

THE APPROPRIATE USE OF CUSTOMER DATA HIGHLIGHTS FROM OUR WORK TO ESTABLISH GLOBAL PRINCIPLES

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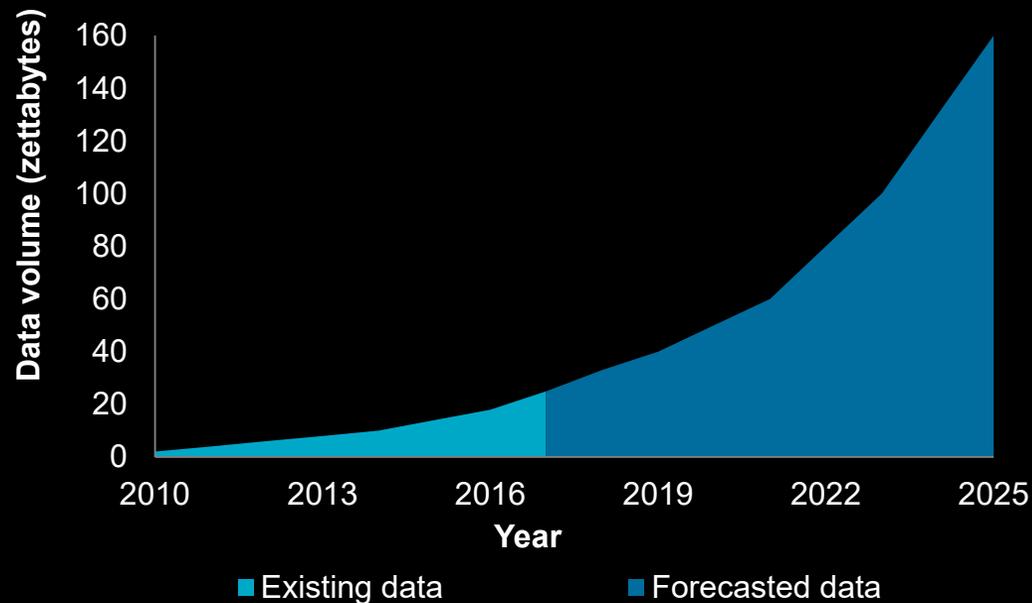
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Transformation of technology, consumer behaviour, and data science has exponentially increased the amount and types of customer data available to firms

The amount of data collected has increased...



...and the types of customer data collected have expanded

	Traditional forms	Emerging forms
Identity	Public records, tax filings	Fingerprints, photographs, iris scans, digital IDs
Health	Medical records, insurance claims	Fitness tracking, sleep/eating habits
Financial	Bank statements, credit scores	Peer-to-peer payments, online budgeting
Social	Organization registries	Social media connections and activities
Location	Telephone books	Geolocation tracking
Media behaviour	Library checkout histories	Web browsing activities, content streaming

Every **2** days we create more data than we did across the **20th century**

Certain marketing companies have **about 1,500 data points** on approximately **96%** of US citizens

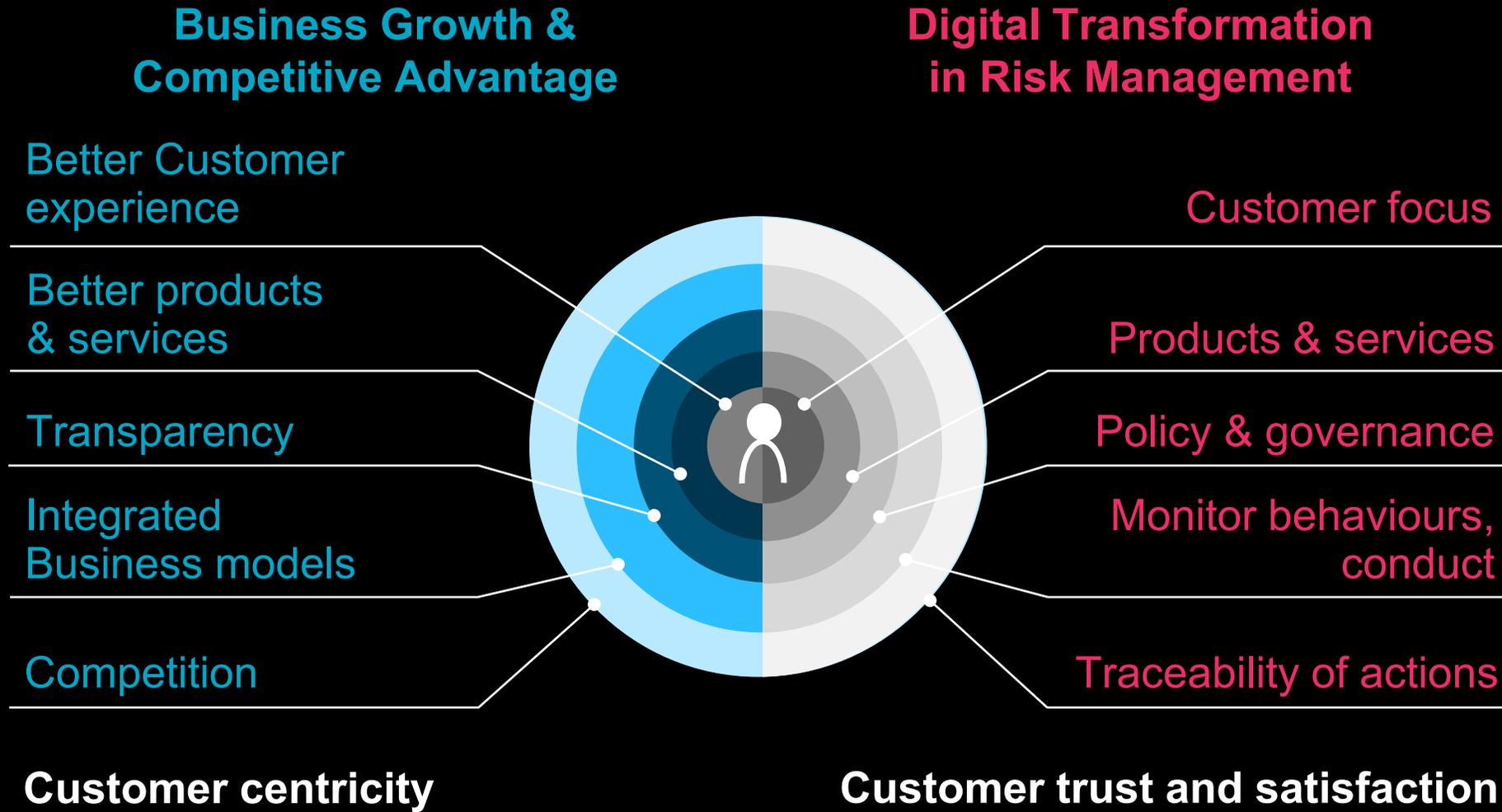
95% of the top free mobile apps collect customer data (location, social networks, etc.)

Source: The Digitization of the World From Edge to Core (Seagate & IDC, 2018)

Banks are reorienting their strategies and business models around data as an essential asset

	Role and description	Potential crown jewels	Players that might have an advantage
Platform provider 	Aggregates and curates customer demand information and (component) supply information for the ecosystem	<ul style="list-style-type: none"> • Privileged access to customer information • Privileged access to business information • Expertise in modern data aggregation and synthesis 	<ul style="list-style-type: none"> • Google, Facebook • Amazon, Alibaba • Banks with “whole wallet” customer relationship • Industry data aggregators
Demand aggregator 	Engages directly with customers, surfaces options and facilitates decision-making	<ul style="list-style-type: none"> • Customer trust • Customer reach • Deep know-how in the spectrum of financial needs and products • Experience design, informed by human insights and customer journeys • Algorithm development to support the above 	<ul style="list-style-type: none"> • Banks and insurers with high customer trust
Component supplier 	Delivers a specific “product” or capability when triggered by a specific need	<ul style="list-style-type: none"> • Highly efficient product factory • Readily able to plug-in to demand aggregators’ solutions • Able to adapt the product or capability to new information surfaced by the LifeMap • Modern software engineering and architecture capability (using modern APIs, cloud services, et al) 	<ul style="list-style-type: none"> • Large “monolines”, by geography • Insurance carriers • Fintech specialists

Digitisation improves customer centricity, but has to be complemented by risk management



The risks associated with customer data could undermine the trust that is essential to financial system stability

Customer – Appreciate that data about them help to create tailored products and services, but concerned about privacy and other risks from data misuse

- ✓ New products and services tailored to individual needs
- ✓ Enhanced customer experience
- ✓ Financial inclusion for underserved individuals
- ✗ Financial losses due to fraud
- ✗ Loss of privacy if data are used without consent
- ✗ Exclusion from products or services due to real or perceived risks



Government – Eager to spur innovation and growth, but mindful of risks to customers that may weaken trust in the financial system

- ✓ Clarifying expectations can encourage responsible and prudent innovation
- ✗ Imbalanced or poorly crafted policies can chill investment
- ✗ Uncoordinated policy within or across countries can burden firms
- ✗ Regulatory and oversight gaps can expose customers/firms to “bad actors”

Business – Enthusiastic to leverage customer data to generate insights and profit, but unclear how to adapt to changing regulations and public sentiment

- ✓ Development of new products and services
- ✓ Better risk management capabilities
- ✓ Cost savings from more efficient internal operations
- ✓ Opportunities to strengthen customer relationships
- ✗ Regulatory penalties or reputational damage from misuse of customer data (loss of customers)
- ✗ Operational losses from fraud or cyberattacks
- ✗ Market disruption for companies that depend on pooled risk or cross-subsidization

There is significant opportunity for policymakers to articulate clear principles to govern the use of customer data to manage these risks

Lack of clarity about how to define and enable data “ownership” challenges the development of an effective data governance framework

Traditional concepts of “ownership” do not fit data well...

✘ Data is intangible

- It cannot be physically held or handled, as a car or computer can

✘ Data can have multiple “owners”

- A piece of data can be legitimately held by multiple entities at any given time
- Data is a non-binary good, so enabling multiple parties to possess and use the same data does not necessarily undermine its value

✘ Customer data that is most valuable today is more personal, and therefore more sensitive, than ever before

- Highly-detailed information about individual preferences and behaviour enables customization, but also increases our interest in protecting privacy and strengthening consumer control over how that data is used

...instead, conceptualizing usage rights as a bundle of interrelated rights may provide a more effective framework

Examples of usage rights (not exhaustive)

- Right to know the information in the first place
- Right to retain it for extended periods
- Right to use it to make decisions
- Right to sell or otherwise transfer the data
- Right to make the data public

Views about appropriate usage norms are still evolving

Rapid changes in data use

- Increasingly diverse types of data are being used in increasingly complex ways
- Financial services data usage has potential to deliver “win-win” for key stakeholders, unlike some of the data debates focused on social media and other tech businesses

Changing public opinion

Differences across nations

- Differing cultural norms relating to privacy shape each jurisdiction’s policy-making constraints and opportunities
- Challenge of – and need for – cross-border coordination heightened

- Widely-publicized data breaches and data collection scandals involving social media platforms have raised awareness of privacy risks and inability of consumers to control data usage
- Lack of consumer sophistication about how data is being used and how behaviour can affect access to products and services, among other issues, in the future

Our work to date

Work to date

Principles

- Conducted **40+ interviews** with subject matter experts on **principles for the appropriate use of data**
- Developed **principles** through working group meetings in **Singapore and New York**, along with individual stakeholder interviews

Governance

- Reviewed **current state** of standards, regulations, oversight and supervision across regions for data use and ownership
- Developed set of **suggested next steps for implementation of principles and explored potential trade-offs**



A detailed summary of working group findings, principles, and next steps can be found in the recently published white paper, “The Appropriate Use of Customer Data”

Stakeholders aligned on five key principles, opining on topics like portability and the underlying conditions for the appropriate use of customer data

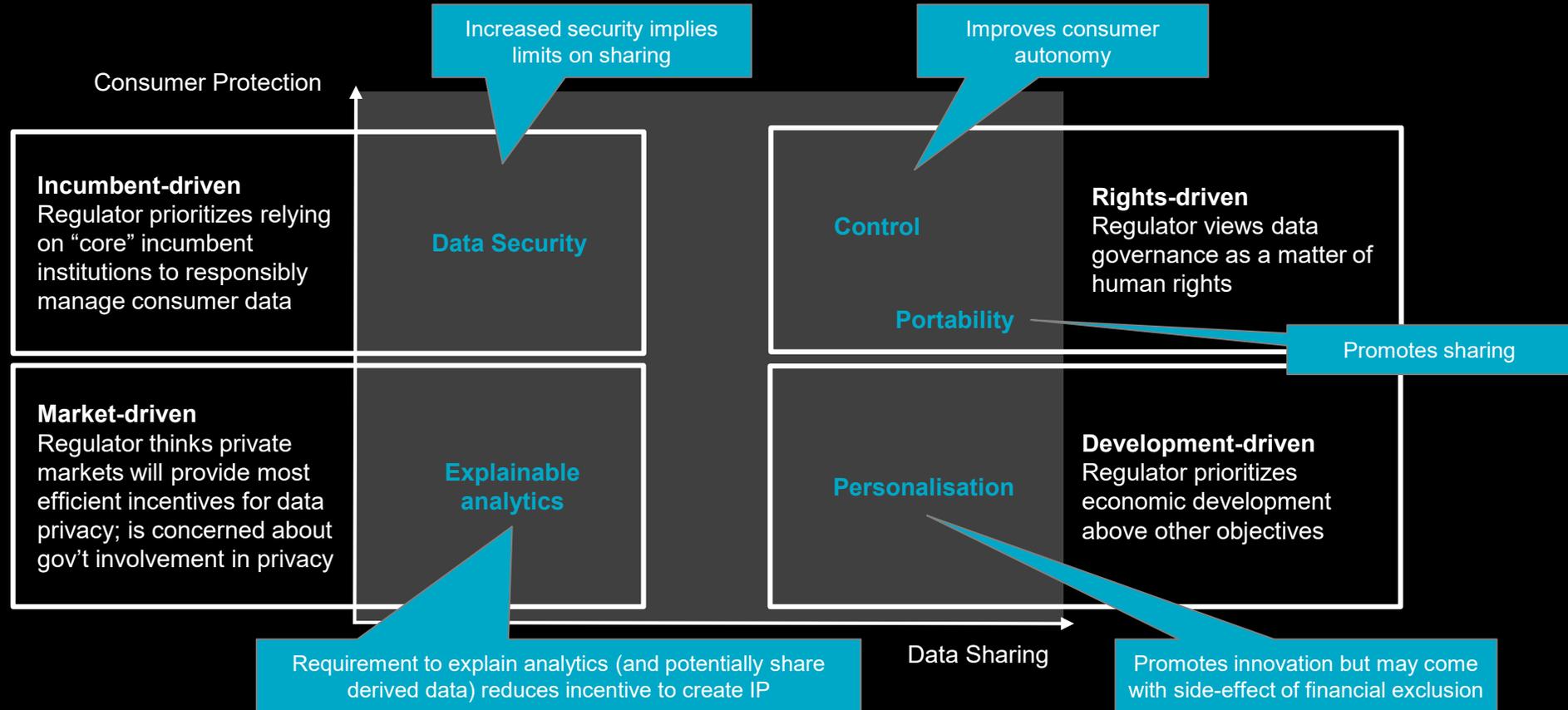
5 Key Principles of Data Governance

 Control	<i>“Companies should be clear about their use of customer data, attain customer agreement to their customer data policies and, where appropriate, seek consent for specific uses.”</i>
 Security	<i>“Companies should be held responsible and accountable for data security.”</i>
 Personalization	<i>“Companies should be able to create individual customer-level profiles that allow them to provide differentiated customer services.”</i>
 Advanced analytics	<i>“Companies should be able to comprehensively test, validate and explain their use of data analytics and models to customers.”</i>
 Portability	<i>“Companies should, where appropriate, allow customers to access, download, transfer and/or permit third parties to manage data about them.”</i>

Simple? Not quite...

Policymakers are likely to place different importance across these principles

Simplified framework for mapping policymaker objectives



We can therefore expect significant geographic differences resulting from policymaker priorities

There also remain important trade-offs within each of the principles



- **Customer autonomy vs. effective anti-financial crime measures:** E.g. creation of a single client view in an effort to combat financial crime may not be possible due to banking secrecy regulations.
- **Consent requirements vs. customer experience:** Consumer behaviour and preferences do not necessarily match; current consent mechanisms are often time meaningless.
- **Access vs. protection:** Fee-based models might exclude those unable/unwilling to pay for services that companies currently offer for free.



- **Innovation ability vs. system integrity:** Effective cyber security controls can overburden young start-ups; lax requirements threaten the security of customer data and the integrity of the larger financial system.



- **Debate on limitations for specific data uses** and questions over whether societal checks should be made on outcomes (e.g. requiring basic provision of insurance services for all customers, even those less desirable from a profitability perspective).



- **Appropriate vs. legal:** The topic of data ethics—that what is allowed is not necessarily what one should do, and what one should do is not necessarily allowed—is likely to come to the forefront of forthcoming discussions on the use of data.
- **Explainability vs. model efficacy:** E.g. The notion that a “black-box” algorithm may in some cases deliver more efficient outcomes for customers and companies alike, but that financial institutions then might not be able to explain how a certain outcome was generated.



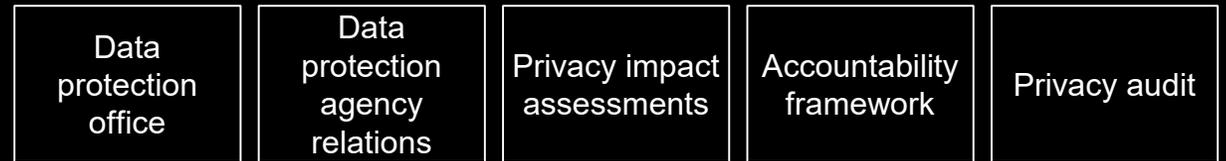
- **Customer choice vs. equal treatment:** Regimes enabling customers to freely access, download and share data are assumed to improve efficiency, benefit customer choice and altogether support innovation. However, the effects on established players—the larger incumbent financial institutions—are less appreciated.

Meanwhile, European banks have been focused on GDPR compliance, which leaves important gaps to be resolved

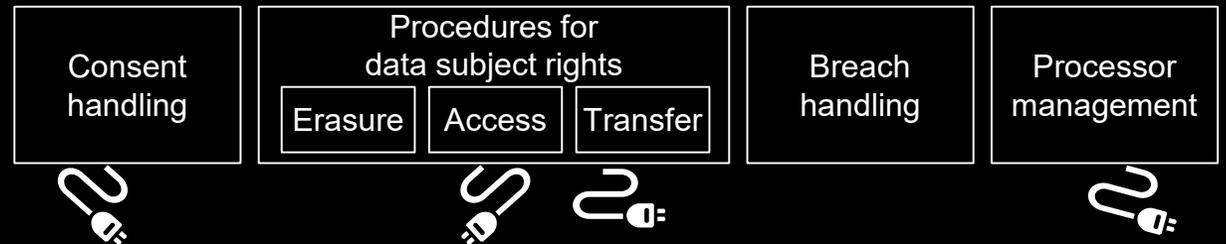
- At many firms, compliance programs have been devised to deliver on the formal elements required by GDPR
 - Policies
 - Data protection officer
 - Committees
 - Privacy impact assessments
- A compliance focussed approach will leave firms with (at best) an ability to highlight and report problems when they occur, but with few tools to make choices about the way that data is being managed
- The continuing trend towards open access (e.g. PSD2) means there will be ever more boundaries and data processors to manage
- Doing this on top of a fragmented data-set without clear management of consent will become ever more difficult

Loose wires: GDPR programs that focus on basic compliance and are unsupported by technology will not support future privacy efforts

Compliance Layer



Process Layer



Multiple risks arising from disconnects

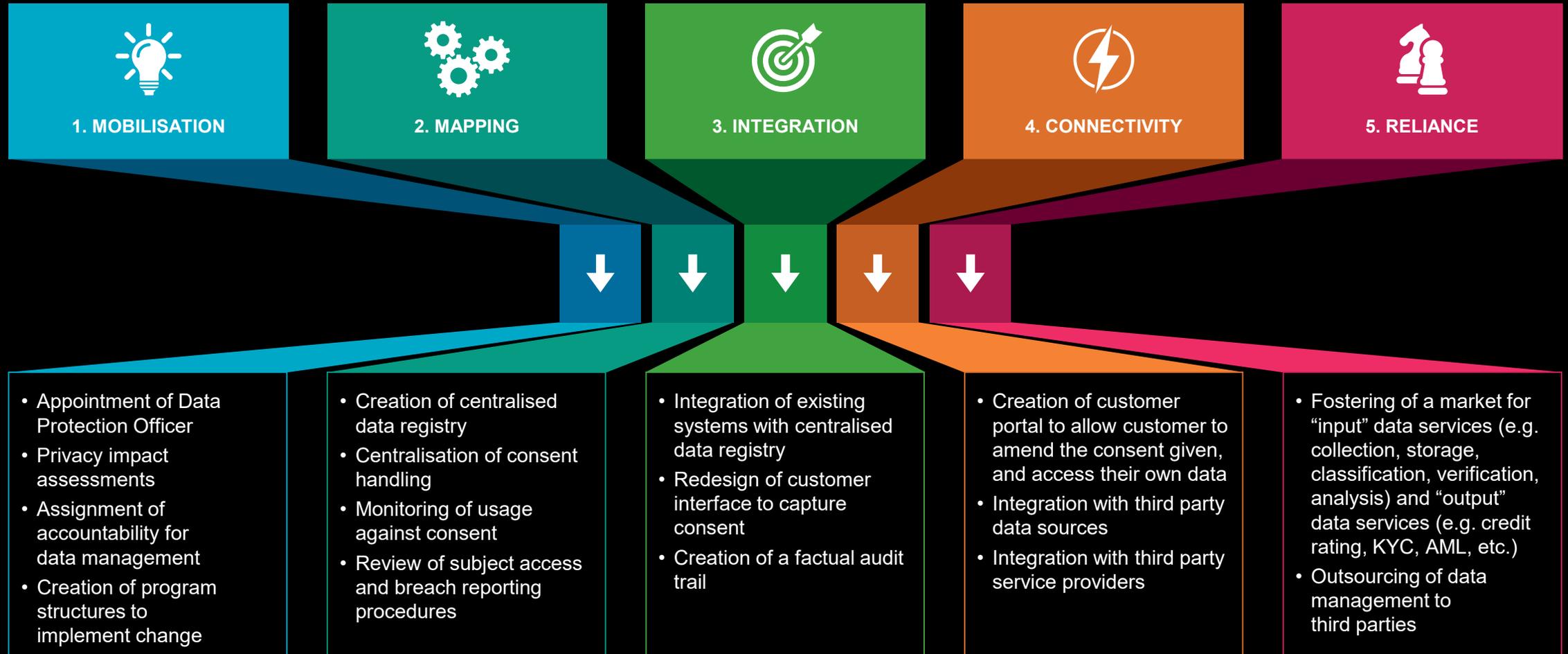
- Inability to link consent to multiple instances of data
- Inability to reconcile different sources of customer data
- Inability to retract consent in complex supplier network
- Inability to create audit trail of third party permissioning
- ...

Technology Layer



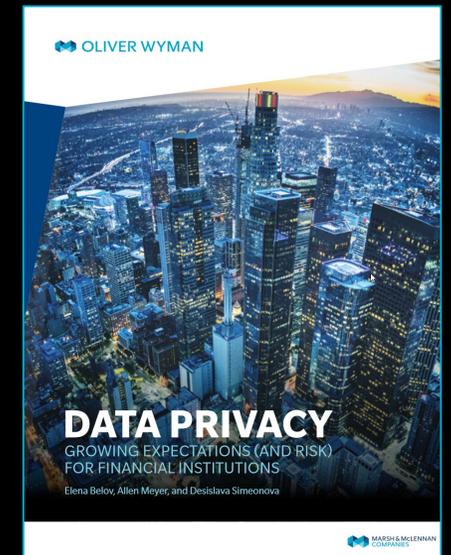
A roadmap for sustainable privacy management beyond regulatory compliance

Five steps required for sustainable privacy management



There are five no-regret moves for firms wishing to advance now

1	Increase awareness at the senior executive and board levels	<ul style="list-style-type: none">• Alignment between strategy and approach to data privacy• Visibility of legislative agenda• Adequacy of resources and infrastructure to handle future requirements
2	Understand how the organization uses personal information	<ul style="list-style-type: none">• Understand what is collected from whom and for what purpose• Understand data management and storage• Develop a view on future requirements e.g. in light of digitisation and disintermediation
3	Data privacy risk identification	<ul style="list-style-type: none">• Establish line-of-sight into the most significant privacy risk scenarios across consent, sharing, aggregation, breaches• Understand the efficacy of protective controls.
4	Determine the firm's stance on data privacy	<p>Beyond the regulatory minimum:</p> <ul style="list-style-type: none">• What do we consider to be personal information?• How do we use and share personal information?• How do we inform consumers about data use?• What rights do we give consumers?
5	Increase transparency and disclosure for consumers	<ul style="list-style-type: none">• Make disclosures more accessible, interactive, and informative• Educate customers on key privacy concepts• Explain steps customers can take to increase their privacy



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