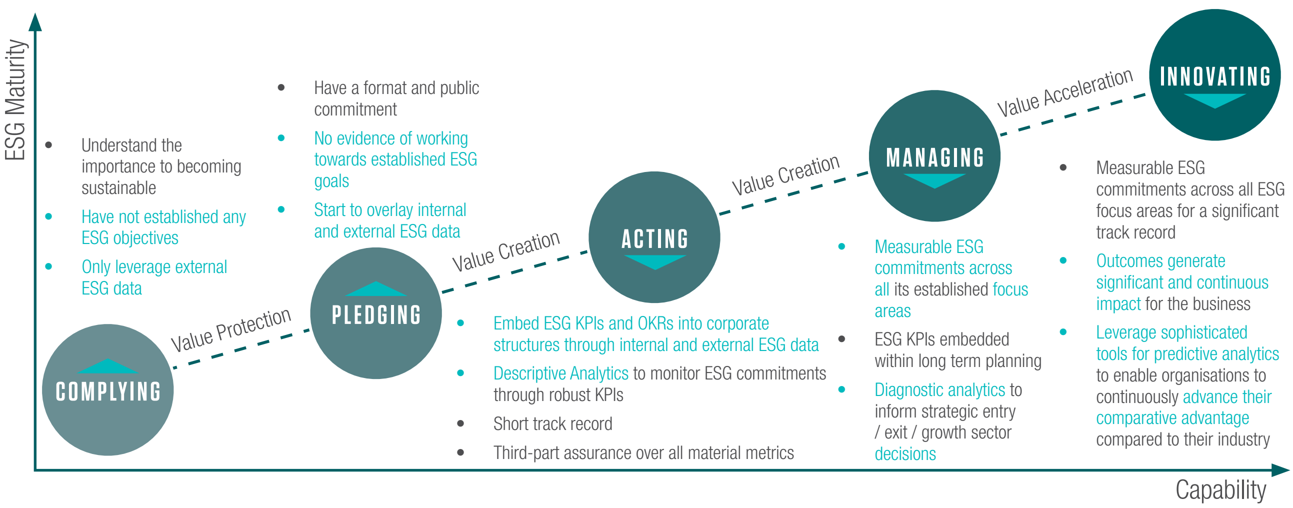
LEVERAGING BANK DATA TO BECOME AN ESG INNOVATOR: THE FOUNDATIONS

The scars left behind by the increasingly severe natural disasters occurring globally are a stark reminder that climate change and environmental degradation are a source of long-term financial risks.

Take the example of the Netherlands, a country with ~one-third of its land mass situated below sea level. In 2017 the central bank of the Netherlands estimated that the country's financial sector could face losses of up to EUR60bn in case of catastrophic flooding which has an estimated probability of between 0.5% to 0.01% of occurring in any given year[1]. Since financial regulators worldwide do not consider these types of natural disasters as isolated potential incidents, given that their magnitude and frequency fall within the remit of supervisory frameworks (e.g. Basel 3 and Solvency 2), they are increasingly focused on assessing banks' resilience to climate risk induced shocks.

Underpinning the assessment of ESG risks is data. To unlock the capabilities necessary to measure, manage, and monitor ESG risks, banks require the assembly of centralised data assets that facilitate a holistic view of their clients' ESG activities.

Capco's ESG practice enables organisations to rapidly progress along their ESG maturity curve to systematically unlock long-term strategic benefits. We focus on helping organisations source material ESG data, embrace robust practices, and deploy advanced analytics tools. This in turn empowers organisations to govern sustainability at scale and drive the business forward, helping them to meet the future with confidence.



1. https://www.dnb.nl/media/r40dgfap/waterproof-an-exploration-of-climate-related-risks-for-the-dutch-financial-sector.pdf [Page 4]

THE CHALLENGE

Capco mobilised to support a globally leading investment bank's vision of incorporating ESG as a key part of its strategy. The focus was ensuring it could support its own clients' sustainable transition to an ESG-oriented world – with a stronger emphasis on the 'E' (Environmental). To achieve this vision, there were four key issues to address:

Lack of Accessible Data

Publicly available corporate ESG data is very rare. Thus requiring different data vendors' costly data products for strong data coverage.

Limited Standardized Data

The necessity to amalgamate sparse and inconsistent data vendors' products results in the arduous task of enforcing data standardization.

No Future Looking Metrics

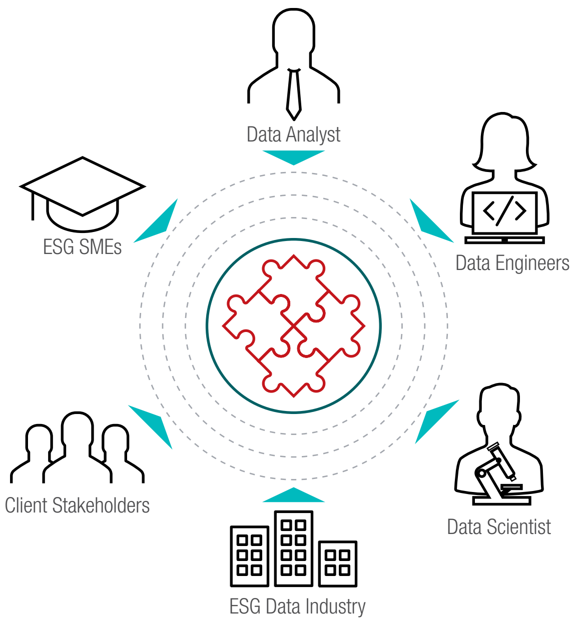
ESG data is mostly a retrospective assessment of performance. However, teams require future looking data to define their corporate strategy.

Poor Data Quality

Vendors' data is collected at different granularities, causing flawed aggregations. Thus complicating companies portfolio view.

HOW WE DID IT

To overcome these issues, Capco worked with the client to overhaul its existing ESG data management practices. Ultimately, this saw the development of a centralised ESG data warehouse, enabling different data professionals across the organisation to access a common 'golden source' of data to drive powerful insights and business benefits. Thus, promoting reusability, standardisation, and consistency.



IMPROVING DATA AVAILABILITY

Due to the prevalence of incomplete and expensive datasets, Capco first wrestled with the complexities of designing an appropriate data sourcing and procurement model, including vendor assessments, and a rationalisation strategy.

The objective was to optimise our clients ESG data coverage by sourcing the necessary data to provide a strong overview of their client base and the wider global market. This required adjusting our sourcing strategy to ensure all client profiles were covered to account for sectoral, geographical, and size differences.

We determined data gaps through a structured analysis approach which involved the review of the bank's existing ESG data catalogue to identify any thematic gaps between the current and required state. By understanding the severity and relative importance of the gaps to the client, the team iteratively reviewed the vendor selection and sought datasets that added value to the business to continuously improve the bank's ESG data catalogue. This served to maximise the coverage and richness of E, S and G data attributes to satisfy existing and future requirements.

In addition, to future-proof the assessments, periodic reviews were conducted to ensure topical market themes were incorporated with a view to continuously improve data materiality. By routinely engaging in strategic vendor Proof-of-Concepts, we rapidly engineered a well-stocked ESG data warehouse to address all the client's ambitions.

STANDARDISING ESG DATA

Having completed the ESG data discovery and sourcing journey, a variety of data experts were mobilised to harmonize inherently patchy datasets. The cumulation of inconsistent datasets presented various issues, including duplicated attributes, conflicting units, contradictory metadata features, and more.

By engineering an enterprise level ESG data taxonomy, Capco was able to take a structured approach to the addition of new vendor data. In developing a set of rules regarding the classification, naming, and sanitization of vendors' data, we ensured a cohesive view of data held across the organisation. This allowed different vendors' interpretations of an attribute to be translated to one unified view, accessible to all use cases.

ENHANCING DATA QUALITY

Having amalgamated all corporate ESG data assets into a single enterprise asset, there was an inherent need to cross-reference corporate and ESG data to assess both financial and ESG performance side-by-side.

Unfortunately, ESG data is often generated at quite different levels of granularity. Some vendors offer data at the group holding level of a company, whilst others report at a subsidiary level. Moreover, even when different vendors provide the same degree of granularity, they will seldom leverage a common external point of reference.

To overcome these issues, we supported the development and testing of various Entity Resolution engines. Such techniques enabled internal client data to be autonomously linked to multiple external vendors' databases. The ultimate solution collated all information surrounding any specific legal entity – regardless of whether it banked with our client. Thus, enabling analytics at scale of our client's clients'.

The development of an enterprise Entity Resolution system underpinned our client's capability to incorporate novel ESG data into their existing systems, thus improving their overall data quality. By cross-referencing its clients' ESG and financial performance, they were able to identify new opportunities within the ESG domain and pursue leads for new businesses for both current and potential customers.

PROVING A FORWARD-LOOKING ASSESSMENT

Forward-looking data plays a critical role in informing financial institutions' long-term strategies for transitioning towards an ESG positive future. While the ESG data landscape is largely underpinned by both historic and contemporary data, it is however dramatically lacking any future-looking data – including targets and projections.

To overcome this issue, several Research and Development teams were mobilised to set up capabilities which leveraged pioneering industry specific ESG guidelines to produce future-looking metrics. One of our key achievements was creating projections of Green House Gas (GHG) emissions for clients operating in the bank's most critical industries. This was achieved by leaning on the Partnership for Carbon Accounting Financial (PCAF) industry guidance.

These efforts empowered our client to measure its financial portfolios' alignment with multiple strategic climate scenarios consistent with the Paris Agreement – informing how best to reallocate global capital to achieve its corporate vision.

WHAT WE DID

The implementation of Capco's solutions, accompanied by our rigorous data analytics, management and ESG expertise, ultimately facilitated the assembly of a series of interlinked ESG and Financial Data Assets. These golden-source assets enabled the client to have a strong understanding of its own clients' ESG commitments and compare these to their day-to-day operations and medium-to-long term strategic decisions.

To generate such a foundational yet paramount source of truth required us to deliver on three distinct fronts:

- **A vendor scoring framework** assessing vendors' capabilities to provision the necessary volume of high quality, impactful, and up-to-date data required to engage in strategic conversations with its clients – thus improving data availability across the organisation.

- **A bespoke data taxonomy** containing the necessary logic to clean, standardise, and classify the various inputs into pre-defined buckets. This piece of intellectual property encapsulated the necessary transformations required to standardise external ESG data, eliminating ambiguity.

- **A tactical entity resolution engine** enabling the interconnection of records pertaining to the same entity across various financial and non-financial data systems. This enhanced the enterprise's data quality by engineering golden sources that connected customers' ESG and Financial data.

BUSINESS BENEFITS

Capco's deployment of its data analytics and management expertise within the ESG domain empowered our client to position itself as a partner in its own clients' transition to an ESG friendly world. By understanding the current gaps within this vision, and how these could be overcome, we realised tangible gains, including:

- **Improvement of** our client's organisation's **ESG data literacy.**

- **Development of golden-source data assets** enabling a holistic view of its own clients' ESG commitment and historic actions towards its commitments.

- **Integration of ESG data into Relationship Managers' workflows,** allowing strategic conversations to take place between our client and its own clients.

- **Implementation of a** strategic **sustainability perspective in risk and portfolio management** to drive optimal capital reallocation.

- Mostly importantly, the **development** of such **core ESG data assets** have **paved the way for** our client to start **measuring, managing, and monitoring** its **own clients' ESG risks** on a global scale.

Given our successful partnership, Capco has accompanied our client as it opened a next chapter as an ESG pioneer. Our ongoing efforts have enabled trailblazing initiatives, including the development of an ESG composite score measuring its clients' ESG performance; state-of-the-art Natural Language Processing models to capture meaningful information from unstructured data, including news articles; the creation of a tactical ESG analytics unit tasked with answering questions of strategic significance; and more.

CONCLUSION

As ESG data practices become increasingly dynamic and forward-looking, ESG analytics will continue to be essential in deriving insights that help current and future investors make informed decisions. The embrace of robust ESG data management practices is the foundation for the advanced analytics tools banks seek today. By patiently developing the basics, firms will be ideally positioned to welcome the future with confidence, knowing they have the necessary tools to make the right decisions.

In our next piece, we will begin to showcase some of the trailblazing analytics tools banks can work towards and the material benefits such opportunities enable.

AUTHORS:

Alessandro Angeletti Martinez-Falero, Associate

CONTRIBUTOR:

Matthew Kenneth Watts, Senior Consultant

CONTACT:

Chris Probert, Partner & Data Practice Lead

E chris.probert@capco.com

WWW.CAPCO.COM

CAPCO
a wipro company

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