Boundless benchmarking

Revolutionizing business models with open standards

APQC

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Foreword

Nearly 20 years ago, IBM and APQC joined forces, along with 12 other leading organizations, to create an open standard for managing, evaluating, and improving business processes. The goal? To standardize, collect, and share process frameworks, measures, and benchmarks that could be used by organizations worldwide to evaluate performance consistently, accurately, and objectively.

Today, APQC's Open Standards Benchmarking® database contains over 4 million data points across 1,200 standardized measures, encompassing key business processes spanning enterprises and industries. In 2021 alone, APQC's members accessed nearly 600,000 Benchmarks on Demand. And the number should be even higher in 2022.

Tens of thousands of organizations have contributed to the Open Standards Benchmarking library, making it the world's single largest database of business process practices and validated performance metrics. APQC collects and validates data, analyzes it, and publishes resulting metrics in a blinded fashion, protecting the confidentiality and integrity of the benchmarks.

While APQC metrics help organizations improve cost-efficiency, assess performance, and project future outcomes, benchmarking has also become a powerful strategic management tool. As ecosystem partnerships become ever more common, open standards benchmarking will help define and drive business performance in entirely new ways.

In this report, we look at how business leaders are prioritizing the use of open standards and benchmarking today and how it impacts business. But even more importantly, we preview the role of open standards and benchmarks in the ecosystem economy. We explain how benchmarking is evolving from 'nice to have' to an essential foundation—a common language and set of principles—for emerging economic structures and market environments.

Key findings

Open standards benchmarking enables collaboration and innovation at speed and scale—laying a foundation for business models of the future.

Benchmarking drives business performance.

Organizations with average revenues of roughly $10 billion attribute just under 7% of their revenues—equal to $655 million—in business value to benchmarking in 2021.

Transformation programs are gaining traction.

71% of executives say that benchmarking helps drive organizational transformation, and 68% say benchmarking helps translate more business value from transformation efforts.

Process mining highlights opportunities to improve.

Almost 3 in 4 executives say expanding access to big data analytics systems and software makes benchmarking activities more valuable.

Open standards streamline comparison and collaboration.

While 75% of executives say common definitions are essential for accurate benchmarking, 44% say their organizations lack them.

Business impact of benchmarking

Benchmarking helps organizations work smarter, faster, and cheaper. But it also improves innovation, enables collaboration, and provides the insights needed for successful change.

When IBM and APQC (among others) collaborated to create the Open Standards Benchmarking database in 2004, organizations had no way to reliably compare their operations against their competitors. Introducing a benchmarking library provided a much-needed baseline.

Over the years, business leaders have found many ways to improve business performance using open standards benchmarking. It helps them achieve strategic goals—from boosting employee retention to streamlining the customer experience—across virtually all functions and industries.

But where does benchmarking deliver the most value to business? To assess how executive perspectives on benchmarking are changing, IBM and APQC surveyed 2,000 global C-suite executives about where they use benchmarks, how benchmarking improves business performance, and how they expect to use benchmarks in the future (see “Study methodology” on page 23).

We found that, on average, organizations with revenues of roughly $10 billion attributed the equivalent of just under 7% of revenues—or approximately $655 million—in business value to benchmarking. Extrapolated across Fortune 1,000 organizations in the US, this means the business value of benchmarking would be—at a minimum—an astonishing $1 trillion in 2021.

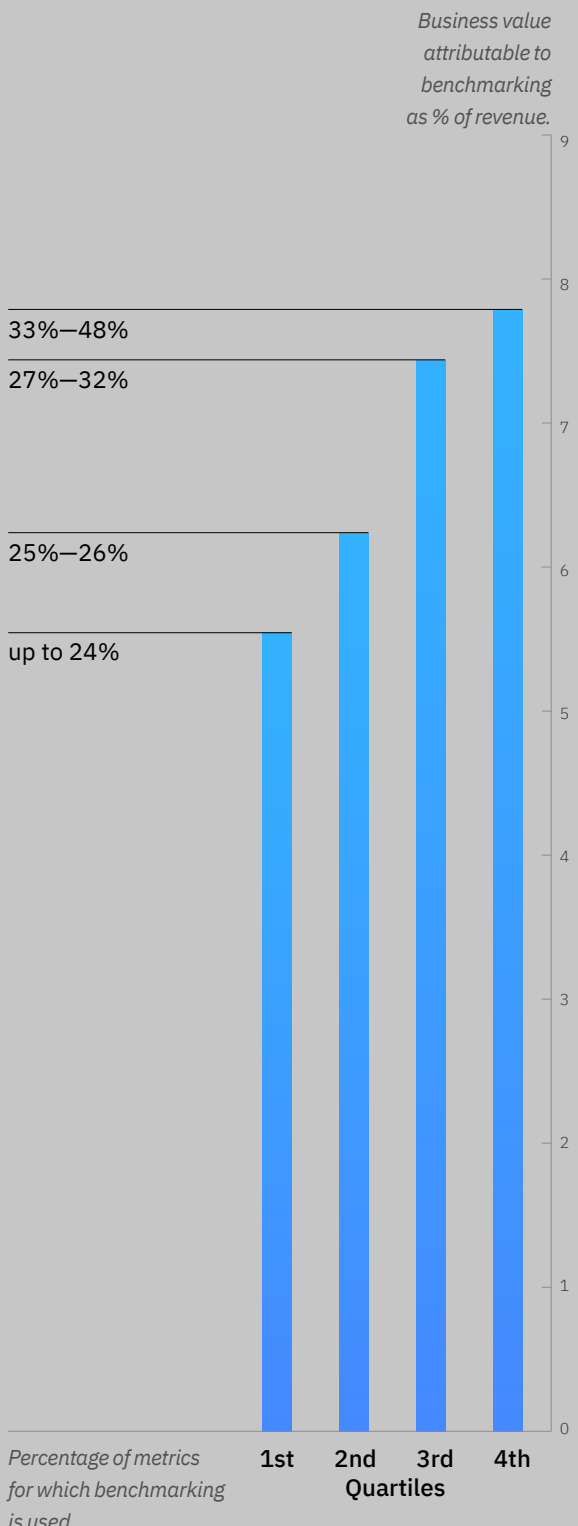
While each organization uses benchmarking in its own way, our survey revealed that the more comprehensively benchmarking is used for setting and managing goals, the more business value it delivers (see Figure 1). By helping leaders find ways to reduce costs and increase revenues, organizations that use benchmarking to inform a larger portion of metrics see a bigger value bump.

This is just the beginning. As markets and industries evolve to become integrated partner ecosystems, we expect benchmarking to drive value in entirely new ways. Open standards benchmarking will emerge to provide a shared language, enabling collaboration and innovation at speed and scale. And it will lay a foundation for business models of the future.

FIGURE 1

More for the money:

Employing benchmarking more comprehensively for setting and managing goals translates to greater business value.



Benchmarking as a strategic asset

In the two decades since open standards benchmarking began, rapid adoption of technology has enabled unprecedented creation, sharing, and analysis of data. How benchmarking is done, as well as how data is stored and used to drive organizational decision-making, has fundamentally changed.

Today, dashboards place benchmarking information directly into the hands of executives, managers, and front-line employees, distributing actionable insights at each level of the organization. It has also become easier to translate the application of benchmarking into meaningful business outcomes (see “CMI case study” on page 10).

As a result, nine in ten executives see benchmarking as a strategic management tool and use it at least once per quarter. While improving performance will always be important for business leaders, our survey shows that executives now expect benchmarking to serve a host of more strategic goals.

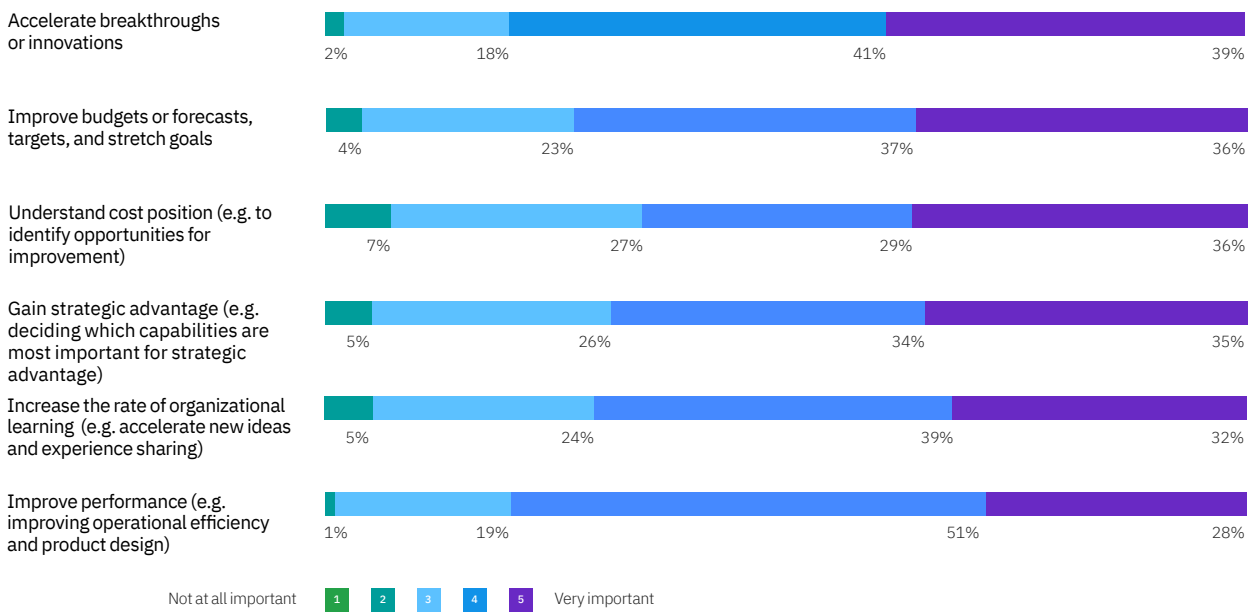
Four in five executives see accelerating breakthrough innovations as a very important benefit of benchmarking—putting it at the top of their list of priorities (see Figure 2). Better budget forecasting, faster organizational learning, and gaining competitive advantage are also highly valued.

Organizations have also found creative ways to use benchmarking to gain traction in their transformation programs. Nearly three in four (72%) executives say they use benchmarking to drive change within their organizations, and almost the same number (71%) use it to drive organizational transformation. A similar portion (68%) say that benchmarking helps achieve more business value from transformation, while roughly 2 in 3 say they use benchmarking to align technology investments and transformation with business value.

FIGURE 2

Benefits of benchmarking

Executives now prioritize strategic outcomes over performance improvements



Question: What benefits from benchmarking are most important to your organization?

Looking to the future, executives believe expansion in benchmarking will outpace many of its traditional applications (see Figure 3). Executives tell us that over a six-year span, their use of benchmarking in sustainability and risk management will increase by more than 150%. They expect benchmarking in ecosystem engagement to grow an eye-popping 243%.

Organizations are expanding the reach of benchmarking using hybrid cloud technology to reveal more diverse information in centralized dashboards from shared data sources. Integrating public cloud, private cloud, and on-premises infrastructure, hybrid cloud enables orchestration, management, and application portability across all three. The resulting single pane of glass provides a unified and flexible distributed computing environment, where organizations can orchestrate and scale traditional or cloud-native workloads within the most appropriate computing environment. Making data more accessible and easier to analyze, this unified environment is a boon for organizations looking to use benchmarking more intensely.

Access to vast stores of data can also present new challenges, as organizations struggle to distill insights quickly and efficiently. That is why many organizations are using process mining to complement their benchmarking efforts.

FIGURE 3

Breaking new ground

Benchmarking across functions is on the rise

Questions: In which of the following functions did you use benchmarking as a strategic management tool three years ago? In which do you use benchmarking as a strategic management tool today? In which do you plan to use benchmarking as a strategic management tool three years from now?

Case study

CMI makes benchmarking more adaptable

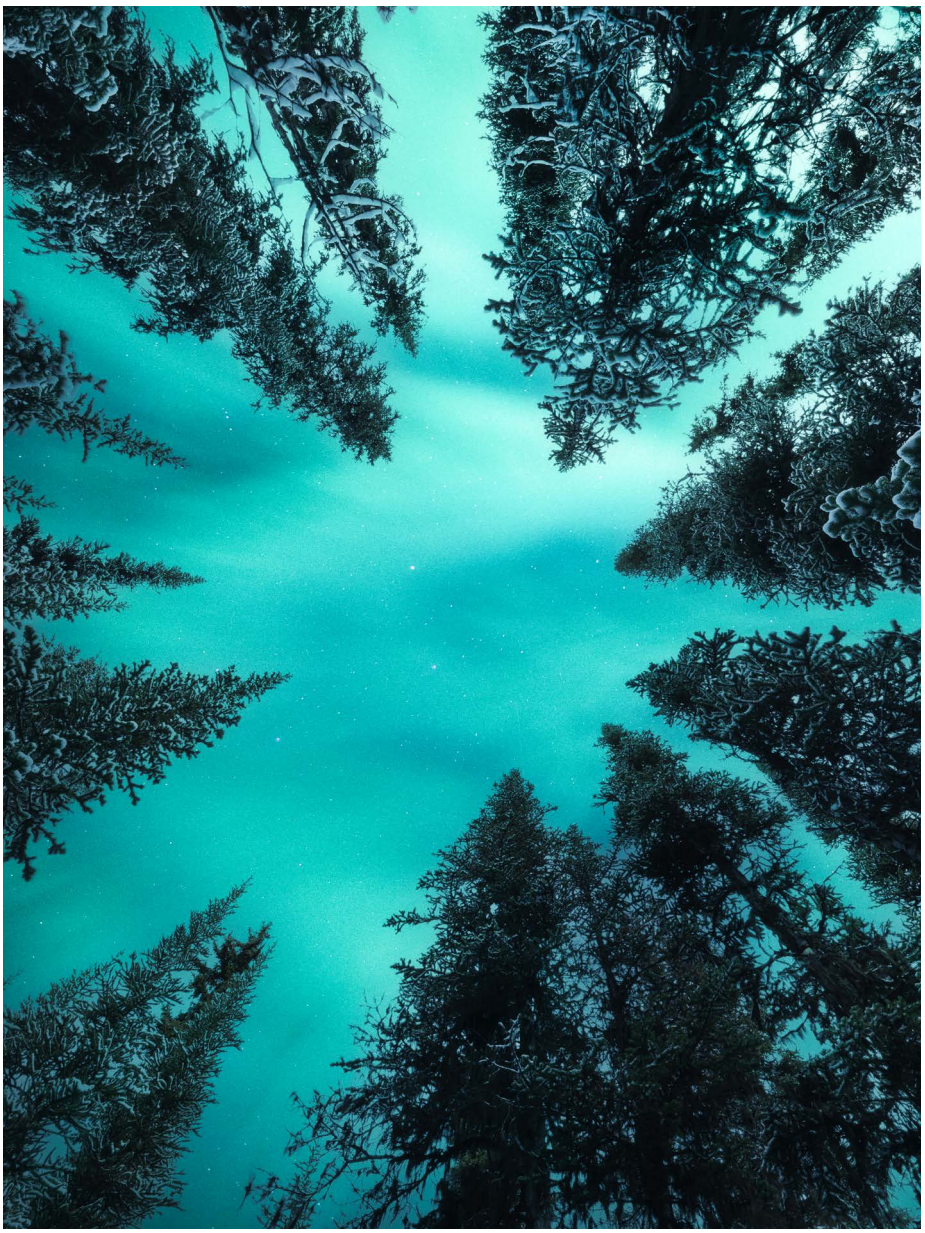
Constant change demands continual innovation. But innovation must be guided by a clear vision—the strategic direction defined by how leaders want to respond to change.

As an agro-industrial company that operates across 15 countries, Corporación Multi Inversiones (CMI) is constantly adapting to market shifts. To make informed decisions that can help it increase investment, generate job opportunities, and promote economic development across Central America, CMI turns to benchmarking.

For example, CMI used performance and practice benchmarking to enable a recent restructuring. “When you’re combining and integrating teams, there are always difficult decisions,” said Diego Alvarado, Head of the Process Management and Continuous Improvement Center of Excellence (COE) at CMI. “Do we need to cut people? Do we need to relocate people? Do we need to reassign our functions and departments? Those difficult questions can’t be answered subjectively. They need a hard, objective foundation based on numbers.”

When they need to make tough calls, business leaders can connect with the COE for support in conducting benchmarking exercises. They raise a performance issue or present a desired outcome, and the COE helps narrow down the right measures and peer groups for benchmarking. If needed, the COE provides additional support in calculating internal metrics to help ensure apples-to-apples comparisons.

Over the next five years, the COE plans to increase CMI’s benchmarking maturity and make benchmarking a faster and more adaptable experience for business stakeholders. In so doing, the COE will focus on improving data availability and aligning its programs to shifting business needs. Using more short-term indicators can help the company better leverage benchmarking in a fast-changing business environment, and expanded KPIs can demonstrate how each process adds value to the organization.



Extracting value with process mining

As organizations navigate a deluge of data, many are changing how they analyze the terabytes of information their systems produce and capture each day.

Process mining allows them to integrate large data sets from event logs of multiple systems, such as customer relationship management (CRM), enterprise resource management (ERP), value stream, or ticketing systems, to analyze and report the effectiveness of business processes. Any system that leaves a digital trail—or can be configured to do so—can also generate data for process mining.

Executives see process mining as a powerful operational indicator. 65% say they are already actively using process mining to improve processes within their organization. And in partnership with software-as-a-service (SaaS) providers, 69% compare their organization's data with other SaaS customers.

Providing an objective view of current-state processes, process mining helps pinpoint redundancies and opportunities to improve or automate. Vast amounts of information are there for the taking, and analyzing it promotes efficiency, innovation, and better execution.

Despite process mining being a relatively new source of strategic business intelligence, most executives have embraced it, citing three primary benefits:

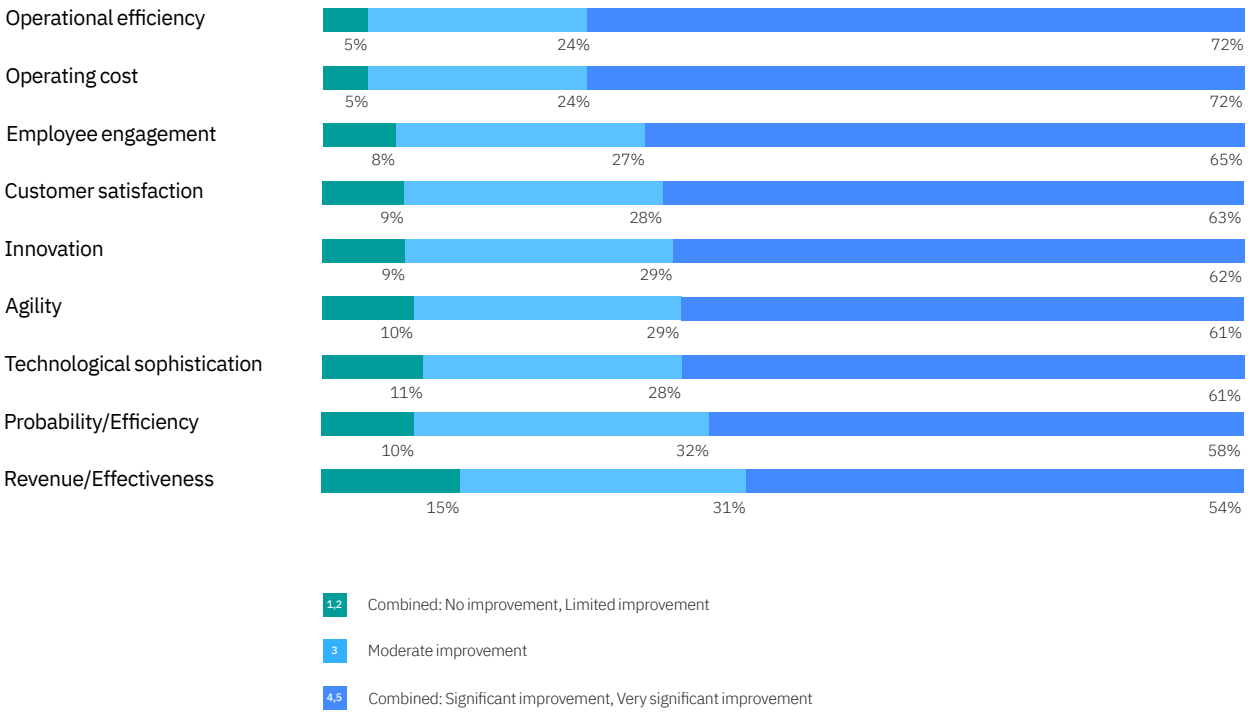
1. Performance improvements, such as operational efficiency or product design (81%)
2. Evaluating conformance of process execution (75%)
3. Achieving breakthroughs or innovations (72%)

Almost two-thirds of the executives we surveyed report significant improvements in employee engagement, customer satisfaction, and innovation as a consequence of process mining (see Figure 4).

But process mining does not work in a vacuum. It needs to be used in partnership with benchmarking to deliver the deeper insights executives seek. That's why 69% of executives see integrating process mining and benchmarking as an area of opportunity to increase value, while only 24% say they're using process mining to replace benchmarking. Almost three-quarters (73%) see expanding access to big data analytics systems and software as a way to make their benchmarking activities more valuable.

FIGURE 4

Digging deeper

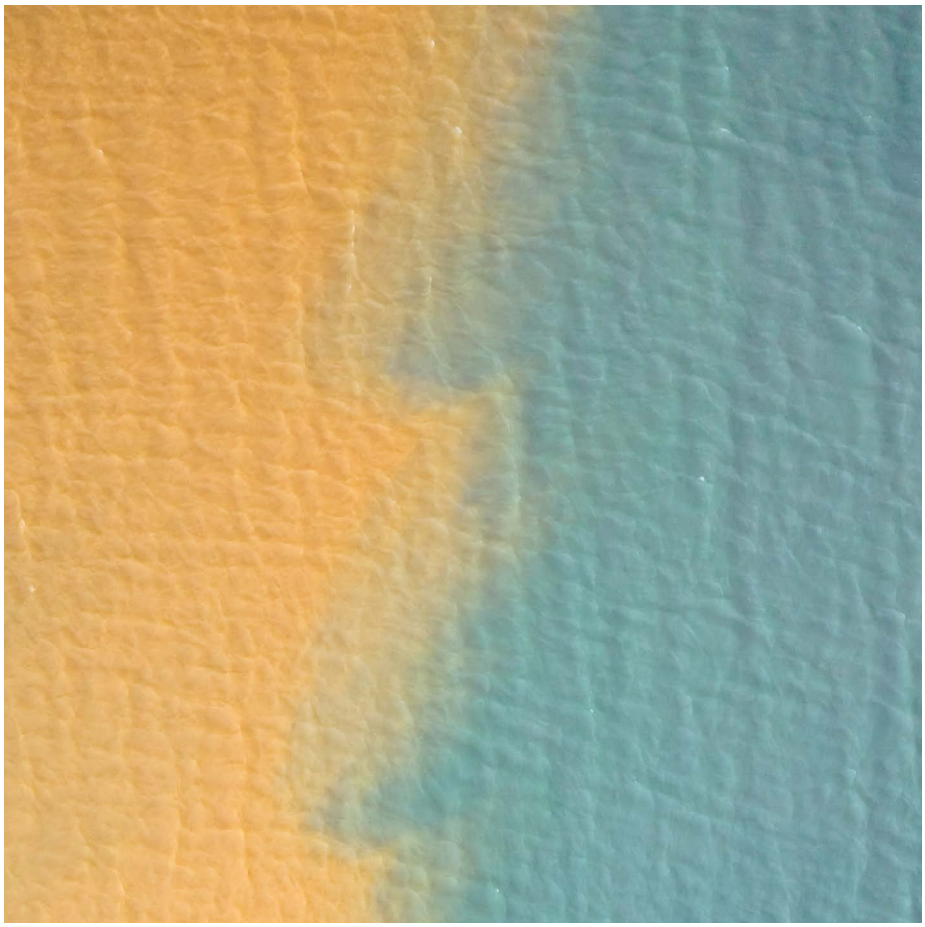


Question: To what extent has process mining improved your organization's performance in the following areas?

Benchmarking and process mining need to be used in tandem to deliver the deeper insights executives seek.

Process mining, used in combination with benchmarking, can inform more strategic day-to-day, or even real-time, decision-making (see “CPG case study,” page 15). However, these two complementary methods work best when supported by a strong foundation of data standardization that helps ensure the integrity of analysis and reduces complexity.

Interoperability and integration let systems talk to each other and allow leaders to view data from disparate sources through a single lens. But to get this high-level view, organizations first need a common language that different departments—and different organizations—can use to communicate and track progress toward shared goals.



Case study

Benchmarking dashboards enhance scenario planning for global CPG company

Massive multinational corporations have seemingly limitless opportunities to drive revenue growth. To predict which options will produce the most business value, they need to dig deep into operational data.

One global consumer packaged goods (CPG) company recently used benchmarking dashboards to broaden perspectives on where performance could be improved.

The company has rolled out dashboards that embed benchmarking into day-to-day decision-making, giving leaders the internal and external benchmarking information they need to:

— Control and standardize reporting, spot issues early, and explore "what-if" scenarios
— Compare current-state performance against targets and external peers and competitors
— See what performance changes would be needed to move targets
— Drill down to understand the "why" of current-state performance to inform longer-term strategies

"You can play with the dashboard to see what would happen if you raised a target by 5% and consider if that's achievable for the process area," said one of the company's operational directors. "Thinking strategically, we could consider further work to align our process globally or use of technology to gain additional efficiency to align with external benchmarks."

The CPG company also expects its process mining work, currently in pilot phase, to empower benchmarking by making trustworthy internal performance data readily available. Process mining and benchmarking are currently integrated in some large-scale transformation projects, including one large source-to-pay initiative. Process mining helps identify breakdowns in the process that need to be fixed before moving forward and, at the conclusion of project milestones, provides evidence that transformations were successful.

Using process mining, the CPG company has been able to automate manual orders with existing software, pinpoint and fill supply chain gaps, and combine freight loads. The company has also used process mining to refine transactional processes, such as realizing productivity improvements in order-to-delivery and unlocking cash flow opportunities in accounts payable.

Benchmarking across the ecosystem

When open standards benchmarking took root, many businesses were still operating within silos, so most processes were internally focused and functional in nature. Over time, bridges began to connect operational silos, creating end-to-end internal processes. More recently, systemic processes have emerged that connect internal processes to entities outside of the organization through ecosystem partnerships (see “Tetra Pak case study” on page 19).

Ecosystems have become the basis for continuous collaboration, co-creation, and open innovation, moving working relationships with partners beyond the transactional or tactical. And organizations can increase the value of benchmarking by expanding their efforts beyond the four walls of the organization and into the ecosystem. To do this well, organizations must speak the same process language and use common definitions for the data points used to monitor and measure outcomes.

Nearly three-quarters (73%) of executives say they coordinate benchmarking objectives with ecosystem partners, but only 20% report full collaboration (see Figure 5). This is a 12-percentage-point gap compared to those reporting full collaboration with partners in developing shared definitions of metrics and data standards.

When deployed collaboratively within a broader ecosystem, the business impact of benchmarking can be exponential. But, while collaboration multiplies benefits, it also begets greater complexity.

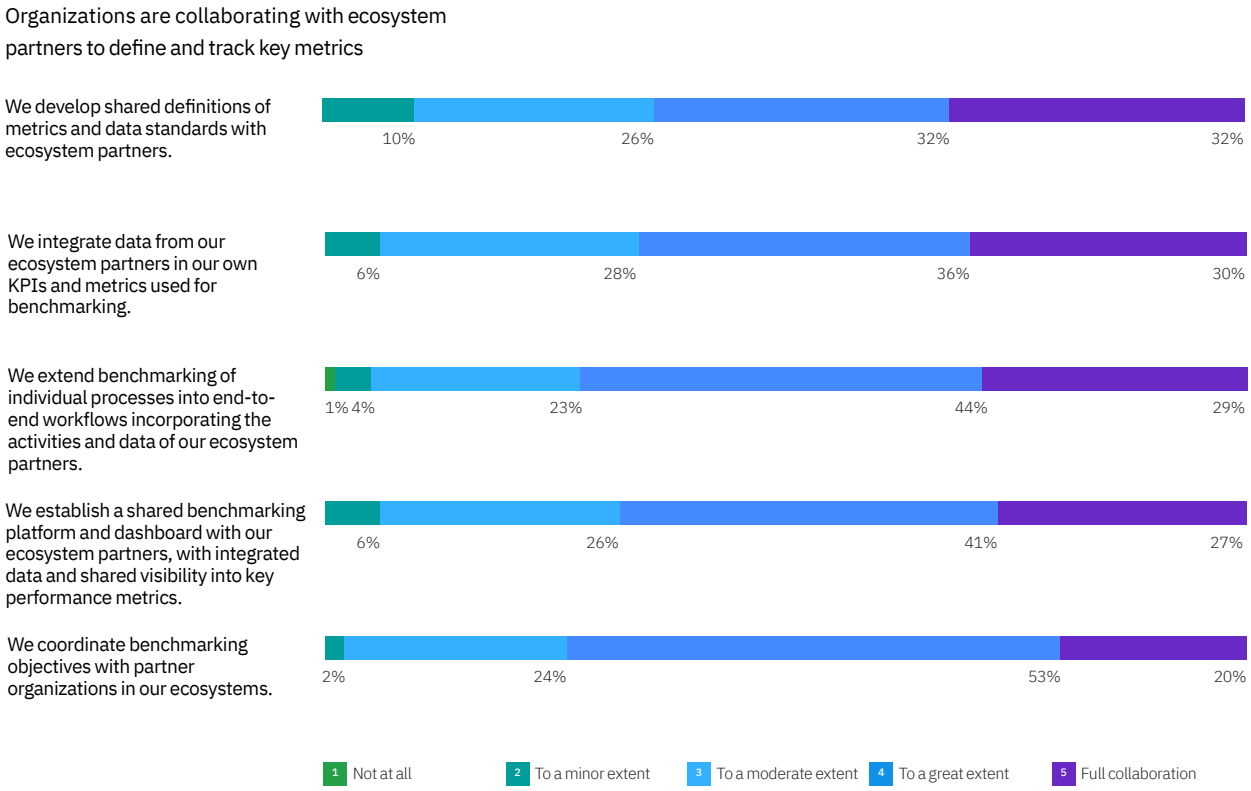
Extension of benchmarking through ecosystem engagement potentially creates an initial "J curve" dip. There is a natural learning curve when bringing new partners into a benchmarking effort, which can cause an initial slowdown or even a reversal in outcomes. But once groups come into alignment, complexity can rapidly decline, and the value of the collaboration can increase.

This is where open standards come into play. By providing common definitions for processes and dataflows, open standards make it possible to compare and analyze data coming from sources inside and outside an organization. A collective benchmarking data warehouse, such as APQC's Open Standards Benchmarking library, can help organizations quickly streamline ecosystem collaboration across specific business processes that have already been clearly defined.

Despite the opportunity, many organizations still struggle to identify and adopt common language that is shared across ecosystems. Top roadblocks to progress? A lack of common definitions or process frameworks. While 75% of executives agree that common definitions are essential for accurate benchmarking, 44% report inadequate common definitions or process frameworks in their organizations.

FIGURE 5

Moving in unison



Question: How does your organization work with ecosystem partners on benchmarking?

Advantages are manifest. Business leaders believe that shared standards and definitions make benchmarking more trustworthy (see Figure 6). More than three-quarters say that benchmarks without supporting context of metric definitions are less trustworthy.

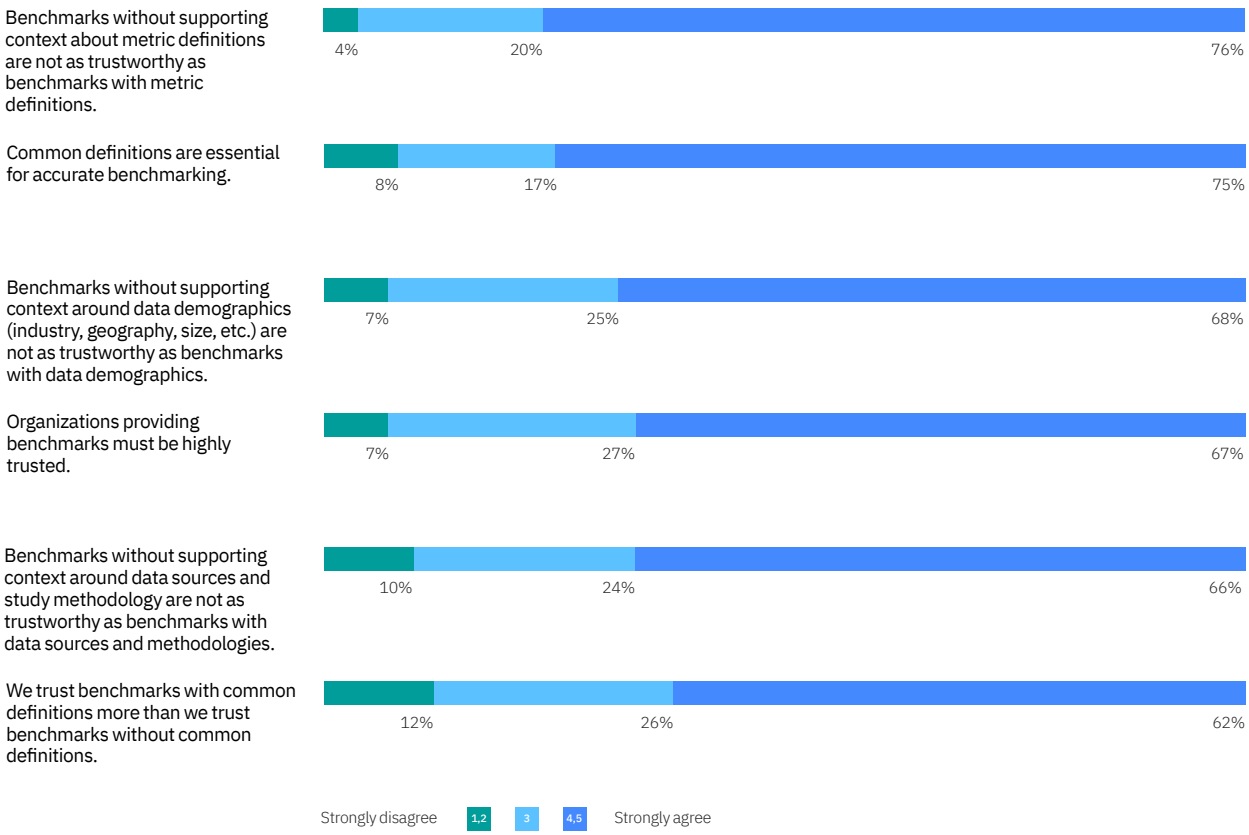
Open standards offer clear definitions of specific process components, as well as context to strengthen understanding. Measures in APQC's Open Standards Benchmarking library are based on APQC's Process Classification Framework® (PCF), which creates a common language for organizations to communicate and define business processes comprehensively without redundancies.

Because business processes are continuously advancing, open standards must also evolve to deliver value. Transactional processes will continue to play an important role in keeping organizations running, but next-generation leaders will be more focused on managing value streams in more highly strategic ways.

FIGURE 6

A common language

Shared definitions provide the foundation for successful benchmarking.



Question: To what extent do you agree with the following statements about the foundations of successful benchmarking? Some lines do not add up to 100% due to rounding.

Case study

Tetra Pak sees success through ecosystem benchmarking and open standards

Industry benchmarks can provide the intelligence organizations need to gain a competitive edge. Tetra Pak, a multinational food packaging and processing company, goes a step further by creating bespoke benchmarks with a group of regional peers.

One to three times a year, Tetra Pak's global process teams run custom benchmarking projects within an ecosystem of other European companies, such as Volvo and Bosch. Sharing data, the companies evaluate process performance and develop or refine their process improvement roadmaps.

Tetra Pak also leverages "one-stop shop" benchmarking data providers for more frequent benchmarking of some enabling processes. For example, because Tetra Pak has outsourced most of its accounting activities, it regularly benchmarks the outsourcer's performance against accounting benchmarking data.

The company is also exploring opportunities to further standardize processes through practice benchmarking with resources from external organizations, including APQC.

With a new cloud-based ERP rollout on the horizon, Tetra Pak is re-standardizing its processes using APQC's Open Standards Benchmarking and Process Classification Framework process definitions as a guidepost, laying a foundation for high-quality ecosystem benchmarking going forward.

"The more standard processes you get, the more opportunity there is for benchmarking," said Jeffrey DeWolf, Director of Global Process Performance Methods and Tools. "It's not just a matter of looking at how we're doing versus others, but also looking at what we should be measuring and whether we need new measures."

Overall, the value of benchmarking at Tetra Pak is to enable more informed internal business decisions and make the most of available resources. For example, Tetra Pak was engaged in a multiyear effort to standardize and streamline its master data approach. As the team was preparing to continue this effort, externally available benchmarking data revealed Tetra Pak's master data approach was already best-in-class in terms of cost and quality.

"We saw that we shouldn't really be spending time to further squeeze this," said DeWolf. "We should be looking at other things."

Action guide

Driving benchmarking forward

01

Use benchmarking to drive strategy

While benchmarking has proven valuable as a cost-cutting tool, those who use it solely for cost reduction and target setting are missing a massive opportunity. The future of benchmarking is built on its ability to increase revenue and drive transformation. Many organizations are already focusing their efforts in this area.

Organizations that raise the benchmarking bar have embraced it as strategic business tool and deployed it enterprise wide. These benchmarking superstars have taken three key steps that other organizations can adopt to improve their own benchmarking results.

1. **Standardize processes and measures across the organization.** Leverage open standards and a process framework to create consistency across the organization. Standardize at the business process level, which would be the third level when decomposing the business into four layers.
2. **Extend benchmarking efforts beyond productivity and cost measures.** Incorporate strategic measures that capture the value of processes and align measures and benchmarks with organizational goals or balanced scorecards.
3. **Embed benchmarking into your systems and planning cycles.** Embedding benchmarks into reporting mechanisms, such as dashboards, provides context for long-term and short-term decision-making. Benchmarking stars also:
   - Build in variance triggers for performance measures to initiate a performance evaluation, such as when a measure shifts one to two standard deviations from the expected benchmark value.
   - Use process performance measures and related benchmarks as inputs on capabilities, strengths, and opportunities for strategic planning.
   - Leverage data from peers and competitors to create context for decision-making and push leaders to spot new opportunities for improvement.

02

Expand benchmarking into ecosystems

As the focus of benchmarking shifts from cost reduction to value creation, using more data from more external sources can widen the view decision-makers have of the competitive landscape. Creating a more systemic approach that extends into the organization's ecosystem can help drive quantifiable results.

This means reaching out to your organization's existing partners, such as suppliers, to join forces and share data and results. But why stop there when you can learn even more by expanding benchmarking further with your suppliers' suppliers, industry peers, and customers?

Expanding benchmarking to incorporate external parties may sound complicated, but it can be achieved through a series of practical steps.

1. **Incorporate benchmarking into your ecosystem strategy.** Identify ecosystem value creation and capture opportunities, and align your ecosystem efforts accordingly. Use benchmarking as a tool to size the benefit and prioritize opportunities to enable your organization to capture value at speed and scale.
2. **Transform your benchmarking model.** First, assess the implications of any new ecosystem strategy on the company operating model and the use of benchmarking to support business objectives and performance. Then, you'll be ready to:
   - Adjust your existing benchmarking practices to extend into end-to-end value streams incorporating the activities and data of your ecosystem partners.
   - Develop and expand capabilities geared to benchmarking for value realization from the ecosystem.
   - Create benchmarks and KPIs that de-emphasize short-term transactional opportunism in favor of collaboration, innovation, and co-creation.
   - Invest in benchmarking programs that drive internal and external sharing, collaboration, and openness with partners.
3. **Use benchmarking to orchestrate your ecosystem participation.** As you move forward, be sure to align benchmarking with your organization's various ecosystem roles, key rules, and essential tools. Develop shared definitions of metrics, data standards, and frameworks with your ecosystem partners. Confirm which role your organization plays—and which roles it should play in the future—and determine how benchmarking can reveal where new or hidden value might reside.
4. **Enable future progress.** Invest in open and secure technology architecture for benchmarking to feed rapid integration, engagement, and expansion. Utilize pre-existing architectures for rapid scale-up. Embrace open, expandable hybrid cloud technology that supports fluid integration of new participants and data sharing at scale.

03

Use process mining to realize the full value of benchmarking—but understand that it doesn't replace benchmarking

Process mining and benchmarking play complementary roles in process improvement, with the former playing a supporting role to the latter. Establishing a successful process mining methodology begins with having a plan in mind.

1. **Define the purpose of your process mining efforts up front.** Determine which process mining applications are in scope for your needs, including process discovery, conformance checking, process re-engineering, performance management, and root cause analysis.
2. **Standardize data and processes.** Event log data should have a case ID, activity, and time stamp, at a minimum. Ensure standard processes are in use across your own organization, as well as with the partners in your ecosystem.
3. **Establish a standard methodology or approach.** Process mining typically involves four basic steps:
   - Define the project. Define the problem that the organization aims to solve through process mining. Determine the scope and flow in the process in question. Note any gaps in process indicators and define project objectives and research questions.
   - Prepare data. Locate and extract data from systems. Analyze quality and perform data-cleaning as necessary. Merge data, if needed, to ensure all data sets include case IDs, activity, and timestamps.
   - Process analysis. Feed data into the process mining tool to generate a visualization of the current-state process. Verify compliance, analyze process performance and findings, and identify the root cause of process problems.
   - Process re-design. Identify and evaluate alternatives for improvement. Implement improvements and measure the results.

Study methodology

The IBM Institute for Business Value and APQC, in cooperation with Oxford Economics, surveyed 2,000 C-level executives in first half of 2022 from 13 countries in all major geographies and across 22 industries. Respondents employed benchmarking in their organization and were very familiar with financial and performance metrics. The IBV and APQC implemented an in-depth analysis of how organizations use benchmarking and process mining tools, the benefits they gain from use of these tools, and how they anticipate using them in the future.

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