

# AI-Enabled Financial Report Automation for Finance Leaders

Co-created by **Emerj Artificial Intelligence** and **YSEOP**



# Introduction

The fourth industrial revolution brings new pressures to today's finance leaders. Advances in technology—arriving ever more rapidly—transform our lives and our workplaces. Stakeholders inside and outside our companies no longer have patience for time-consuming, manual processes. This is especially true when it comes to reporting and analysis.

Our regulators, stockholders, and customers demand that our businesses operate with more agility, embrace today's innovations, and free up our workers so they can focus on more valuable and strategic work. Internally, those demands inspire the goals and objectives thrust upon our finance leaders by their business partners and themselves. Operational, cash flow, and risk management reporting all drive critical decision-making within our companies, but only after the reports are in hand, ready to be ingested and discussed.

Until now, reporting has required hours of manual effort across finance departments and companies. Indeed, Deloitte's Baromètre Digital Finance 2021 report identified the automation of reporting as a crucial solution in solving three of these principal challenges facing finance and accounting groups in the next 12-18 months:

- 1 Invest more time in the analysis of non-financial data
- 2 Invest more time in the analysis of financial data
- 3 Digitize accounting and financial management processes

To confront these challenges thrust upon today's business leaders, Corporate Finance must accelerate its reporting, analysis, and decision-making processes, identify root causes in real-time, and share those insights as they develop. The COVID-19 pandemic has only accelerated these trends, and the need for new, faster, and better technologies.

Data science, technology, and automation are responding to these pressures. One in three respondents to Deloitte's 2021 Digital Finance Barometer report intends to begin considering AI-enhanced financial reporting in 2021 and begin implementing a solution in 2022. Gartner believes that, by 2022, one of every four companies will have adopted a form of natural language generation (NLG) technology, an emerging technology that uses software to generate natural language output. Indeed, today, NLG-enabled reporting automation is a must-have to survive amidst the increasing demands of the leaders and individual contributors who drive these business-critical processes.

Finance functions are embracing technology and the need to understand it, its impact, and the pain points it can solve. But, adopting and making use of NLG requires a commitment. NLG-enhanced business processes operate at their best when decision-makers understand the policies, procedures, and practices they are overhauling (or even replacing), how they interact, and how they have delivered results to the business up until now.

Done right, NLG-enabled AI automates data gathering and report generation so that decision-makers can focus on the results of that reporting and the strategy it inspires. To get there, companies need to trust their systems, their automation, and the real-time insights they can now share, whether that comes through the click of a button that sends an email or the flash of a report appearing on a flatscreen in the executive boardroom.

# Use Case 1: Business Performance Analysis



## | Challenge



Every month, nearly two thousand business analysts, financial controllers, and other key stakeholders at a multinational consumer goods corporation needed days to gather and analyze the results of the previous month. These analyses compared month-by-month results against budgets and forecasts across more than 10 dimensions and over thousands of possible product, country, division, and channel combinations.

When they finally got all the results, analysts poured over the details, identifying facts and generating questions for follow-up and to discuss in strategy sessions. The process could take up to 10 days every month-end. The quality of the insights and comments generated by the analysts heavily depended upon their effort, knowledge, and experience.

The company's leadership wanted to make the reports more actionable, to clarify KPI comparisons over time and among strategies, and to identify the drivers that boosted—or bottlenecked—sales.

The company's Corporate Finance team needed a summarized, dynamic business performance analysis on all products for all countries in its footprint, delivered in one click. The analysis needed to provide:

**Consistent quality:**

All analyses had to be produced with the same quality, which could no longer depend on the analyst's efforts and expertise.

**Time efficiencies in report production:**

Company leaders agreed that the business performance analysis process needed to take much less time.

**Faster determination of key metrics:**

Stakeholders had to be able to distill key financial and performance insights so they could more quickly act on them.

## Actions Taken



To help this large multinational company develop this automated analysis so it could be easily understood by all stakeholders, Yseop established requirements around key points that included:

- Delivery of concise business insights derived from real-time data spanning over 70 indicators
- API integration with the new data visualization tool

Yseop designed its Financial Intelligent Report Automation (IRA) solution to generate the multidimensional analysis the company needed and produce reliable reports showing the company's sales performance and profitability results. Yseop standardized the reports across groups, divisions, and departments so that comparisons would be more accurate and efficient.

To free analysts from investing hours into sifting through the details of the analysis for key points, Yseop built the IRA solution to integrate alerts and offer the ability to highlight key variations for later drill-down. These key variations, identified by the solution in just minutes, provided analysts with additional context and actionable insights for the company's business units. Yseop also worked closely with the company to ensure that the NLG-powered IRA solution would fully integrate with the new data visualization tool powered by Looker.

To minimize disruption to the business, Yseop worked closely with the company to roll out the solution in just eight weeks.

## Results



Automating the sales analysis reporting process with AI-enabled IRA saved the multinational consumer goods corporation both time and money. Immediately, the company's leadership noted savings that materialized from the hours and days analysts reclaimed through automating manual, error-prone tasks. Yseop's NLG solution generated actionable insights for the hundreds of stakeholders who relied on the monthly business performance analysis report. Among its key contributions, the NLG solution:

- Analyzed sales results across 70 indicators and 10+ dimensions
- Compared product performance across years and budgets
- Generated actionable insights and 100% accurate commentary

The NLG solution worked much faster than human analysts as well. Needing less than one second to generate a comment, Yseop and the project team determined the solution could generate up to 100,000 business performance comments monthly across multiple dimensions, providing faster and fuller coverage than had been possible in the past. Indeed, for a process that once took 10 days to perform at the end of each month, the NLG solution cut its target to a few days.

The client reported huge potential in the capabilities of the NLG solution, noting that the variance analysis could be applied across all businesses, to analyze:

- OPEX
- IT Spending
- Project Expenses

Using their new, AI-augmented, financial reporting capabilities, the company accelerated its financial reporting with scale and accuracy, most notably in:

**Efficiency and Agility:**

The NLG solution's ability to deliver report analysis in real-time resulted in a 50% efficiency gain in report production. By automating the identification and flagging of issues needing human intervention, the NLG solution helped avoid bad surprises by detecting them earlier than human reviewers could. It also helped analysts focus on responding to actionable insights more quickly and gave them more time for better communication and decision-making.

**Quality of Reporting:**

The NLG solution removed an analyst's effort, skill, and diligence as factors that determined reporting quality. By automating the analysis and reporting, the NLG solution standardized the quality of the analysis and delivered consistent, top-level reporting every time.

**Improved Decision-Making:**

The company quickly discovered that the NLG solution served as an effective performance management tool for executive management. The quality and availability of the information across the company led to greater transparency of sales performance results and improved communication across stakeholders. The solution's ability to target relevant information for follow-up ensured that stakeholder discussions focused on the right metrics and the right results at the right time.

# Use Case 2: Financial Statement Analysis



## | Challenge



The lives of corporate accountants revolve around the certain coming of the financial close with the end of each month, quarter, and year. That predictability of the financial close cycle does not make financial reporting any easier for accounting teams across the globe. Delays, rushed reviews, and inefficient workflows plague the closing of the books in all accounting departments, from those supporting small businesses to those who support Fortune 500 companies. Accountants worry about the accuracy and completeness of their numbers. They worry about security risks and non-compliance with regulatory and standards-based frameworks.

Corporate accounting groups prove their worth through the many financial reports they produce each close. Those reports help internal and external reviewers to monitor the financial health and status of their companies. The reports also help regulators and auditors fulfill their important roles.

Finance and accounting teams increasingly turn to intelligent reporting automation (IRA) that uses AI technologies to reduce the time and stress long associated with the close. Advances in technology reinvent the way accountants create essential reporting like:

- Profit and Loss Statements
- Balance Sheets



- Statements of Financial Position
- Statements of Cash Flows
- Budget-to-Actual Analyses

Yseop's client needed to produce better financial reports in less time while monitoring their financial results. They also sought a way to automatically generate comments and follow-up points for over 600 financial indicators. Lastly, the solution needed to provide drill-down reporting for detailed consumers of financial data like the CFO and Head of Accounting and more summarized reporting for reviewers in management and on committees.

They hoped that the automation of their financial statement reporting through AI would provide them with the accurate, compliant, auditable commentary they needed. They turned to Yseop.

## Actions Taken



To help their client transform its stressful financial close cycle and free up lost hours of corporate accounting time, Yseop introduced AI-based intelligent reporting automation (IRA) to their financial close.

To begin to construct its no-code platform, Yseop met with the client, studied their financial close process and its deliverables, and identified the parts of the process to be automated.

Yseop's project team then gathered the structured data for each of the client's financial reports and loaded it into the Augmented Financial Analyst Solution.

Just two to three weeks later, within the solution, they built the models. After just two hours of training to enable highly customizable reporting, the client distributed the models across the company and all its levels. Defining a common model across subsidiaries, countries, and lines of business enabled the client to pass a crucial step toward standardization. Now all accountants and controllers can leverage the standard model and decline it on their perimeter.

Yseop's project team collected feedback from clients and stakeholders. They worked closely with their client to generate the reports and fine-tune them to address the feedback they received.

Through Yseop's built-in Feedback Loop tool, the client's analysts then adjusted the solution's reporting commentary to reflect its human analysts' natural writing styles and the organization's voice.

## Results



With its Augmented Financial Analyst solution, Yseop delivered a tool that enabled its client to produce reports faster than ever before. Through IRA, Yseop transformed the timeline of the reporting process from days and weeks of manual effort to just a few clicks and seconds.

Yseop's Augmented Financial Analyst solution delivers the full suite of financial reports to its client including income statements, balance sheets, statements in change in equity, statements of cash flow, statements of financial position, and notes to financial statements.

The Augmented Financial Analyst solution provides text that can be used by investors and internal stakeholders to follow the company's financial results in real-time. The error-proof IRA has eased the client's closing period and makes financial information auditable, analyzable with drill-down capabilities for further analysis, and helps the client comply with prevailing regulations.

With the time-saving standardizations offered by the Augmented Financial Analyst's template and model homogenization, the client's internal stakeholders can now dedicate more time to their strategic responsibilities. They can now work with better quality and efficiency and act on the actionable insights delivered by the solution in a fraction of the time that was needed by human-driven processes.

At Yseop's client, the advantages of the IRA have been many, including:

- More time
- Resolution of bottlenecks

- Increased operational efficiency
- More compliance confidence
- Fewer delays
- Better quality

Through implementing AI into their financial reporting process, the client augmented their existing staff's analysis by automating a process that had been manual and time-consuming. By moving financial report automation and the generation of commentary to the IRA, Yseop's client uncapped the true abilities of its employees' time, talent, and expertise. They are now looking at new use cases for automation to further develop their report automation roadmap.

## About YSEOP:



**Yseop** specializes in artificial intelligence (AI) and is a recognized pioneer in Natural Language Generation (NLG) technology. Yseop is rapidly expanding globally, providing enterprise-level automation solutions for some of the world's largest companies in a variety of industries including finance (Credit Agricole, Factset, BNP Paribas), pharmaceuticals (Sanofi), and computer software company (Oracle). Yseop also partners with strategic consulting firms and system integrators including CapGemini, Accenture, and LTI, who support the adoption and deployment of Yseop's NLG solution.

With its multi award-winning Language AI technology, Yseop is revolutionizing the way analysis and reporting is done. Yseop's powerful and user-friendly Augmented Analyst platform allows business users to seamlessly and quickly build and automate the generation of text reports from any structured data.

At Yseop, we exist to support companies through this digital transformation. We believe that our cutting-edge artificial intelligence technology allows businesses to increase the efficiency of their operations and enables people to accomplish less tedious tasks and allows them to use that saved time to do more added-value and creative work.

**Visit:** [www.yseop.com](http://www.yseop.com)    **Contact:** <https://www.yseop.com/contact-us>

## About Emerj Artificial Intelligence Research:



**Emerj Artificial Intelligence Research** is a market research and advisory company focused exclusively on the business impact of AI.

Companies that thrive in AI disruption run on more than just ideas. They leverage data and research on the AI applications delivering return in their industry today and the AI capabilities that unlock true competitive advantage into the future - and that's the focus of Emerj's research services.

Leaders in finance, government, and global industries trust Emerj to cut through the artificial intelligence hype, leverage proven best-practices, and make data-backed decisions about mission-critical priorities.

**Visit:** [www.emerj.com](http://www.emerj.com)    **Contact:** [research@emerj.com](mailto:research@emerj.com)