.g. talent gaps in data and technology now addressed

Asset Manager's planned initiatives across Risk functions

Our survey respondents have identified and prioritized a range of initiatives that they plan to undertake over the next five years



Key: % — % of survey respondents that identified initiative

Timeframe that the majority of respondents selected

Future challenges for Risk functions

Risk functions will need to strike a balance between retaining independence and partnering with the business

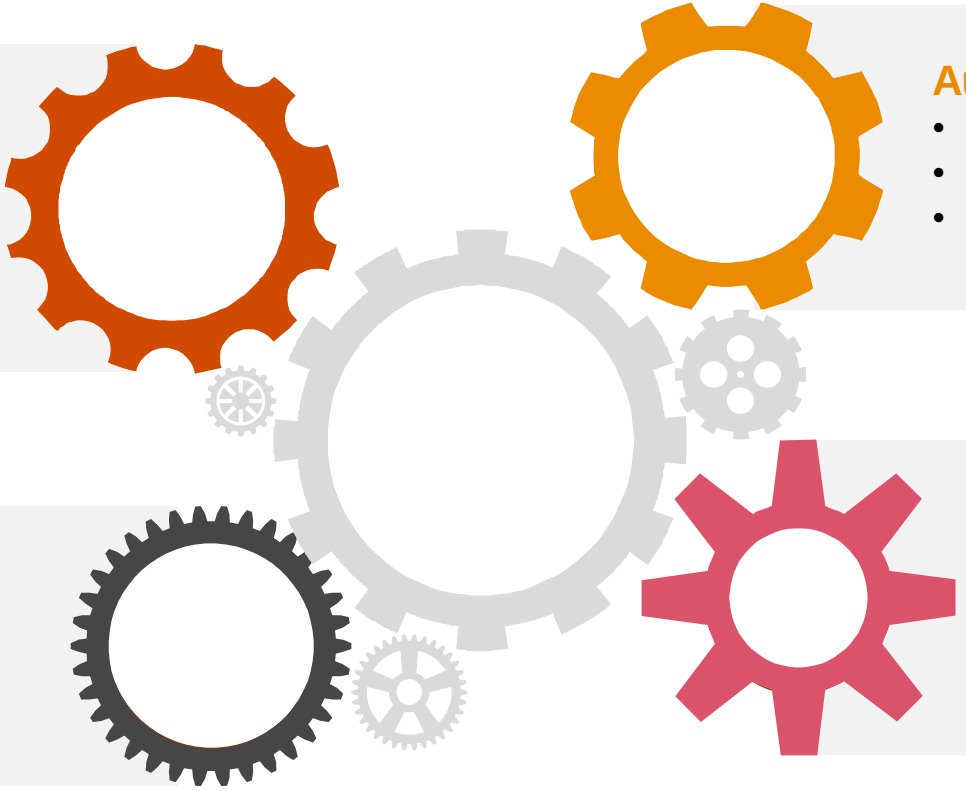
In our view, the Risk function of the future will:

- have a wider mandate which assists the firm to identify, manage and monitor risk from strategy through to execution
- become leaner as it embraces technology – seizing opportunities to use technology to integrate, streamline and automate processes
- embrace data analytics to help produce insights for both current and emerging risks, allowing the firm to make more informed decisions
- accelerate innovation by engaging in projects at an early stage
- attract a diverse range of skills, provide interesting and exciting roles and opportunities for career progression

Before embarking on the transformation journey, AM firms will need to consider four key questions:

1. What is our firms strategy - and how does the risk function help us deliver it?
2. Where is our Risk function in terms of maturity in progressing towards where we aspire to be – and what gaps do we need to bridge?
3. What levers can be pulled and what actions should we take to bridge the gap between where our Risk function is today and where we want it to be?
4. What are our priorities and what does the journey look like?

Recent Developments



Corporate vs. Portfolio Risk

- Model Risk
- Reference rate reform
- Sustainability

Automation / Cost pressure

- RPA for report generation
- Digitization
- Data Quality

Sustainability

- ESG factors in risk management
- Climate scenario analysis

Liquidity Management

- availability of new tools for steering redemptions (e.g. swing pricing)
- ESMA's Liquidity stress test

2

Model Risk Management

Current market developments

Challenges, trends and regulatory concerns with respect to model risk management are rapidly emerging

Need for effective model risk management

		Current industry trends	Challenges
Governance	Model Risk Management ToM	Establishing **model risk management framework** to discuss, review and address: • **Consistent application** of model & model risk definitions, updates and changes to models (incl. assumptions) • **Model issues** status, embedding new & outstanding **model validation findings** • **Challenges, issues and inconsistencies** in development or validation • Perform **ongoing monitoring** of model risk	Missing/ **incomplete model inventory** Lack of **independence in model validation**
Governance	Model inventory	▪ Review and update of **enterprise wide model inventory** ▪ Implement a **regular attestation process** to confirm inventory status ▪ Ensure that separate **model listings and databases** used for operational purposes **are reconciled** to the single model inventory	Deficiency of **effective challenge by model validation** (comprehensiveness of validation methodologies & frequency of validation)
Documentation	Documentation enhancements	▪ Develop & communicate **documentation standards** to model stakeholders ▪ Enhance **model governance documentation**: types of changes requiring validation ▪ Include **model limitations and assumptions** into methodology documentation	Lack of details of **data used in the model development process**
Documentation	Effective challenge	▪ Develop standardised procedures and documentation, for pre and post-implementation validations, to assist in **recording model validators effective challenge**	Lack of evidence and details for **model assumptions and limitations** Insufficient information on **subjective judgements and model overrides**
Measurement	Model tiering	▪ Implementing/updating a **risk-based tiering** approach based on model specific factors ▪ Aligning **model validation frequency to tiering** results	Failure to maintain comprehensive **model documentation**
Measurement	Aggregation of model risk	▪ Establishing a **process for aggregating and analysing holistic model risk**, including trend analysis and comparison over time.	Absence of an explicit **model risk appetite** and **formal reporting** on model risk KPI

Driving Model Risk Management Efficiencies

Up to 30% reduction in operational costs (mid-term)

Standardization

- Standardized reporting templates / testing.
- Well-established MRM procedures and guidelines
- 1st/2nd line of defence synchronization

5%

- Increase productivity and efficiency
- Coordinated effort across multiple areas (FO, MV, Governance and Internal Audit) with benefits across all of them

Workflow

- Sound model lifecycle management process
- Integrated model inventory system including model dependencies and tiering

5%

- Decreases redundant work
- Allows for better planning and allocation of resources
- Supports effective

Automation

- Common Testing Library in scripting language (e.g. Python)
- Automated testing, reports & documentation

20%

- Medium-term investment unlocking significant savings
- Enables better workforce management across junior and senior resources
- Need to consider career and development options for less experienced staff

Emerging Technologies

- Usage of AI/ML across the entire MRM process for driving efficiencies and providing accelerators

?

- Potentially huge automation and savings opportunities
- Requires investment to develop scalable platforms and new skill sets
- Individual use cases can already provide significant benefits

- Rethinking the model lifecycle management can unlock and even amplify these benefits across the end-to-end processes
- Complementary to cost savings, these investments will further lead to significant enhancements in model performance and the controls environment

Key Takeaways

Increased usage of models lead to increasing risks
Errors in models or wrongly used models can lead to various risks, including reputational, financial or liquidity risks

Increased regulatory focus
Also financial institutions (non-banks) that are being supervised by BaFin report increasing focus around proper model risk management

New technologies require a sound Model Risk Management framework
Artificial Intelligence or Machine Learning need to be properly integrated into the institutions MRM

Cost around models will increase to grow, so MRM needs to become more efficient

Using a front to back view on MRM and proper tooling can significantly reduce your costs
Using standardization in processes, workflow tooling and automation MRM related costs can be reduced by 30%

New technologies will enable you to reduce your costs further

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Liquidity Stress Testing

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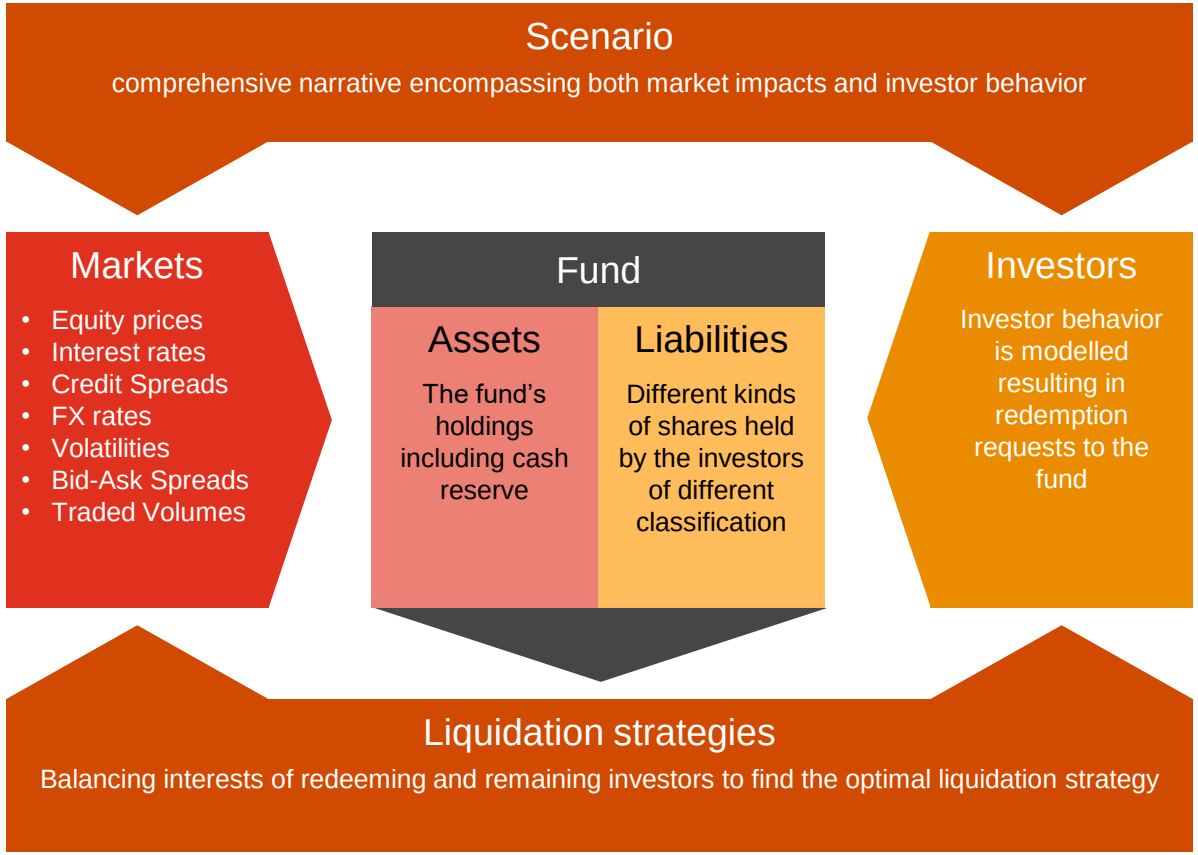
… Corona hat die Aufseher aufgeschreckt und ihnen lange Versäumtes in Erinnerung gerufen: Die Liquiditätssteuerung von Fonds ist nicht überall krisenfest.

Börsen-Zeitung, 16.5.2020

Schematic overview of the liquidity stress testing mechanism

Starting from a stress scenario, suitable liquidation strategies balance the interests of redeeming and remaining investors



Development of appropriate scenarios

- Development of a comprehensive liquidity stress testing framework
- Scenario: comprehensive narrative encompassing both market impacts and investor behavior
- Translation of the narratives (story lines) of macroeconomic stress scenarios into changes in relevant risk parameters

Simulation of asset liquidity

- Simulation of asset liquidity under normal and stressed conditions
- In addition to common risk factors, such as the price and volatilities of equities, interest rates, credit spreads and FX rates, liquidation cost and time needed to liquidate securities are to be considered
- Assessment of liquidation cost and time should be determined by asset type, liquidation horizon and the size of the trade

Simulation of investor behavior

- Redemption requests by clients are typically the most common and important source of liquidity risk
- Investor behavior differs across investor types, investor concentration, investor location and investor strategy

Liquidation strategies and KPIs

- Choose the appropriate asset liquidation strategy for each fund
- Combine the outcomes of assets and liabilities liquidity stress, take into account common metrics to estimate the overall impact on fund liquidity

Overall Framework – ESMA LST

Complexity within the components of the LST framework

Scenarios

- Integration in risk management framework and consistency among funds
- Determining LST processes and LST policies, which should be in line with the contingency planning and interact with the portfolio management function
- Separate functions, ensure independence, and manage conflicts of interest

Historical scenarios
(e.g. financial crisis, European debt crises)

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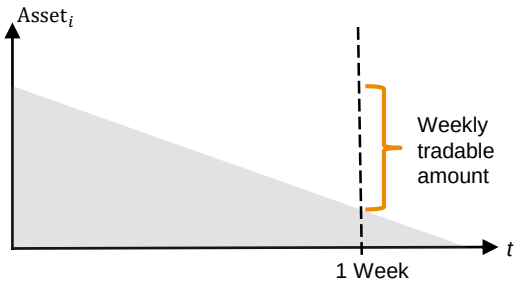
Hypothetical scenarios
(e.g. rising interest rates)

+

Reverse Stress Testing
(scenario that would make the business model unviable)

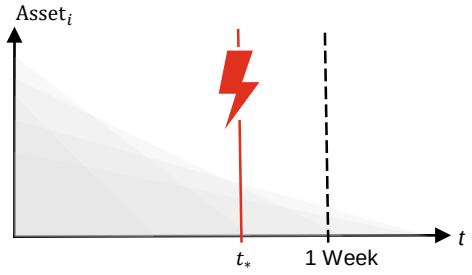
Assets

- Classification of assets in liquidity buckets (e.g. HQLA, according to Basel III)
- Gathering market data such as traded volumes, bid-ask spreads, order-book information, etc.
- Finding a common model for deriving time to liquidation and liquidation costs for each asset



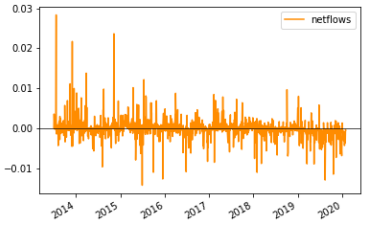
Liquidation Strategies

- Finding a suitable liquidation strategy for every fund in each relevant scenario (e.g. waterfall vs. slicing approach)
- Ensuring compliance with both the fund's investment policies and regulatory requirements
- Exploring different liquidation pathways in order to find the optimal liquidation strategy in each scenario

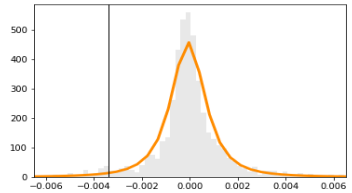


Liabilities

- Model the investors' redemption behavior in each scenario
- Estimation of elasticities using expert elicitation frameworks
- Modelling redemptions using both historically high levels of redemptions and hypothetical levels from appropriate model distributions



Using shocks from specific historical events



Calibration of net flow distribution using an appropriate model distribution

Key Takeaways

Recent high outflows have revealed the importance of effectively managing liquidity risks
The more transparent potential liquidity risks are within your funds, the easier you will make it though crisis.

There are tools to steer redemptions in exceptional market conditions
Redemption gates and swing pricing may now be applied to funds domiciled in Germany.

LST is to be integrated in your risk management framework (ESMA)
There is the regulatory requirement to conduct liquidity stress testing combining effects on assets and liabilities.

Results of LST can be used to calibrate your liquidity measures
Liquidity stress test results are not just for the regulator. They help detect vulnerabilities and apply reasonable measures.

As always, the devil is in the details!
Developing reasonable models for the stress effects on funds' liabilities is not an easy task. Neither is the simulation of suitable liquidation strategies for your funds.

We are happy to discus the status quo and the target picture for the management of your liquidity risks.

4

Data Management

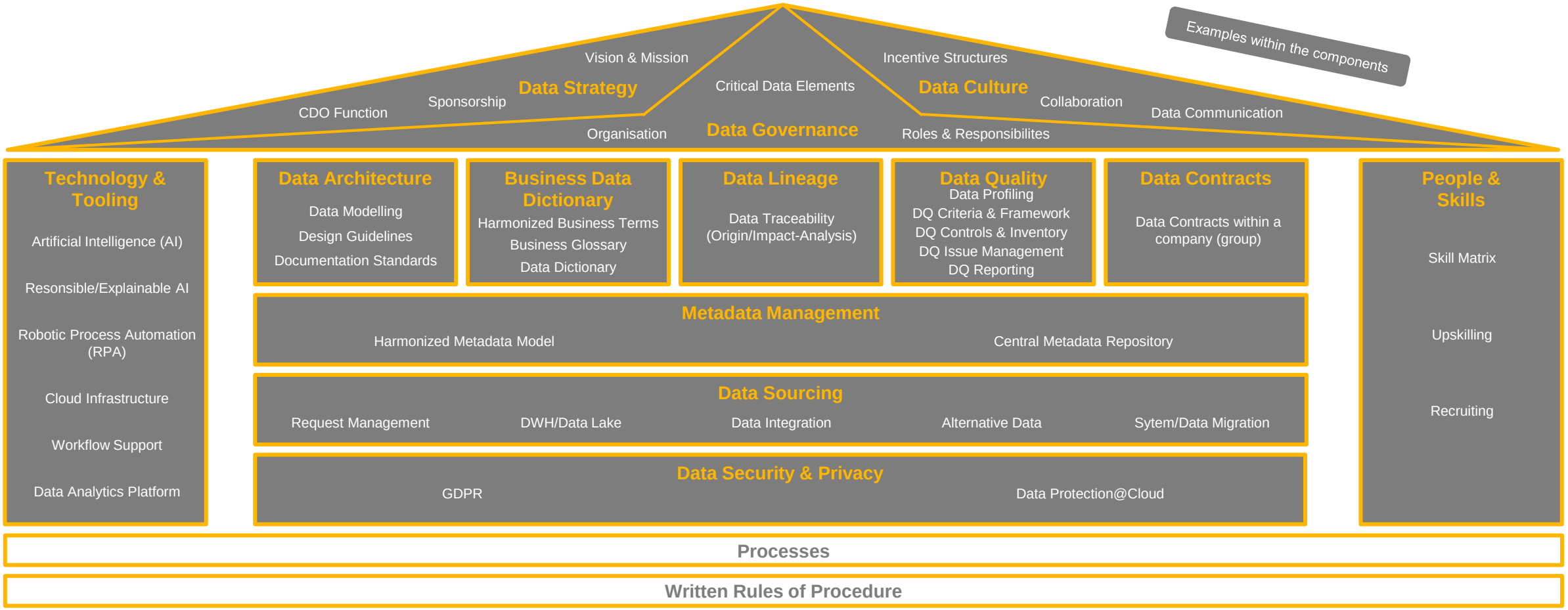
Challenges in the Asset Management industry

The AM industry faces multiple challenges, which to an large extent are technology and data related

	Challenges				Consequences	
External	**Economic circumstances**	Especially the current low interest rate environment puts pressure on the whole financial services industry	**Increasing competition**	Upcoming competitors like FinTechs attack the AM industry with highly digitized product and service offerings	Pressure on margins	Changes in needed skills
External	**Technological change**	Outdated IT-architecture and -systems combined with a rapid changing technological environment leads to a strong need for action	**Increasing regulation**	Through increasing regulations, such as SFTR or ESG, companies have to change their processes and implement compliant (reporting) solutions	High investment costs	Increased burden of compliance
Internal	**Manual processes**	High proportion of manual activities/interventions within the processes	**Poor data quality**	Large number of manual data corrections and partly unreliable data due to poor data quality	Time delays & high resource commitment	Misinvestments / contract breaches / damage cases
Internal	**Redundant data**	Redundant data storage for required data in various IT-systems	**Lack of transparency**	No transparency about the landscape of existing data and its use in processes and reports	Reputational risk	Reduced steering ability
Internal	**Lack of responsibility**	Lack of responsibility for data used in processes and reports	**Dependence on data providers**	Dependence on external data providers with redundant data and uncertainty in its usability	Reduced ability to react in crisis situations	High costs

Data Excellence Capabilities

A profound data management supports mastering several of the present challenges and additionally grants valuable benefits



Key Takeaways

Addressing challenges

A profound data management addresses several challenges AM firms face

Granting benefits

Additionally it grants valuable benefits like a more efficient allocation of resources, increased data quality, improved transparency of data and its use as well as improved reporting capabilities

Data Management as a foundation

Data management supports operational excellence and a future proof data organisation (e.g. data readiness for advanced analytics)

Heterogeneity

The data management maturity level is highly heterogenous within and between AM firms

Status quo and future state

It is important to know the data management maturity level in the status quo and the level of ambition for the future

Step by step

It is possible to improve the maturity level for each component step by step through focused initiatives

5

IBOR Transition

What makes the transition away from IBOR so hard?

Majority of asset managers have now mobilised and are about to complete impact assessments and start the implementation

Ubiquitous

Everyone, everywhere

- $200 trillion of bonds, loans and derivatives indexed to USD LIBOR
- $350 trillion across USD, GBP, EUR, CHF, JPY
- Embedded on instrument and fund level (e.g. performance and risk benchmarks)
- Impacts along the full value change including strategy, processes and systems

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Uncertainty

High degree of uncertainty over short time frame

- Evolution of term rates
- Depth and breadth of liquidity
- Quality, timing of fallback language
- Existence and adoption of derivatives, other reference rates
- Role of regulators unclear and changing
- Capacity of industry to handle

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Operationally complex

Dynamic, operationally intensive and technical problem

- Functionally different curves that develop at different times
- Dynamic dependencies on market evolution
- High dependency on readiness of third party vendors
- Dependencies on accounting, tax and regulatory relief, calculation of value transfer
- Multijurisdictional

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Covid 19 implications

Other internal priorities and market turbulences

- UK regulators released on 25 March 2020 a statement reaffirming that firms should continue to plan for the cessation of LIBOR at the end of 2021
- Interim milestones, e.g. no issuance of sterling LIBOR-based cash products (e.g. bonds and loans) have been delayed
- EUR CCP discounting switch date and EURIBOR fallback consultation delayed

Why is conduct risk relevant to your IBOR transition project?

A recent PwC survey across UK asset managers showed that 86% of respondents have embedded conduct risk within their IBOR transition project

Client Comms	Economics Value Transfer	Market Disruption	Best Execution	Conflicts of Interest	Market Manipulation	Insider Dealing

Client information

With large number of clients and investors, AMs face risks in consistent client treatment and potential and information asymmetry between investors (institutional vs. retail clients)

Meeting Fiduciary Duties / Investor Outcomes

Transition to new RFRs (incl. potential economic value transfers) require a high degree of alignment and consistency by AMs to meet their fiduciary duty and ensure investment outcomes for investors

Market manipulation and Anti-trust

AMs risk being drawn into inappropriate trading activity by counterparties, by these influencing or fixing the price of risk free rates through trading or quoting in underlying or related markets

Risk of Regulatory Breaches

AMs must avoid using non-public information in relation to RFRs and/or LIBOR with an aim to mitigate negative outcomes or obtain positive gains for investors

Enhance product Governance process and pre-trade monitoring controls	Develop metrics at business level for the monitoring of conduct risks	Define globally aligned business guidelines by client segment	Provide clients with flexibility for early adoption of alternative rates	Define an external and internal communication strategy	Maintain transparency and open dialog with regulators	Avoid using non-public information in relation to RFRs and/or LIBOR

Key Takeaways

UK regulators stand firm on cessation timeline with some interim milestones being delayed due to Covid-19, the FCA reiterated previous statements on LIBORs likely cessation by the end of 2021

New RFRs are published and liquidity is building up
The trading in RFR linked products is on the way of building up liquidity with SONIA volumes being the most advanced followed by SOFR; €STR trading as just began

Regulators push for adoption of new RFRs
WGs and regulators push for the adoption of new RFRs through increasing haircuts and communicating interim milestones for changing market conventions (e.g. loans, cash products

Ongoing uncertainty and transition challenges persist
Discussion around term rates (forward vs. backward looking) and fallback language together with the operational readiness of vendor systems impose challenges for asset managers

IBOR transition in the focus of regulators
Communication with regulators with regards to IBOR transition including conduct risk has increased in frequency as the 2021 deadline approaches

Wir verabschieden uns und hoffen, Sie werden auch bei den nächsten Webcasts dabei sein! Bei Fragen oder Anmerkungen sprechen Sie uns bitte jederzeit an.

Vielen Dank für Ihre Aufmerksamkeit!

Heiko Christmann

Phone: +49 211 981 5402
Mobile: +49 160 97991360
heiko.christmann@pwc.com

Dr. Philipp Schröder

Phone: +49 69 9585 5358
Mobile: +49 151 11805504
p.schroeder@pwc.com

Dr. Tim-Oliver Müller

Phone: +49 69 9585 5816
Mobile: +49 170 7096260
tim-oliver.mueller@pwc.com

Rick Zeckai

Phone: +49 221 208 4129
Mobile: +49 171 2041723
rick.zeckai@pwc.com

pwc.de