



Modernize record-to-report

*How AI and automation
are changing the game*

How IBM can help

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Key takeaways

Fewer than 10% of activities are dedicated to analysis and action—areas crucial to supporting improved business decisions.¹

- For organizations processing more than 1.5 million journal entries annually, the implementation of AI is the top predictor of monthly close cycle time.

For organizations processing fewer journal entries, the top predictor of cycle time is the maturity of information availability, suggesting struggles with data complexity.

- Organizations that have optimized robotic process automation in general accounting have a 25% faster cycle time for the monthly close.

They also experience a 38% lower cost per journal entry than peers who have lower levels of automation.

- Organizations infusing AI into record-to-report generate 66% faster cycle time to process journal entries.

However, only 19% of organizations report rolling out or fully implementing AI.



Introduction

Succeeding in economic uncertainty doesn't happen on its own. It requires purposeful agility, rapid innovation, and the right kinds of platforms and ecosystems. How to capitalize on these opportunities and lead decision-making? Look to finance as your key function.

Yet, nearly half of finance's time is still spent on transactional activities. In fact, fewer than 10% of activities are dedicated to analysis and action—areas crucial to supporting improved business decisions.¹ To provide strategic, financial, and operational feedback on the performance of the organization,² finance needs to transform record-to-report, the end-to-end process of recording, closing, consolidating, and reporting on financial data at the period end.³

Typically, the record-to-report process encounters a number of key challenges (see page 4).

Often, these challenges pile up, resulting in complexity, time-consuming activities, errors, and inaccurate financial results. An ideal record-to-report process will digitally transform finance operations with virtual and continuous accounting to better meet compliance requirements, improve efficiency, and enable business leaders to make agile financial decisions. The financial reports produced by the record-to-report process help CxOs with strategic planning in terms of performance goals and actions required. An increase in efficiency in record-to-report can directly reduce process costs since on average record-to-report is approximately 20% of all finance function FTEs.⁴

Data is the heart of record-to-report.

The IBM Institute for Business Value (IBV) Performance Data and Benchmarking Program performed a statistical analysis of data collected in 2021 and 2022 from more than 500 finance managers globally (see “Study approach and

methodology” on page 20). The analysis correlates the adoption of exponential technologies with outperformance in a variety of record-to-report performance measures.

Key challenges



Journal entries:

- Inefficiency and variability arise with existing activities. Journal entries are created with many repetitive tasks and manual follow-ups are required for much of the input data.
- Disparate enterprise systems coupled with lack of data access and process digitization often create a lack of transaction visibility. As a result, manual interventions in the process compromise the audit trail.
- The inability to review and verify all in-process journal entries leads to delayed close.
- Decisions cannot be made in real time. Limited business insights are available or delayed often, rendering them useless.



Reconciliations:

- Siloed disparate processes involve manual and repetitive work.
- Few insights are available to facilitate meaningful forecasts or real-time decisions.
- A lack of transparency and traceability exists with no end-to-end visibility of siloed data.
- Finance staff encounter a poor user experience with no unified view of end-to-end operations that would allow them to work seamlessly without hindrances.

Chapter 1

Data management sets the foundation for record-to-report

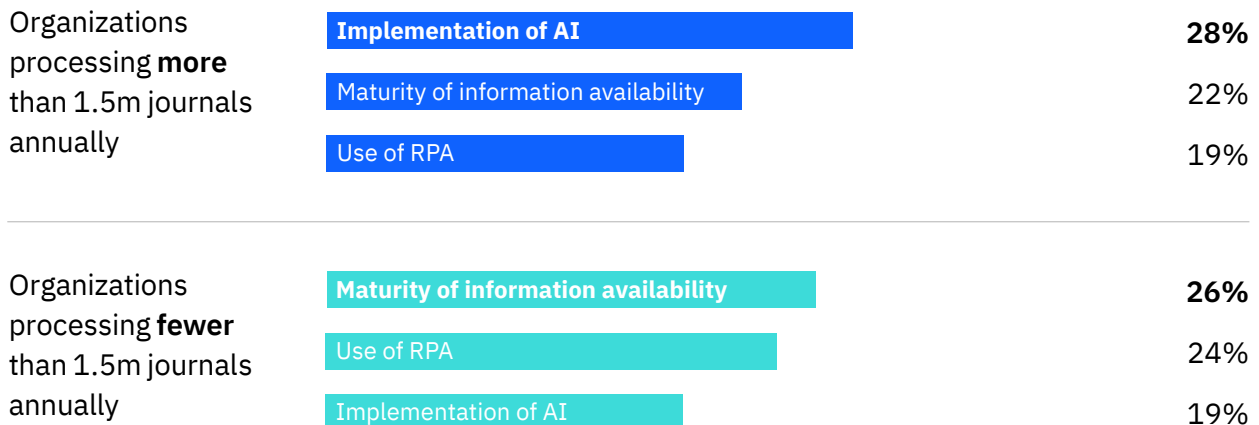
We determined that top performing organizations in the cycle time to perform the monthly close have three things in common: maturity of information availability, the use of robotic process automation (RPA), and implementation of AI.

When we segmented organizations based on the volume of journal entries processed annually, we saw differences in the relative importance of those three factors (see Figure 1). For organizations that process fewer than 1.5 million journal entries annually, the top predictor of cycle time was the maturity of information availability. For organizations processing more than 1.5 million journal entries annually, the top predictor of cycle time was the implementation of AI.

FIGURE 1

Information availability is critical for monthly close.

Key factors in estimating the speed for the monthly close



Source: IBV Data and Benchmarking and Performance. 2022.

Data is the heart of record-to-report. The emphasis on information availability can be explained by struggles with:

- Gathering and processing structured and unstructured data from different sources
- Collecting and consolidating a large amount of data
- Validating and reconciling data.

For those organizations processing fewer than 1.5 million journal entries annually, reduction of this data's structural complexity becomes a precondition. This requires an enterprise-wide data governance framework: data standards and rules to collect, use, and share data simplify the environment.

A comprehensive and consistent enterprise architecture is important to the scaling and compatibility of workflows. Cloud computing can help with the control and sharing of data. Without

this cloud environment, finance organizations will struggle to develop and maintain not only financial and operational data, but the integration of the two. In addition, cloud computing allows access to exponential technologies, such as automation and AI, and supports the seamless flow of data, enabling finance organizations to use it in new ways.

In fact, 61% more organizations that are leading or optimizing in data availability and analysis capabilities have adopted cloud technology (as opposed to on-prem or hosted solutions) for their general accounting and reporting processes compared to other respondents with lower maturity (see Figure 2).

With only 35% of respondents reporting adoption of cloud technology for their general accounting and reporting processes, cloud computing presents an untapped opportunity for many finance organizations.

FIGURE 2

Cloud computing assists with data availability and analysis.



Adoption of cloud

45%
Organizations that are leading/
optimizing data availability

28%
Other respondents

Source: IBV Data and Benchmarking and Performance. 2022.
Q. What best describes your current software delivery method for the general accounting and reporting processes?

Case study

Generali Hong Kong: Creating the foundation for finance transformation⁵

Generali Hong Kong is a branch of the Italy-based financial firm Assicurazioni Generali, providing life, commercial, health, and other insurance products for private and commercial clients. As change sweeps the financial services industry, Generali Hong Kong has undertaken its own transformation journey.

For the finance function, its goals were to drive real-time data flow with automated control; shift the focus from reporting and reconciliation to analysis; and reinforce robustness in reporting and business insights.

To address the challenge, Generali Hong Kong adopted a cloud-hosted ERP solution, which allowed the organization to conduct instant data mining and access intelligent robotic process automation tools.

As a result, Generali Hong Kong now has a single, trusted source of truth for its financial data. The new automation has eased critical financial processes, such as vendor payment and bank reconciliation. It has also freed up staff time from administrative activities to focus on analytics-based roles, enhancing insight capabilities.



Chapter 2

Automation speeds the record-to-report process

RPA allows finance organizations to automate manual repetitive rules-based activities. This technology does what finance staff would normally do—but better, faster, and cheaper.

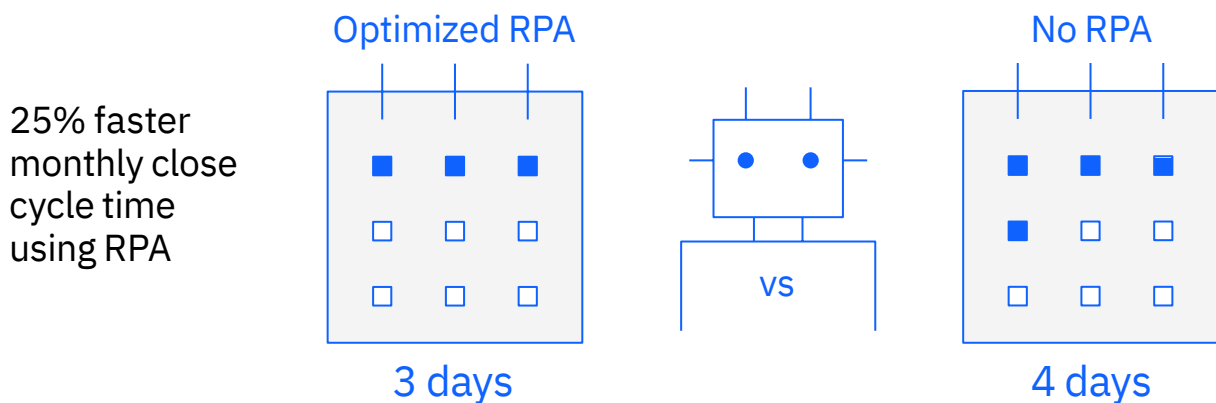
For example, chatbots provide instant connection and a single source of truth for journal entries. An automated scheduler checks for data input and availability and sends alerts. In reconciliations, semi-autonomous processing and self-service can be established with auto certification, auto match, and auto comment features. Touchless automation can enable a 60-75% reduction in journal cycle time.⁶

Yet, only 10% of respondents reported optimizing RPA for their general accounting process. But 75% more top performers have optimized RPA for their general accounting process compared to other respondents.⁷

Organizations that have optimized RPA in the general accounting process have a 25% faster cycle time for the monthly close at the business entity level compared to organizations that have not adopted RPA at all (see Figure 3).

FIGURE 3

Leveraging RPA in general accounting yields cycle time improvements.



Source: IBV Performance Data and Benchmarking, 2022.

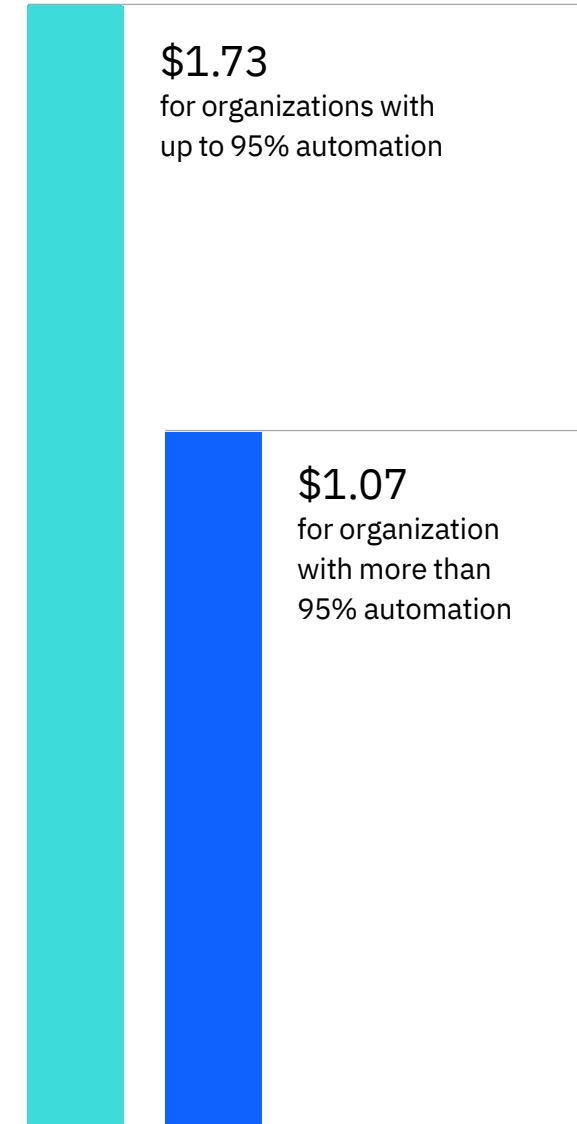
Q. Which best describes your use of Robotic Process Automation (RPA) technology to automate portions of the process “perform general accounting”?

Organizations that have automated more than 95% of their journal entries have 38% lower cost per journal entry compared to organizations that have automated up to 95% of their journal entries (see Figure 4).

FIGURE 4

Automation of journal entries lowers costs.

Cost per journal entry



Source: IBV Performance Data and Benchmarking, 2022;
Q. Of your business entity's total annual number of journal entries, what percentage was automated (system generated)?

Case studies

Metals and mining corporation: Increasing efficiency while enhancing controls⁸

This company had disparate systems which created a siloed record-to-report process. This scenario resulted in suboptimal outcomes for both the company and its customers.

To resolve this situation, the company engaged a partner to benchmark, standardize, centralize, and optimize various processes in the record-to-report process. Automated processes enabled finance teams to focus on performance insights which improved the profile of the finance function within the business.

The work yielded a two-day decrease in the close cycle, 30% headcount reduction, and \$25 million in cost savings.

Multinational building materials company: Automating sales and inventory reconciliation⁹

The company was missing its daily deadline for reconciliation. Robotic automation was able to bring higher efficiency.

- Automated daily reconciliation effort to improve inventory planning
- Robot pulls from multiple point systems and performs reconciliation even in off hours
- Analysts' capacity shifted to handle more complex tasks and exceptions.

The company was able to achieve a 39% reduction in cycle time and a 75% decrease in manual work effort.



Chapter 3

AI enables record-to-report insights

Infusing AI into record-to-report streamlines the process and enhances decision-making. For journal entries, an AI-powered workflow can provide qualitative reviews using historical behavior and rules that enforce organizational policies and provide early insights into performance and business impact. Greater than 99% first pass accuracy can be generated through machine learning.¹⁰

In reconciliations, machine learning-based actionable insights can be generated based on reconciliation anomalies and transaction anomalies. In addition, an AI-powered workflow can create risk insights highlighting transactional anomalies period over period.

However, only 19% of respondents reported rolling out or fully implementing AI for finance operations cost optimization. Twice as many top performers in the general accounting and reporting processes have fully integrated cognitive capabilities across their finance organizations for finance operations cost optimizations.



66% more organizations that have fully implemented AI for finance operations cost optimization *and* are mature in their data availability and analysis capabilities (scoring a 4 or 5 on a 5-point maturity scale) are top performers in record-to-report compared to other respondents.

An example of their superior performance is the cycle time to process journal entries, in which these organizations are 66% faster (see Figure 5).

FIGURE 5

Leveraging AI yields cycle time improvements.

Hours per journal entry



Source: IBV Performance Data and Benchmarking. 2022;
Q. Of your business entity's total annual number of journal entries, what percentage was automated (system generated)?

Case studies

Canadian multinational financial services company: Enhancing reconciliations¹¹

The current process was supported by the bank's in-house shared services team and a third-party service provider. However, the external provider was unable to support business process service delivery due to a nationwide lockdown in India, which impacted critical finance processes during quarter close.

A proof-of-value project demonstrated that an intelligent workflow solution could drive significant efficiency and reduce risk potentially across the more than 1,100 reconciliations undertaken by the bank.

Business outcomes included operating expense savings, transformation, and resiliency. The company achieved a 50% reduction in efforts involved with reconciliation, 35% reduction of cost after accounting for platform implementation, and reduced audit cost and efforts. Reduced risk and increased compliance to guidelines were generated due to reduction in manual intervention.

Educational products and services company: Addressing inefficient record-to-report process¹²

This company performed close to 520 intercompany reconciliations every month, using a manual process that was inefficient in quality, control, and speed of execution. By implementing robotic process automation, the company improved productivity by 31% for the intercompany end-to-end process. As well, intercompany reconciliations were prepared five times faster.

Insufficient time for analysis prior to earnings announcements also posed a challenge to the close process. A cognitive close optimizer solution provided insights to outstanding items and workload distribution during the close process. Improved work allocation resulted in increased practitioner productivity and a 50% reduction in close cycle time.

Perspective

Do you need to modernize
your record-to-report
process?

Key questions to ask:

- Are you comfortable with the current close cycle time?
- Are standard processes and procedures followed by all business units and/or geographies?
- Do you have a high level of confidence in the systems and controls that are in place?
- Are your teams spending too much time gathering and validating data?
- Do you have visibility to the status of all outstanding issues during the close cycle?
- Is the workload of your teams significantly skewed toward month/quarter end, resulting in suboptimal utilization?
- Have you been able to capitalize on exponential technologies to drive better performance insights?

Getting started

With proper data management, the combination of automation and AI is powerful for record-to-report. These exponential technologies provide tangible business outcomes, with greater than two days' cycle time reduction achievable. A 100% on-time close calendar, 70% plus transactional efficiency by reducing actions associated with data processing, and 40%-60% cost reduction are all possible. In terms of effectiveness, organizations could generate a more than 50% improvement on financial opportunity and risk insights.¹³

As we discussed above, data management is the first area of focus before taking full advantage of automation and AI. The required foundation: standardization of financial data and a data architecture.

Once this infrastructure is in place, automation and AI can accelerate the record-to-report process. In addition to these exponential technologies, organizations should conduct a holistic review of other contributing factors that enable top performers. An effective service delivery model that enables commonality can make a crucial difference in the process. And to support the human-technology partnership, finance organizations should closely examine their current skills.



Action guide

Lay the groundwork for leveraging exponential technologies in record-to-report using these steps to steer your efforts.

01

Use design thinking

Use design thinking to define and align around the current experience and pain points in record-to-report. The key stakeholders should be the record-to-report process owner, Chief Accounting Officer, and the Controller. Determine the time and cost involved to perform each task within the lifecycle.

Some key areas to look for:

- Lack of consistent process
- Limited and/or lack of visibility in the close process/cycle
- High volume of open items and/or reconciliations pending
- Long cycle time to close the books
- Limited time for analysis before financial reporting.

02

Prioritize potential solutions

Prioritize potential solutions including process changes, service delivery model, technology implementation, talent/skill capabilities, and data management/governance.

03

Develop a business case

Develop a business case for the solutions, including spend assumptions, maturity assessment of the current record-to-report process, and value that can be generated. Potential benefits should include process efficiencies, cost reduction, improved user experience, reduced risks, and increased visibility.

04

Create an implementation plan

Create an implementation plan for the record-to-report transformation, including roadmap, business objectives, milestones, and costs. Include pilots to rapidly achieve success and demonstrate the value of the solutions.

05

Continuously monitor performance

Continuously monitor performance after implementation to quantify benefits realized and enable continuous process improvement.

06

Ramp up execution

Ramp up execution and conduct formal weekly/monthly reviews with business stakeholders to understand roadblocks, critical path, and value realization. Adjust the implementation plan iteratively.

Study approach and methodology

In partnership with APQC, we surveyed 544 finance managers. The study focused on current general accounting and reporting practices and technologies, cloud technology, robotic process automation, and AI/cognitive computing capabilities.

The scope of the survey was global, including 25 countries across the Americas, Europe, India, China, Asia/Pacific, the Middle East, and Africa. The

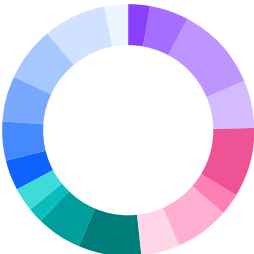
surveyed enterprises represented 18 industries and included a range of enterprise sizes (see Figure 6). Data cited in this study is self-reported by study respondents.

Using multi-layer perceptron neural network models, the relative importance of key factors in estimating the speed for the monthly close was determined. Those factors are maturity of information availability, the use of robotic process automation, and implementation of AI.

FIGURE 6

Survey demographics

Industry distribution



Aerospace manufacturing	3%	Life sciences	6%
Automotive manufacturing	5%	Media and entertainment	2%
Banking	11%	Mining	3%
Chemicals and petroleum refining	6%	Other manufacturing	4%
Electronics	9%	Retail	5%
Fast-moving consumer goods	3%	Services	6%
Government	7%	Telecommunications carriers	7%
Healthcare providers	5%	Transportation	8%
Insurance	8%	Utilities	3%

Regional distribution



Africa and Middle East	7%
Asia Pacific	27%
Central and South America	9%
Europe	31%
US and Canada	26%

Parent organization revenue



Less than \$100 million	2%
\$100 million to \$500 million	20%
\$500 million to \$1 billion	17%
\$1 billion to \$5 billion	35%
\$5 billion to \$10 billion	10%
More than \$10 billion	16%

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Related Reports

AI's quantified impact on the finance function

"AI's quantified impact on the finance function: Improving process quality, cost, and efficiency." Benchmarking Insight. IBM Institute for Business Value. November 2022.

<https://ibm.co/artificial-intelligence-finance>

The CFO Global C-suite Study: Strategic Intelligence

"Strategic Intelligence: CFOs as architects of action and champions of change." IBM Institute for Business Value. January 2022.

<https://ibm.co/c-suite-study-cfo>

Finance as the essential business partner

"Finance as the essential trusted business partner: To become indispensable, Finance needs next-generation enterprise performance management." IBM Institute for Business Value. June 2020.

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Notes and sources

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- 6 Based on internal IBM client information.
- 7 Top performers are defined as organizations that score in the overall top quartile percentile ranking with equal weight given to cost, quality and efficiency/quality metrics for general accounting and reporting.
- 8 Based on internal IBM client information.
- 9 Ibid.
- 10 Ibid.
- 11 Ibid.
- 12 Ibid.
- 13 Ibid.

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