

Foreword

We are in a time of rapid change across industries, procedures and perspectives. In the global banking sector, both Finance and Risk Management are evolving towards more adaptable, data-driven approaches for dealing with continuously shifting Finance and Risk landscapes and priorities. These shifts are pushing banks to enhance their Finance and Risk data capture and to ensure their monitoring processes are more responsive. And these activities, in turn, are increasing the challenges banks face in managing their data quality.

Data quality management challenges are being addressed in various ways across the global banking sector. During its interactions with the sector, Deloitte Netherlands has observed that the priorities in the approach used by mid-sized banks differ from those of large global banks. Mid-sized banks can also be expected to deal with various dilemmas differently, including how they identify internal and external drivers for data quality management, how they prioritise the quality standards relative to other management interests and how they align short-term and long-term priorities with their invariable budget constraints. It was these difference in approaches that prompted us to conduct our survey, which revealed both differences and similarities between participating banks, and which will hopefully help banks to set a clear course towards a data-driven future.



About the survey

Over the past few months, Deloitte Netherlands has been conducting a survey consisting of a series of personal interviews with representatives of various banks. This survey builds upon our Global Risk Management Survey and zooms in on the Dutch mid-sized banking industry. It aims to throw some light on how the sector is addressing various data quality management topics. All 8 participating banks were represented in the interviews by board members (CROs, CDOs or CFOs).

This report summarises the aggregated responses from the interviews, based on the following topics: Regulation, Awareness, Governance, Processes and Systems, and Data Quality Implementation. It also highlights general trends and can be used as a high-level benchmark by any financial institution wanting to understand the maturity of its data quality management in the Finance and Risk domains compared to that of its peers.

Deloitte Netherlands would like to thank all the participating banks for taking part in the survey in an open and transparent manner.



Executive summary

Summarising key findings from respondents on an axis of five data quality management topics: Regulation, Awareness, Governance, Processes and Systems, and Data Quality Implementation

Regulation



Regulation is the most important driver of data quality improvements among mid-sized banks.

All respondents believe their organisation is highly likely to maintain or scale up its focus on data quality in the future. As regulatory standards are constantly evolving, the participants are concerned about the impact of increasing regulatory demands on their data quality management. Interestingly, mid-sized banks' understanding of their level of regulatory compliance was found to vary.

Awareness



Level of organisational awareness of data quality management varies across functions.

However, all the banks surveyed plan to increase awareness across the entire data value chain. Multiple respondents raised concerns about the level of knowledge and experience of data quality management among employees at all levels. Respondents also mentioned a general lack of understanding of the impact that data quality issues can have, as well as a resultant lack of adequate prioritisation.

Governance



Implementation of the data governance framework is often unsatisfactory.

Multiple respondents mentioned that, despite complex roles and responsibilities being well established on paper, the implementation of these frameworks is lagging. The reasons mentioned included a lack of priority at management level, as well as a lack of knowledge and experience among the employees meant to fulfil various roles and responsibilities.

Processes & Systems



Most participating banks reported low confidence in their organisations' data quality processes and systems.

This applied particularly in the case of banks working towards greater regulatory supervision and more automated processes. The respondents shared their concerns about the limited control frameworks being set up at each stage of their processes. More mature banks also mentioned the importance of constantly improving their infrastructure to allow for more complex data needs.

Data Quality Implementation



The maturity of participating banks' data quality implementation is generally seen as moderately positive, with most respondents describing their implementation as "mature".

Most of the banks interviewed face challenges in assessing, monitoring and improving their data quality. The maturity of each individual aspect tends to be highly dependent on the maturity of other aspects. While most of the respondents are currently defining their Critical Data Elements (CDEs) for several departments, only a minority have already harmonised their definitions bank-wide. Another challenge most of the participating banks are facing is a lack of impact analyses of the data quality issues and an inability to foresee and prevent such issues.

Interpreting the survey results

The survey questions were categorised under five headings: **Regulation, Awareness, Governance, Processes and Systems, and Data Quality Implementation**. The interview responses are presented separately for each category.

In addition to reporting the most common and most striking results for each topic, we try to answer the questions: *“What challenges are banks facing?”* and *“What is keeping banks busy?”*

The next few pages in this report show the positions of all the participating banks (anonymised) on the maturity level scale for each topic under the heading of *“Where do the participating banks stand?”* The key characteristics of each maturity level on the scale are described on the right. This is intended as a reference for benchmarking and to enable you to position your organisation on this scale and compare yourself directly with your peers on each data quality topic.

This assessment is based on a qualitative analysis of the responses from the participants.

Limited

Awareness and knowledge is insufficient, priority management is lacking, and remediation and monitoring are done on an ad hoc basis. Policies and processes are absent. Roles and responsibilities are established ad hoc.

Developing

This topic has received attention and its importance is acknowledged. Although policies and processes have been established, they have not been implemented in practice. The maturity level varies across the organisation.

Defined

Data quality processes are implemented consistently across the organisation and are regularly monitored. A data governance framework has been established and is followed organisation-wide.

Leading

The bank is leading the industry. Industry best practices for data governance and reporting processes are continually improving. Data quality assessments are regularly reviewed at an executive level.



“Over time, the standards of the ECB-regulated banks will apply to those that are not yet and the ECB will have a different benchmark... If we meet the criteria of yesterday’s DNB, it does not mean that we are good for the next three years... Improving Data Quality will be a continuous journey and it will never stop.”

--- CFO of a Dutch mid-sized bank



All respondents believe their organisation is **highly likely to maintain or scale up its focus on data quality** in the future.

Among the reasons motivating banks to become more future-proof are to incorporate digitalisation and emerging businesses. However, the primary reason is the need to comply with increasingly demanding regulations.

All the respondents are concerned about the impact of supervisory and regulatory processes on their data quality management.

For more than half of the respondents, their concern is rooted in the interpretation of new, complex and more demanding regulations on ESG reporting, data granularity and risk modelling.

The DNB is currently leveraging a lot of data-related standards from ECB standards. For banks not currently regulated by the ECB, it is important to realise that the DNB's standards will be constantly tightened and improved. This will be a continuous journey: in the long term, therefore, banks also need to keep in mind the gap between their organisation's data quality management and the ECB standards.



We see considerable differences between mid-sized banks' understanding of their level of regulatory compliance.

Some respondents indicated that they have no idea of how compliant they are, while at the other end of the spectrum we found banks that are confident that they are halfway compliant.



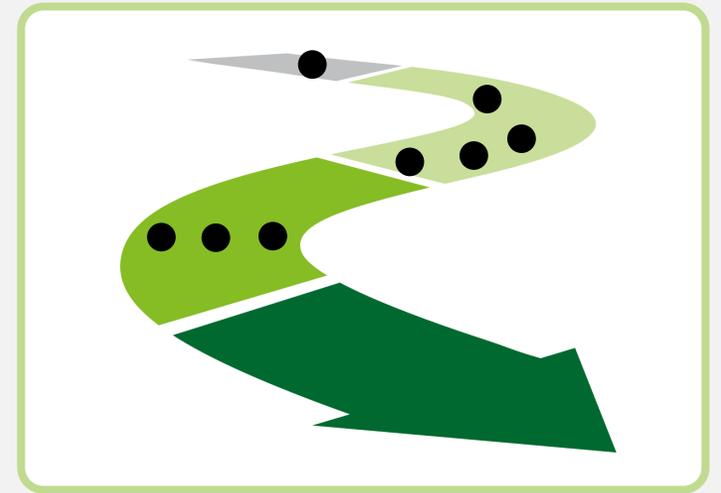
REGULATION

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What challenges are banks facing?

- Translating regulations into business actions
- Managing priorities
- Ever more demanding regulations
- ESG reporting

Where do the participating banks stand?



All respondents believe their organisation is **highly likely to maintain or scale up its focus on data quality** in the future.

Among the reasons motivating banks to become more future-proof are to incorporate digitalisation and emerging businesses. However, the primary reason is the need to comply with increasingly demanding regulations.

Internal Audit's approach should be more detail-oriented instead of "ticking the boxes".

DNB on-site inspections is highly focused on calculation details, on the golden source of the data and on manual interventions in automated processes. To make Internal Audit findings more meaningful, the focus should move from "ticking boxes" (designed to see whether the methodology and framework are in place) to identifying gaps in the practical implementation.

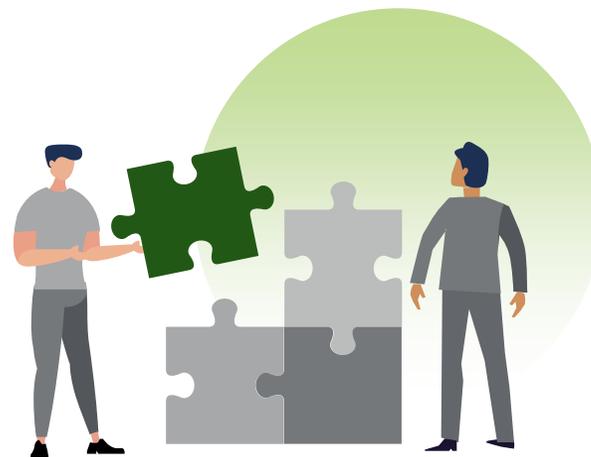
The respondents' Internal Audit departments commonly found that business processes needed to be improved, and that attention needed to be paid to the quality of data on impact reporting and the lack of human resources.



The key challenge is to find a balance in prioritising.

Respondents stated that although regulators found DQ issues through on-site inspections, these findings were generally not critical or material. The key challenge is to find a balance in prioritising different findings to tackle them appropriately.

There are countless data-related (and other) topics on the board agenda and so choices need to be made. Priority is usually given to actions or projects whose impact attracts most regulatory attention or where regulators have already defined a concrete roadmap to accelerate implementation, whereas internal processes or improvements tend to be postponed.



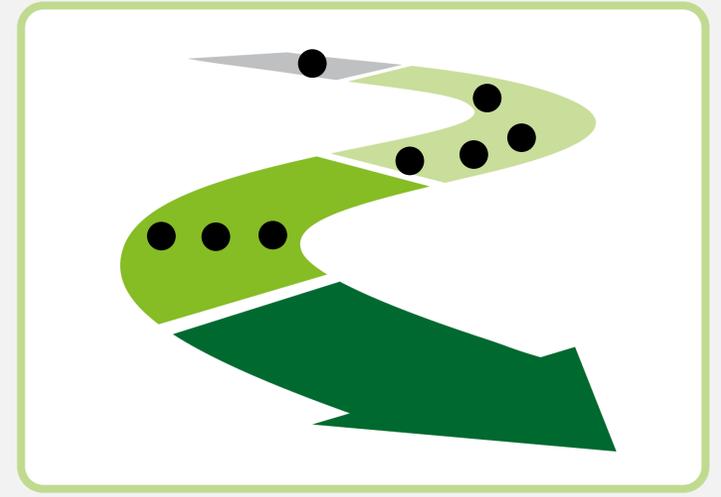
REGULATION

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What is keeping banks busy?

- Keeping up with complex and changing regulations in risk management and decision-making
- Setting up a data programme to tackle prioritised data issues
- Data collection for ESG-related reporting and risk management

Where do the participating banks stand?



Mid-sized banks are still seeking to increase and **balance the level of awareness** of data quality management across their organisations.

Sufficient awareness throughout the value chain will help to correctly translate governance into operational processes for functionally implementing data quality management.

Respondents are fairly confident about their awareness of the importance of data quality management.

Most mid-sized banks' board members are directly involved in and regularly updated on data quality management reporting processes. The topics driving their agendas in this respect include Data Quality Governance and Data Quality Root Cause Remediation. However, there is a lack of understanding of the impact that data quality issues can have on strategic oversight and decision-making.



But there is still room for improvement across the chain of command.

While board members regard their awareness as reasonable, they are more concerned about the knowledge of their employees working on data quality implementation. Awareness is currently mainly being developed by learning on the job and/or knowledge-sharing between colleagues, which smaller banks tend to find more efficient. Most respondents also find attracting and engaging the right talent in this competitive market to be challenging.



Across departments, the level of awareness also varies.

Some respondents indicated that they see unequal levels of awareness across their three lines of defence. Data quality awareness and the general set-up are relatively more mature in Finance departments (first line) than in Risk departments (second line).



AWARENESS

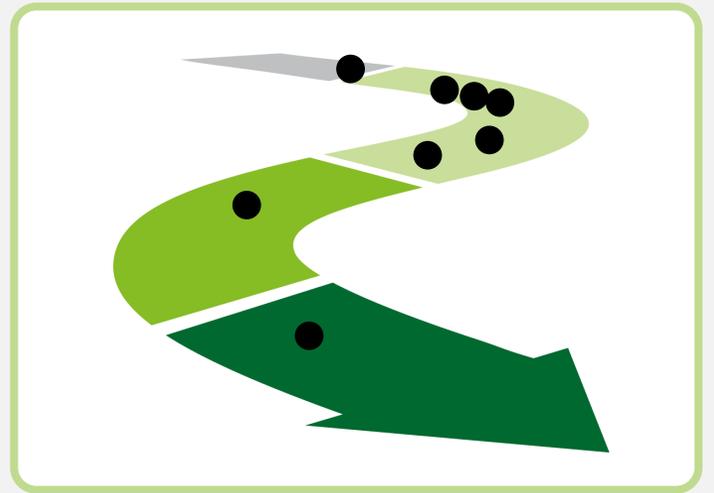
What challenges are banks facing?

- Employees have insufficient knowledge of data-related topics
- Unequal level of awareness across teams

What is keeping banks busy?

- Organising internal training on data-related topics for their employees
- Finding the right people with the right knowledge
- Encouraging collaboration between teams for knowledge exchange

Where do the participating banks stand?



Mid-sized banks still need to close gaps in **implementing** the governance framework established on paper.

A clear governance structure identifies principles, roles and responsibilities from the end user to the data owner and provides guidelines for data management.

More than half of the mid-sized banks have appointed a Chief Data Officer (or equivalent).

Most of the respondents consider data a common denominator of Finance and Risk. In most cases, however, ownership of data management within the bank is positioned under Finance (CFO) rather than Risk (CRO).



Implementation is challenging, because paper is patient, people not so much

-- CFO of a mid-sized bank



But there is a lack of progress on implementation.

Roles and responsibilities are generally established or well established “on paper”. However, multiple respondents mentioned that progress on implementation is lagging, either due to differing priorities, or to a lack of the knowledge and experience needed to properly translate frameworks into practical actions.



GOVERNANCE

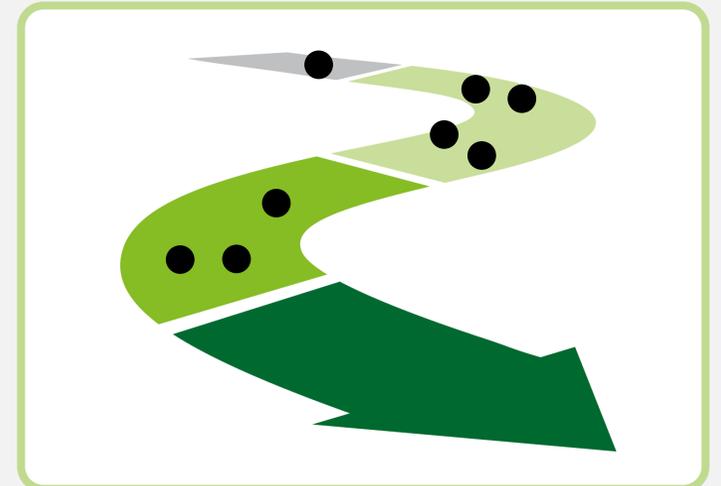
What challenges are banks facing?

- Translating theory and frameworks into practice

What is keeping banks busy?

- Making sure the right priorities are set and sufficient knowledge is available to implement the framework in practice

Where do the participating banks stand?



Most respondents show **low confidence** in the data quality processes and systems being set up at their organisations.

Organisations need to translate regulatory requirements as stated in BCBS 239 and the DAMA-DMBOK theoretical principles into practical and value-oriented solutions.

Organisations with more complex models or more regulatory supervision are less confident.

Higher data requirement volumes mean these respondents find setting up a structural data quality process more challenging and more urgent.

Majority of the respondents have set up data quality frameworks and methodology in their organisations.

But one common challenge that everyone faces is that of limited implementation. This challenge is caused by mid-sized banks generally having insufficient experience and knowledge to properly translate regulations and frameworks into practical business actions.

Automated processes do not necessarily mean good data quality.

If processes are more automated, more attention needs to be paid to ensuring that issues at each step of the process are noted or flagged to avoid “garbage in, garbage out”. Some respondents emphasised the need for a control framework for each step in the data quality processes.

Automation does not necessarily lead to an improvement in data quality
 -- CFO of a mid-sized bank



PROCESSES AND SYSTEMS

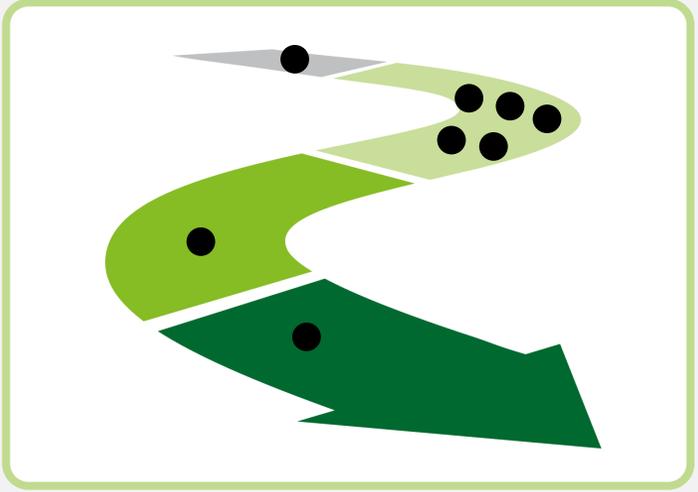
What challenges are banks facing?

- Limited implementation
- How to prevent “garbage in, garbage out”

What is keeping banks busy?

- Improving infrastructure to allow for more complex data needs (e.g., data lineage, granularity)
- Setting up a control framework for each step in data quality processes

Where do the participating banks stand?



Majority of the mid-sized banks face challenges in **assessing, monitoring and improving** their data quality.

To apply focused and prioritised data quality management, an organisation must first identify its Critical Data Elements.

More than half of the mid-sized banks are in the process of defining their Critical Data Elements (CDEs).

We see the others (i.e. a minority) facing challenges in trying to harmonise their CDEs and definitions across departments to achieve bank-wide unity. This difference in maturity levels results from unequal levels of awareness across departments. It is very important, therefore, to improve cross-team collaboration by supporting teams with less knowledge and bringing them up-to-speed.

Data lineage maturities range from completely defined to not yet defined.

The respondents recognise, however, the importance of defining CDEs. More than half of them indicated that partial lineage was being set up, using either external or internal tooling.

Setting up a centralised data warehouse for Finance and Risk (i.e. defining the golden source of the data) is on the agenda of the majority of the data programmes that the banks we interviewed are planning or executing.



DQ IMPLEMENTATION

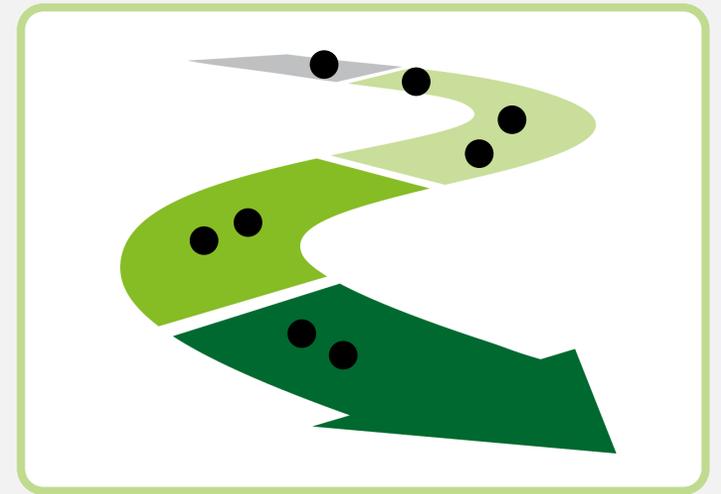
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(Measure & Monitor)

What challenges are banks facing?

- Inability to foresee and prevent issues
- Managing priorities
- Defining the golden source of the data
- Impact analysis

Where do the participating banks stand?



Majority of the mid-sized banks face challenges in **assessing, monitoring and improving** their data quality.

Based on the organisation’s governance, DQ reporting enables the appropriate departments to monitor data quality and to take the first steps to resolve issues.

Most of the respondents believe that the data quality of their CDEs is measured in a structured way.

We see different banks using different approaches and tools for data quality assessment and monitoring.

Banks with centralised data governance also assess and monitor the data quality of all CDEs across departments centrally. At banks with decentralised governance, each department is responsible for its own CDEs, and reports data quality to the CDO (or equivalent) separately. Although this may result in inconsistencies in reporting, it provides additional oversight into the granularity of where exactly the data quality issues lie.

Banks that measure data quality more structurally tend to have more continuous monitoring and reporting.

More than half of the banks indicating that they measured data quality structurally also indicated regular monitoring and reporting of data quality issues across (or partly across) the bank, either centrally or decentrally. While the frequency of measuring data quality varied, it is important to focus on foreseeing and preventing data quality issues rather than resolving them on an ad hoc basis.

This maturity pattern also applies regarding a structural process for remediating data gaps. Respondents expressed concerns about a lack of impact analysis on data gaps, a lack of documentation on processes and a lack of management involvement.



DQ IMPLEMENTATION

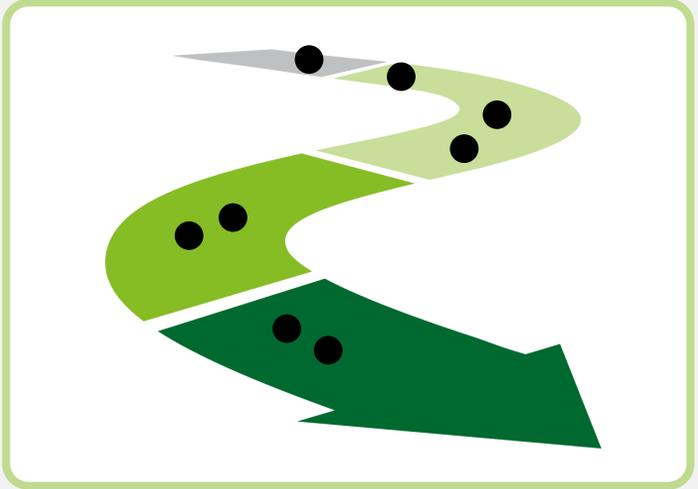
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(Measure & Monitor)

What is keeping banks busy?

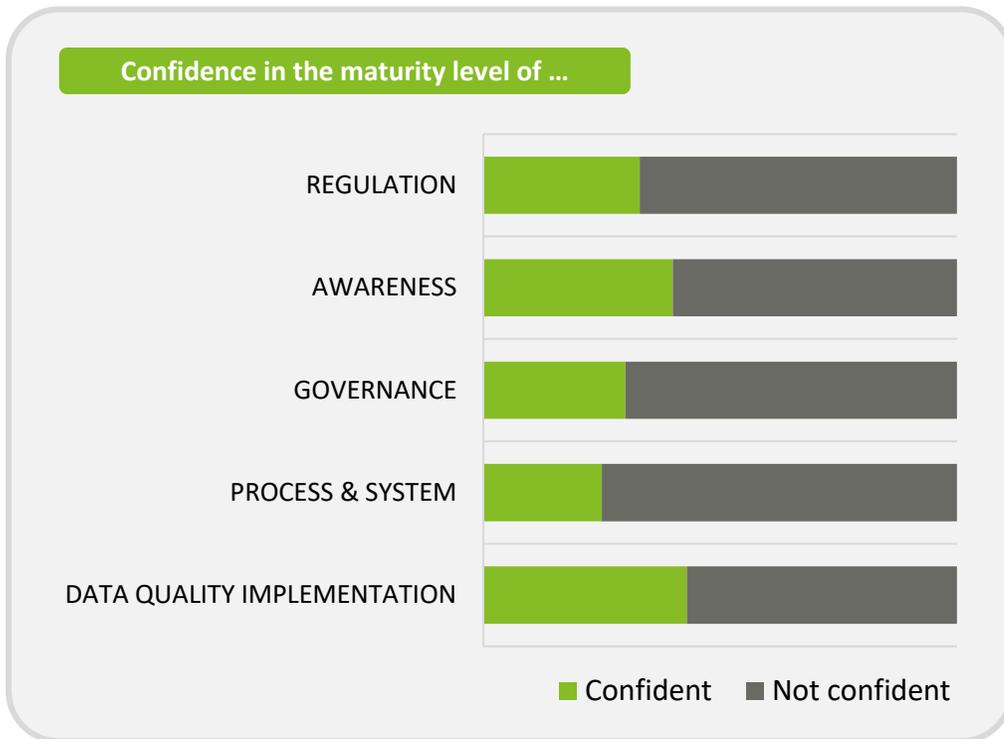
- Harmonising bank-wise CDE definitions
- Improving collaboration across teams
- Implementing more advanced analytics software

Where do the participating banks stand?



Conclusions

Having aggregated the participating banks' positions on road maps we concluded that, in general, only about one third are confident about their level of maturity in managing their data quality, especially in terms of their processes and systems.



We recommend CXOs pay greater attention to leveraging data as a strategic asset.

Laying the foundations:

- Setting up a control framework to avoid “garbage in, garbage out”
- Translating regulations and framework into business requirements and concrete actions
- Managing priorities between running the bank and changing the bank

Continuing the journey:

- Upgrading the bank's operations to exceed DNB and ECB data quality standards
- Attracting the right talent, fluent in data, and using it for decision-making and for balancing knowledge and skills within teams
- Exploring new technology and platforms for optimal data usage
- Moving beyond the foundational efforts to capture more value from your data

The Future of Data Quality Management

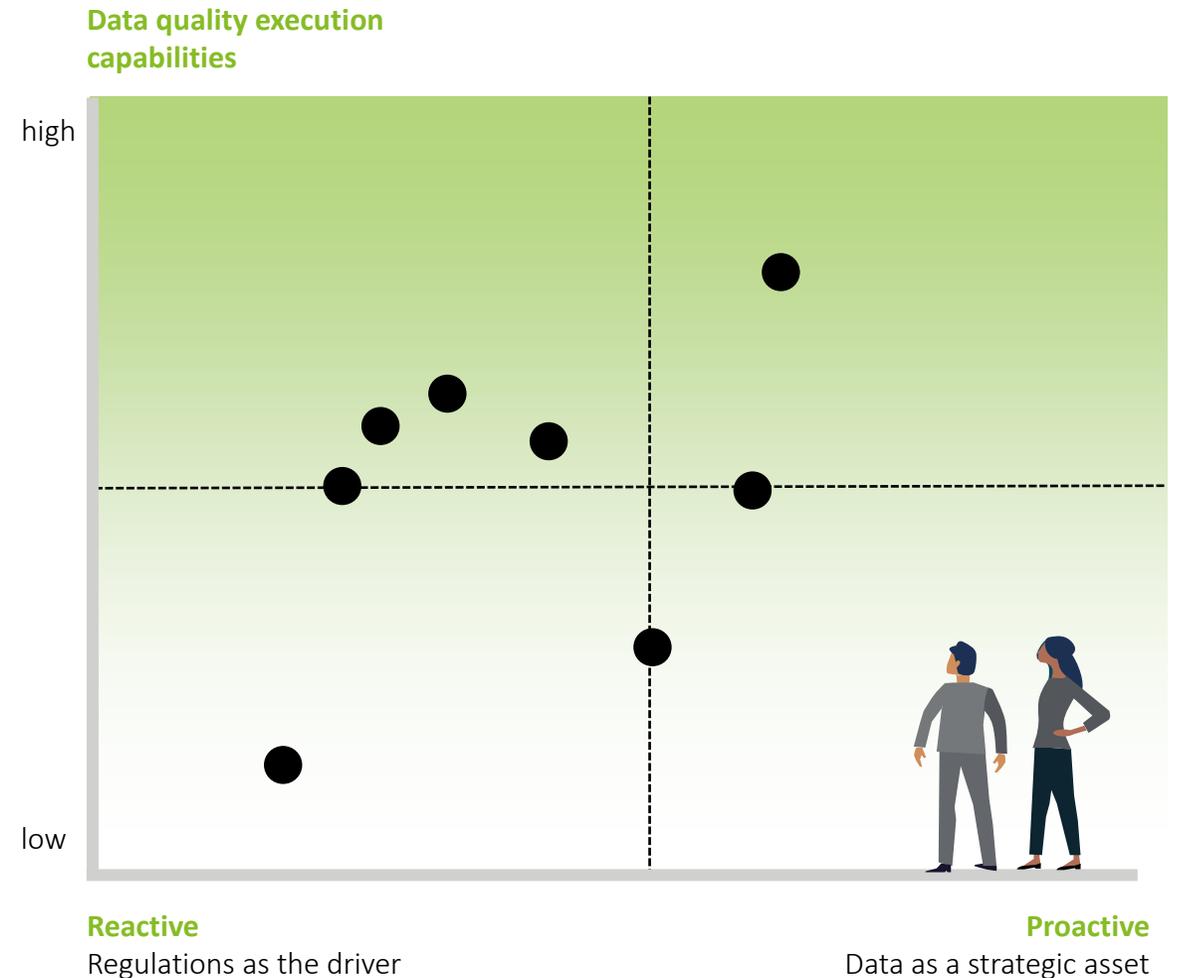
One of our key findings is that, for the majority of the participating banks, regulation is the biggest driver for improving their data quality management. These banks have a relatively reactive approach in efforts, and their activities are incident-based.

For the minority with a proactive approach, their main purpose is to improve their organisation so as to better serve clients by exploring opportunities in digital banking or expanding into new markets. Data is their strategic asset, and data quality is considered a strategic imperative and proactively managed as a KPI at board level.

Becoming strategy-driven will motivate banks to engage in activities that focus on building future-proof data quality processes, instead of on filling gaps from yesterday.

Based on our qualitative analysis of the survey results, we see **strong correlation between board-level involvement and recognising data quality as a strategic priority**. This in turn results in the organisation being an industry leader in its data quality execution capabilities.

Looking ahead, ensuring good-quality data should not be seen as a chore to be completed before regulators impose penalties, but instead as a stepping stone for banks to build a more responsible business.



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