Risk-Based Supervision for Inclusive Digital Financial Services

TRANSCRIPT: Developing a Data Strategy

A modern, integrated data strategy is essential to support data reforms that encompass revamping regulatory reporting systems and IT infrastructure supporting supervisory work. Let's unpack what you need to consider as part of your data strategy.

The first consideration is **aggregated vs. granular data**

The most fundamental decision supervisory authorities and supervisors need to make when developing their data strategy is about the level of detail required in the data. This means deciding between collecting aggregated data or granular data.

Aggregated data is the most common type of data collected by supervisors. It is when an indicator is calculated and reported by the financial service provider. For instance, the total number of account holders, reported as such, is an aggregated indicator. There is an inherent trade-off between high-quality analysis with the level of data aggregation in regulatory reports.

To gain more detail with this type of data collection method, supervisors need to request that financial service providers add breakdowns to aggregated indicators. For example, financial service providers need to not only provide the total number of account holders, but also supply a breakdown of these account holders by the customer gender, age, demographic location, and by average account balance.

The problem is that when providers are asked to calculate an aggregated indicator with too many breakdowns, there is a greater chance that the quality of the data will be reduced. This is usually due to the extra system configurations, or even manual procedures, needed to produce the aggregated indicator with multiple breakdowns.

An alternative is to request that financial service providers report their whole dataset of account holders, or mobile money transactions, to the supervisor. The supervisor then aggregates the data and calculates the indicators they want. This is what we call granular data. A major advantage of granular data is greater flexibility. Supervisors can calculate any desired indicator across reporting providers on any given day because they are not constrained by predefined indicators. If adequate analytical skills and technology are available, then granular data has the potential to provide much richer supervisory insights.

There are disadvantages to granular data too. These include having to hold and manage a much higher volume of data. Also, a great volume of highly granular data does not work well with old-style reporting templates, such as excel templates. In general, manual processes, which are surprisingly common in regulatory reporting, do not produce high quality granular data.
If a supervisor wants to pursue collecting granular data, it is important to investigate whether the organisation and the relevant financial service providers are ready for collecting, storing, analysing, and reporting highly granular data.

The second consideration for your data strategy needs to **be identifying current gaps and existing problems with data.**

A data strategy should include a diagnostic to identify these gaps and issues. This diagnostic will assess whether supervisors have the high quality data they need, and whether they are making full use of their existing data. Data needs are determined by the supervisor's policy goals and supervisory objectives. Conducting a mapping exercise assists in this assessment.

Here are the steps for the mapping exercise:

- **Step 1:** List your policy goals.
- **Step 2:** For each goal, list your objectives.

  For example, for the policy goal of ensuring trust in the national payment system, one objective could be to keep levels of fraud in e-money transactions low. Supervisors can then list the indicators needed to achieve this objective, which may include total number and value of e-money or transactions for the quarter.

- **Step 3:** List the data points needed for each indicator.

Reviewing this map will help supervisors identify the gaps in data scope, frequency, timeliness, and accuracy. Once identified, supervisors then need to investigate the causes for such problems. For instance, many of the problems may relate to the prevalence of manual data aggregation and manual reporting procedures at financial service providers and supervisory authorities.

The third consideration for your data strategy is **data infrastructure**.

The data strategy has to consider if the data infrastructure is prepared to manage the need for granularity in data without impacting accuracy and timeliness. Data infrastructure must prioritise interoperability and secure data sharing across departments and across relevant authorities. It also needs to be scalable and flexible to manage the evolving nature of Digital Financial Services and to futureproof the infrastructure as much as possible.

To achieve these objectives, supervisors need to assess their data and IT infrastructure. For instance, cloud computing and modular data models are usually needed to achieve the scalability and flexibility to handle high volumes of granular data, changing supervisory approaches, and an expanding number of supervised entities.

For supervisory authorities in emerging and developing economies, this assessment could help them identify opportunities to leapfrog. This means that rather than taking the path of incremental upgrades observed in developed economies, those authorities should take advantage of often less developed and less intricate legacy systems to move directly toward digital-, and possibly even AI-native, scalable systems.

For these emerging and developing economies, McKinsey says that "Ambition from the outset can pay off—though it may require frontloaded investments".

The fourth consideration in your data strategy is **Data Governance**, which is how data is governed and managed within an organisation.

When designing and implementing a data strategy, supervisors need to review and improve how data is governed within the organisation. This is particularly important if organisations will be increasing data granularity, as well as the types and formats of data, and broadening the range of data sources they will be collecting from.

Data governance is also critical when investing in Supervisory Technology, particularly those using advanced AI and machine learning technologies. Such governance helps ensure mitigation against the added risks involved with implementing such technologies.

All four of these considerations are critical to include when designing and implementing a data strategy. They are necessary to facilitate both individuals and organisations to become digital and data-driven.