

POWER UP YOUR ESG SOLUTIONS WITH
**COLLABORATIVE
DATA ECOSYSTEMS**



Financial Services

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In the financial services industry, companies are feeling pressure from governments, shareholders, and customers to improve their environmental, social, and governance (ESG) performance. Indeed, ESG has quickly evolved into a central issue that affects the ability to build trust in brands, attract the right talent, and increase revenues. Investment in ESG-focused funds and products is expected to account for one-third of dollars under professional investment management globally by 2025—some \$53 trillion.

The growing importance of ESG is driving increased interest in sharing and using data more effectively to measure and manage ESG performance. Today, many financial services companies are exploring collaborative data ecosystems (CDEs), in which a variety of functions and partner organizations share data to provide deeper insights into the business. And applying this concept to ESG promises to create a substantial value.

Enabled by a combination of internet, cloud, software as a service, big data, security and privacy controls, and artificial intelligence technologies, collaborative data ecosystems are expected to be used widely in the near future—and to deliver significant benefits. According to the Capgemini Research Institute, such data sharing is already helping companies increase revenues 9%, reduce costs 11%, and improve customer satisfaction 15%. It can also double market capitalization, with a typical \$9 billion revenue company able to realize \$500 million in benefits even before adopting a full CDE business model, which would bring even greater benefits.

“An ESG cloud platform can be a key tool to improving ESG performance. But it is only as good as the underlying data used to power it.”

On the ESG front, the collaborative data-sharing concept can be used to shape cloud-based platforms that bring together data from a wide range of internal and external sources to power an integrated suite of ESG-related applications. This platform can give financial services companies a comprehensive and flexible set of ESG capabilities in one place, eliminating the need to piece together disparate data and various applications—and strengthening their ability to improve ESG performance. No company can determine its ESG impact without taking into account the full lifecycle of its products and services; only through engaging with an ESG CDE can the true picture be created and used as the basis for prediction.

A cloud-based ESG platform holds tremendous potential. It can enable financial institutions to measure and manage their own marketplace and compliance risk. It can let them select sustainability-focused supply chain partners, make operational improvements to reduce carbon footprints, and build ESG-friendly brands. And it opens the door to the creation of new ESG-related products and services for customers, including personalized ESG investing tools for private investors.

However, an ESG cloud platform is only as good as the underlying data used to power it. Effective ESG solutions need to be based on a solid foundation of quality ESG data—and that data can be hard to gather, integrate, and manage effectively. To build that foundation, financial services companies need to take a more rigorous and comprehensive approach to bringing data together. By doing so, they can position themselves to use ESG performance as a powerful tool for gaining competitive advantage, increasing revenue, and driving growth.

The ESG Cloud Model

To develop and deploy an effective ESG cloud platform, companies can use a layered model that creates a robust data pipeline to feed ESG applications (see Figure 1).

This model consists of:

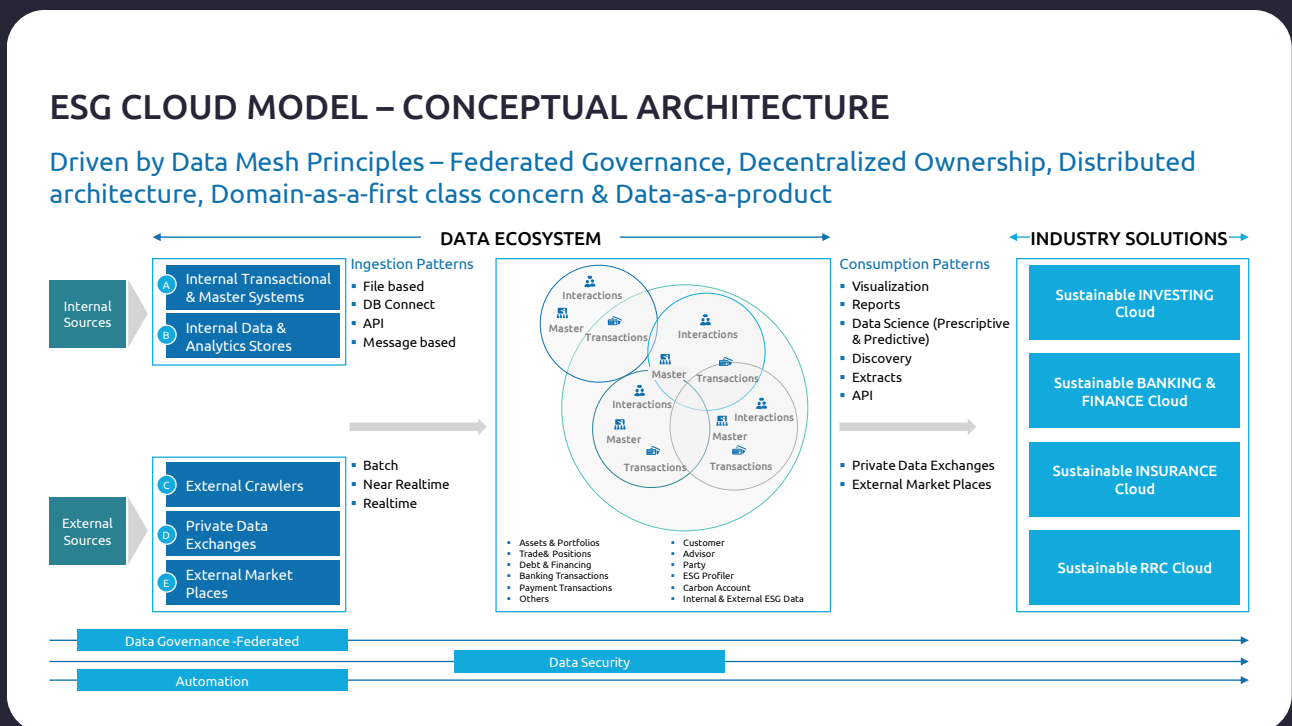
Collaborative Data Ecosystem:

This layer encompasses two steps. First, it brings in the structured and unstructured data that companies buy and gather from a wide variety of external sources, such as third-party data vendors, rating agencies, public data exchanges, and supply chain partners. It also brings in the company's internal data—data about customers, portfolios, transactions, its own carbon accounting, and so forth. These often-disparate data streams are cleansed, integrated, and standardized to provide a comprehensive pool of consistent, quality data. In the second step, this cleansed data is combined into meaningful data sets and data models that can be used in a variety of ESG-related activities.

Industry ESG Solutions:

This layer uses the data sets and models from the Data Ecosystem layer as inputs for a wide range of business uses such as visualization, dashboards, predictive/prescriptive analytics, and artificial intelligence tools. The data powers applications for reporting on compliance, producing accurate ESG ratings for investment portfolios, developing ESG-related products and services for customers, sharing ESG data with data partners, and selling the high-quality ESG the company has produced on public marketplaces—all tailored to specific industry segments, such as banking, finance, insurance, and investing.

Figure 1: Capgemini's ESG cloud model—conceptual architecture



Building the ESG Data Foundation

While this model is straightforward enough, implementing it can present challenges. For example, an effective data-gathering strategy must cast a wide net that includes many sources of data, from data vendors and company reports to press coverage and social media channels. This is key to ensuring the company has a timely and accurate assessment of ESG factors, because drawing on a limited number of sources increases the risk of relying on “green-washed” corporate disclosures and potentially inconsistent vendor data. Government-backed ESG CDEs are also being created, and in the future could be a mandated part of standard corporate reporting practices. Thus, being prepared to leverage them quickly will be a key competitive advantage.

Casting a wide net for data is not always easy. With the huge amounts of data available today, it can be difficult to find the relevant data needed for a company’s specific needs. To help, companies can build data-sharing relationships with key data vendors and value chain partners, and work with external data marketplaces. In addition, machine learning and natural language processing technologies can power web crawlers that quickly identify and assess relevant online media and scientific reports to understand how companies are perceived externally in terms of ESG performance.

Meanwhile, much of today’s required ESG data is stored on various public clouds, as well as companies’ private clouds. Working with these varied clouds typically requires making copies of data, which increases the risk of data-integrity problems as copies are modified and quickly get out of synch with the original data source. Maintaining these redundant data sets also increases IT computing and storage costs. (This includes increased energy usage, which not only pushes up costs, but also runs counter to efforts to be seen as an ESG-focused brand.)

Today’s evolving technology is enabling new approaches to those problems. For example, Capgemini has partnered with the Snowflake Data Cloud to enable the more efficient integration and merging of data as part of an ESG cloud. Snowflake’s

“With a cloud-based model, financial services companies can work with large amounts of data from a wide variety of sources to gain insights into ESG performance, which can ultimately help them reduce risk, attract customers, and increase revenue.”

– Ashvin Parmar, Vice President, Solutions Leader, Financial Services Insights and Data, Capgemini

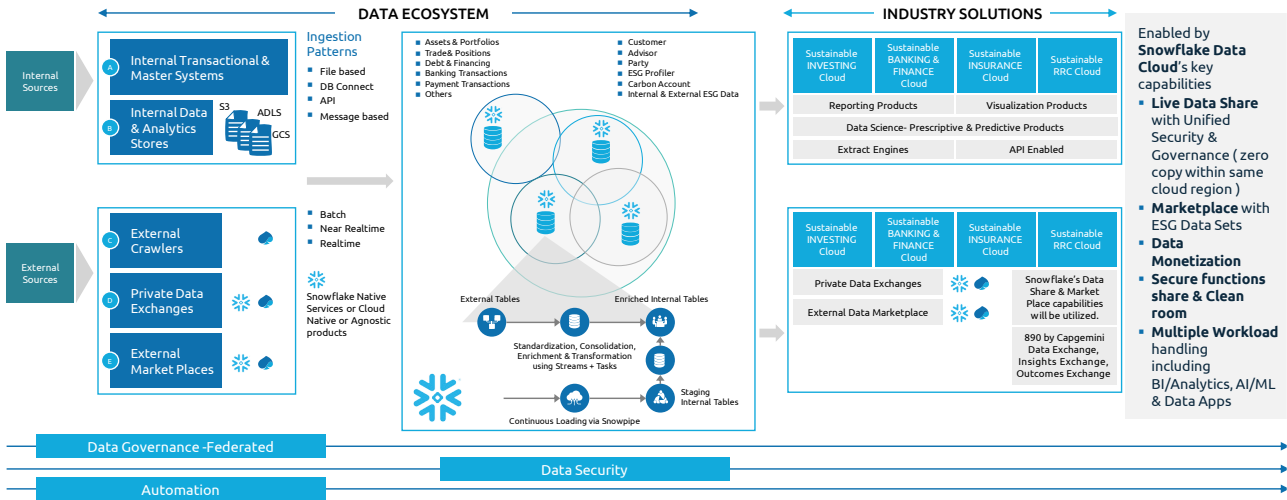
Financial Services Data Cloud solution enables “live data sharing” across different cloud platforms—without having to move or copy data. In addition, the solution offers unified governance and security capabilities, tailored to the financial services industry.

The Snowflake Financial Services Data Cloud meshes seamlessly with the ESG cloud model. In the first layer, it enables efficient data sharing to and from external parties and offers a data marketplace with readily available, high-quality ESG data sets. It also supports access to internal data from sources across the company, such as human resources, facilities management, vendor management, and compliance. And in the second layer, it can handle multiple types of workloads—including business intelligence and analytics, artificial intelligence/machine learning, and data applications—on a single platform. It also provides monetization capabilities that allow financial services companies to participate in third-party data marketplaces. (In Figure 2, the Snowflake icons indicate its Financial Services Data Cloud capabilities.)

Figure 2: Capgemini’s ESG cloud model—technical architecture

ESG CLOUD MODEL – TECHNICAL ARCHITECTURE

Driven by Data Mesh Principles – Federated Governance, Decentralized Ownership, Distributed architecture, Domain-as-a-first class concern & Data-as-a-product



Overall, the Snowflake Financial Services Data Cloud plays a vital role in the ESG financial services cloud. At heart, it allows financial services companies to easily maintain a centralized, automatically updated ESG data warehouse, while letting them work efficiently and securely with a comprehensive single source of the truth for ESG information that can be used across the company.

“Snowflake values the partnership with Capgemini on ESG solutions for our joint customers. The Snowflake Financial Services Data Cloud is an especially good fit with the ESG cloud model, enabling financial services companies to work efficiently and securely with a single source of the truth for ESG information to be used across the company.”

– Matt Glickman, VP, Financial Services, Snowflake



Putting the ESG Cloud Model to Work

Creating and engaging with an ESG CDE enables financial organizations to establish their ESG cloud with a robust data foundation feeding into a portfolio of ESG solutions, and take advantage of a growing range of capabilities to managing ESG performance. They can develop ESG dashboards that allow senior executives to easily monitor progress in achieving their sustainability goals. Reporting to regulators, investors, and the public will be based on a solid factual basis, reducing the potential of being accused of “green-washing” their ESG reports. Insurance companies will gain the ability to consider ESG risk in their property and casualty coverage and premiums. Banks can incorporate ESG factors into their credit decisions.

A strong ESG CDE foundation can also be monetized by offering customers new ESG-related services. For example, Capgemini offers a Profiler solution that gives financial services customers easy-to-use dashboards that offer visualizations of ESG history, trends, and projections for specific companies. Investors can then personalize their portfolios to focus their investments on companies that match their interest in specific areas, such as net zero carbon, the circular economy, or fair labor practices. This approach could also be applied to credit card transactions to help customers monitor how well their personal spending aligns with their ESG values.

Because it offers flexibility in terms of both the data foundation and the portfolio of applications, the ESG cloud platform can keep expanding and shifting to encompass a growing range of ESG capabilities and meet changing needs. That means that financial services companies can use it to keep honing their ability to track ESG metrics for specific companies or entire investment portfolios, select sustainability-focused supply chain partners, make operational improvements to reduce carbon footprints, better understand ESG-related risk, and stay in step with the evolving attitudes and expectations of customers, employees, investors, and regulators.

ESG has become a key battleground, and the ESG financial services cloud provides an important competitive weapon. As in other areas of business, a robust foundation of good, timely data, delivered efficiently where it is needed by decision-makers throughout the company, will be critical to success. With that data foundation in place, a financial services company can excel at managing ESG performance, which in turn will help it create a strong brand, enhance compliance, bring innovative offerings to market, and move from managing ESG as a compliance exercise to using it as a strategic tool for increasing revenue and driving growth.

Bloomberg Intelligence, “ESG assets may hit \$53 trillion by 2025, a third of global AUM,” February 23, 2021, [bloomberglp.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/](https://www.bloomberglp.com/professional/blog/esg-assets-may-hit-53-trillion-by-2025-a-third-of-global-aum/)



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