Deloitte.

Finance for a sustainable future:
From AI tools to AI toolboxes

A platform approach for Finance offers coordination and flexibility

Many Finance organizations already have experience using a variety of artificial intelligence (AI) tools. They rely on these technologies not only for traditional Finance data and tasks, but also for the fast-changing mandate to gather and report sustainability data. As the data and its uses become more varied and complex, the next step may be to take disparate AI applications and align them across the enterprise's technology landscape and ecosystem in a more coordinated way.

This "platform" approach—not as a literal, physical IT architecture, but as an organizing principle—can take the enterprise value of this information to a new level in areas such as increasing the marginal productivity of labor, creating more effective and higher-fidelity data sets, and achieving more of the potential from an organization's people. In effect, it elevates AI not only to run discrete functions more efficiently, but to run the enterprise more efficiently.

Sustainability originally entered the Finance realm as a reporting requirement, and in that respect, it is still relevant—but there's more. When charged with gathering and using sustainability data for reporting, Finance functions have found it can unlock other kinds of value to improve operations and substantiate a license to operate across the "triple bottom line." Supply chain resilience, decarbonization and related credits, and enterprise efficiency are all areas in which the use of sustainability data can help a Finance team serve its core mission.

AI tools that can assist Finance with that work, not only in gathering data as in earlier applications but also in helping to plan and operate. Fast evolution is one of AI's hallmarks, from robotic process automation (RPA) through machine learning (ML), Generative AI (GenAI), and agentic AI—an emerging architecture in which reasoning engines understand context, plan workflows, connect to external tools and data, and execute actions to achieve a defined goal.

Amid this change, many companies have begun questioning: *What types of new tools should we adopt? Which software vendor is the best fit for us? How can we better coordinate the tools we already have with the new ones?*

To keep up with the need to access reliable, detailed sustainability data across the enterprise, with all the gathering, transformation, analysis, and reporting it requires, the answer can be a platform approach. Coordinating multiple capabilities and replacing multiple data models with common ones can help AI grow not only "outward" in breadth of application, but also "upward" in providing value that spreads beyond Finance and Sustainability functions to benefit the whole enterprise.

In Sustainability and other data-intensive areas, a coordinated platform of capabilities—not just individual applications—can make a difference by streamlining the interconnected processes that turn high-volume data into valuable information an organization can use to increase data quality and traceability, build trust with stakeholders, avoid assurance risk, and drive better decision-making and problem-solving.

How a platform approach can help

A platform offers advantages beyond the capabilities of each individual technology involved. Integrating AI can create efficiency and automation in collecting, cleaning, and analyzing data. When tools connect in real time, it can be easier to use AI models to examine sustainability data even from outside traditional Finance categories—for example, climate reports—and extract useful insights from them.

A platform approach can also improve the management and governance of an AI system as well as its function. With a cohesive strategy, an organization can be more efficient and purposeful in selecting software, service partners, and implementations. Bundling tools in intelligent ways can create economies, while at the same time improving the end-user experience. If you have access to five tools, it may not be clear which one to use, or how to combine their capabilities. On a platform, a user can have a single experience that has all the component capabilities built in. For this and other reasons, the power of a platform is greater than just the sum of the AI and traditional technologies under its umbrella.

In Sustainability and other data-intensive areas, a coordinated platform of capabilities—not just individual applications—can make a difference.

Different starting points, different paths

A CFO and Finance team can reap benefits whether they need to create a new platform just for Finance or piggyback on platform architectures already in place—or whether the platform initiative is scoped to handle only sustainability tasks or has a broader mandate—as long as there is alignment between the new mission and the overall enterprise data strategy. In some cases, existing platforms don't include AI elements and are candidates to be upgraded with new components.

A platform is large by nature, but it should not be a monolith. Efficiency and adaptability are the point. A finance function has many decisions to make about software, architecture, third-party providers and partners, and operational strategy, and no two outcomes are likely to be the same. Perhaps the biggest difference between this approach and the status quo is that there is a strategy at work.

Why is this important now?

CFOs have faced challenges in adopting AI: They have had to gain familiarity with a new and fast-evolving set of capabilities while matching them in real time to finance requirements like the Corporate Sustainability Reporting Directive (CSRD) or voluntary reports. Finance will also need to address risks such as security and error detection and prevention in the function of AI models. It may seem daunting to begin a new round of innovation on top of that, but starting with a strategy and taking a platform approach can add welcome control, coordination, and visibility to the very processes that inspired AI investments in the first place.

Why is this important now?

The genesis of sustainability data as a Finance concern is primarily reporting. But, as with earlier shifts in technology, there are benefits beyond reporting. The work that delivers better, faster reporting and insights for sustainability reporting can also support strategy and add market value in hard-dollar ways. A Finance function that stands up an AI platform for niche purposes only might miss the broader advantages of operationalizing data across functions while it chases its own regulatory tail.

Consider a familiar process like variance analysis. Collecting deltas from facility to facility results in a factual administrative exercise that can require a lot of manual effort, all to get to first-level insights. But knit all those analyses across a platform, and an organization can move beyond the what to see the why—a mosaic of trends, opportunities, and leading practice outcomes that paints an overall picture of where things can improve. The same principle can apply to sustainability data, another multivariate data environment in which connecting dots can yield actionable intelligence, for example by making sense of scope 1, 2, and 3 emissions from widespread sources.

The potential for advantage is there, but so is a potential remedy for current gaps. Many organizations are lagging in the use of sustainability technology and use dated data gathering and sourcing practices even while data grows in volume and variety. In particular, nontraditional and unstructured sources present a challenge to older methods. A platform AI approach can move an organization beyond these roadblocks.

Under the hood

Where can platform AI "plug in" to improve Sustainability and Finance performance?

Across many critical data steps.

Gathering

Obtaining and digesting unstructured data, aggregation and analysis, cleansing and quality assurance, or amplified use of optical character recognition to handle details and extracts from contracts or other documents. For organizations with multiple locations, this can be a substantial time-saver.

Transformation

After uptake, AI can help enrich data and perform complex calculations.

Reporting

Preparing data for submission is only the beginning. AI can actually draft regulatory responses so humans can focus on honing them; this can apply to requirements under multiple required and voluntary reporting regimes.

Analysis

Platform AI can power climate modeling and simulations that help companies reach net-zero goals.

Survive, drive, and thrive

What does it look like to make useful progress in AI platform adoption? From the minimum effort required to stave off problems to a standout program, there are different levels of achievement that can help a Finance team survive, drive, or thrive with its platform program.

Survive

The base level of AI coordination is…
to have some.

Tool by tool, case by case, AI is already utilized in most organizations. But those uses are generally ad hoc: They create pockets of value, but the results are seldom repeatable because there's little strategy or leadership direction. An investment in AI leadership and culture can help bring current uses into alignment and set the stage for more purposeful deployments ahead.

Simply forming the strategy behind an AI platform, no matter how much of that strategy has made it from page to practice, represents a step forward in many cases. That's because it can guide decisions on people and skills, cost-benefit analyses, data products, and fluency efforts that can pay off later.

Drive

A step beyond the minimum on AI platforms may involve an uptick in leadership engagement—not only acknowledging the role of enterprise-wide AI planning, but perhaps promoting the use or even creation of specific applications. Organizations that reach this level may also begin looking not only at the structure of AI, but also at ways existing operations may shift to accommodate the technology's use. A focus on the ethics of AI use is a worthy step forward as well.

A viable economic model that identifies key performance indicators—along with activation plans that account for data, people, and an operating model—can be part of this middle phase as well. At this stage, organizations may begin to embrace reusable procedures, and centers of excellence or control centers may emerge.

Thrive

A platform approach to AI can be said to thrive when it bends the value curve: more opportunities and more results without additional outlay. Thriving, mature AI platforms operate under recognized governance models and demonstrate repeatable results. In a thriving enterprise, technology and talent acquisition are closely linked, because there are no longer "non-AI" roles to fill.

Standout programs may find other parts of the organization, outside Finance and distinct from Sustainability, "borrowing" the platform models they've created. This kind of intramural coordination can also help identify promising AI use cases that not only work, but have the potential to accelerate value.

Using AI for sustainability

Areas to examine	Target setting	Initiatives strategy	Planning and analytics	Initiatives program management	Initiatives execution
	Visioning, benchmarking, science-based targets	Research, optimization, incentives	Scenario planning, performance analytics	Enterprise performance management, enterprise risk management	Vendors, partners, change management, virtual power purchase agreements

Taking action: What to do now

It is early days for this broader approach to AI, and many of the organizations that are on the path from early AI adoption to platform orchestration are doing a mix of pilots, applied uses, and strategizing. In many cases, the first operational use is focused on a low-risk area where an organization can try, learn, and even fail with few regrets.

That does not mean, however, that Finance should remain stuck in "death by proof of concept." Better to define a strategy, design an approach, and get going. Breaking it into steps can help:

Understand

In adopting AI, it has been advisable for organizations to assess the processes they handled manually before mapping those processes onto automated tools. A parallel approach can help with the move from fractured AI use toward more coordination: Assess the manually managed interplay among currently separate AI processes as a guide to creating a platform that will tie them together digitally. In particular, sustainability-related operations may happen in multiple places or stages that are candidates for greater coordination.

Educate

Another parallel is in learning. Moving from AI to platform AI carries the same imperative as moving from not-AI to AI: People need to understand what it is and what it can do. If team members aren't already conversant in AI, GenAI, and agentic AI, they should become so before any attempt at a more integrated approach. From there, education about the model—its structure, function, and advantages—is the next step. For example, how can the new approach speed and simplify a variance analysis of facility-based carbon data? Useful sources of information are all around, not only in a company's ERP systems and old reports, but in news and market data.

Assess

Whatever has gone before is worthy to be challenged. Previous sources and pathways for data. Even previous AI tools themselves. A 360-degree people, process, technology review of current practices, common shortfalls, and stakeholder and regulatory expectations can help define the technical and nontechnical capabilities a new platform will require.

Explore

Once the Finance organization internalizes an understanding of what platform AI can do, take that question back to the company's overall strategy. How can the value-additive elements of a new approach help this particular organization marshal its sustainability information to greater effect? Capabilities are impressive, but value counts. What is there to gain? Defining the desired end state can help shape the work at its outset.

Invest

What hardware, software, and human assets will it take to implement an AI platform for sustainability? A coherent plan should yield an "ingredients list" early in the process of coming together, and most organizations will find they need to address precursor capabilities before they can move ahead.

More data, more tools, more cases, more users

There's little point in denying that AI is growing fast in many enterprises. But when its use is sporadic and ad hoc, AI grows *outward*. Coordinating its use through a dedicated enterprise platform can spark a shift so that AI grows *upward*. If established AI uses happened at the unit level with the unit's goals in mind, a more coordinated approach points all of the organization's AI power at high-level enterprise objectives.

That technology shift can be reflected in an enterprise shift. Bringing disparate AI cases into a coherent platform has the potential to transform an organization—perhaps beginning with Finance and Sustainability, but resonating throughout. For companies that have already begun their AI journeys, a platform approach is the logical next step.

Authors

Alex Mannella
Managing Director
Deloitte Consulting LLP
amannella@deloitte.com

Sheba Ehteshami
Sustainability Client Excellence
Deloitte Consulting LLP
sehteshami@deloitte.com

T.C. Redd
VP | Product Strategy, Sustainability
Deloitte Consulting LLP
tcredd@deloitte.com

Tim Raschle
Senior Manager
Deloitte Consulting LLP
traschle@deloitte.com

Vishnu Narins
Managing Director
Deloitte Consulting LLP
vnarins@deloitte.com

Acknowledgements

Arnab Bera, arbera@deloitte.com

Brian Jobe, bjobe@deloitte.com

Dina Trainor, dtrainor@deloitte.com

Jeff Schwartz, jeffrschwartz@deloitte.com

John Heath, jheath@deloitte.com

Khurram Latif, klatif@deloitte.com

Lester Engel, lesterengel@deloitte.com

Vijay Sharma, vijaysharma@deloitte.co.uk

Deloitte.