SPOTLIGHT

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Harnessing Analytics to Support the Changing Role of the Modern CFO

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Introduction

The previous 24 months have seen a series of historic disruptions at a global level. The disruptions have varied from geopolitical unrest and pandemic-related shutdowns to supply chain breakdowns and more. Their unprecedented nature has reshaped the role of the CFO forever. According to discussions with financial leaders, the pandemic, for example, has greatly accelerated the pace of business and placed an even higher level of importance on digital transformation. In a recent IDC survey, over 70% of businesses stated that the disruptions caused by the pandemic highlighted the need to shift to a digital-first strategy.

AT A GLANCE

KEY STATS

» 74% of companies surveyed cited using technology to attain contextualized data as it relates to financial operations as an important area of focus in the coming year.

» 76% of companies surveyed cited using technology to achieve real-time decision making as it relates to financial operations as an important area of focus in the coming year.

In the past, CFOs focused heavily on cost reduction, risk management, and business process optimization. While those things still matter, the continued pandemic and other disruptions have forced changes to the role of the CFO. Today's CFO must be a business enabler supporting and funding new products and services as well as essential business development requests. CFOs must also be highly focused on business agility, adjusting and readjusting forecasts and budgets rapidly based on market conditions. The role of the modern CFO is more forward facing, more data driven, and more strategic than at any other time in history.

However, the foundational tools of the office are very often ill-suited to accommodate this shift. Legacy applications, which populate many larger companies, don't have the flexibility, automation capability, or business intelligence features needed to support today's CFO. Legacy applications can limit the CFO's ability to make data-driven decisions at the speed of business and across the scale of the entire business. As such, the need for a new breed of digital, insight-driven tools is critical.

CFO's New Skill Set: Analytics

Financial leaders find themselves facing massive streams of business-critical data that must be sifted through rapidly. The role and skill set of CFOs must therefore evolve to include more data science and data management. CFOs must be able to look at financial data and find strategic trends and glean insights that will impact key performance indicators for the business. Analytics and data management skills are often not native within the office of the CFO. This has necessitated a deeper connection between the office of the CFO and the IT team. Going forward, the separation between the CFO and the CIO will shrink. For example, CFOs are now being asked to be more involved in IT decisions around ERP and analytics packages. As the collaboration between the CFO and IT continues to evolve, there will be a need for software applications that bridge the gap between IT and finance via low-code/no-code features with powerful yet intuitive analytics capabilities.

Challenges for Today's CFO

During the height of the pandemic, CFOs were asked to answer broad, sweeping questions in real time. For example, accurately determining how much cash/liquidity a company has in real time was exceedingly difficult for companies with multiple business units and multiple systems of records across multiple countries. Even simple questions can be difficult when data is distributed across a wide and disconnected network of systems and processes. Amid this often disconnected environment, CFOs must contend with the following challenges:

» **Financial and business metrics must be communicated to stakeholders effectively.** CFOs have been hampered by an inability to gather and disseminate business-critical information to the necessary stakeholders at speed. Modern solutions offer financial leaders the opportunity to share essential metrics dynamically and automatically among stakeholders.

» **Both fraud detection and fraud prevention need to be managed.** The office of the CFO is on the front line when it comes to fraud detection and prevention. These can be difficult to manage as cyberfraud becomes more sophisticated. During 2021, businesses lost $2.4 billion to business email compromise (BEC) incidents, according to the Federal Bureau of Investigation's 2021 Internet Crime Report. Intelligence can be applied to fraud management and detection by enabling the real-time auditing of every business transaction to find anomalies and discrepancies.

» **Capital appropriation process is not well coordinated with long-term planning.** A lack of visibility into cash and liquidity makes it difficult to forecast accurately and build effective long-term capital appropriation plans. Building cash and liquidity visibility demands modern intelligent tools to facilitate complex modeling and scenario building.

» **Period-end financial consolidations are cumbersome and time consuming.** Financial closings can be a chaotic process within the financial operations value chain. For many organizations, it's a collection of late nights, frantic emails, and spreadsheet reconciliation. Artificial intelligence (AI) and machine learning (ML) can be applied to the financial close process to automate bank reconciliations and regulatory compliance activities.

» **Staying on top of regulations and financial compliance is a major challenge.** Businesses must navigate a constantly shifting collections of regulations at the federal, state, and local government levels. These regulations not only shift from country to country but also change within each country, often annually. This level of complexity is an opportunity to apply AI/ML to monitor and update tax content and to fill out the various forms associated with compliance from country to country.

The Move to Modernize Financial Infrastructure

The office of the CFO has been engaging in digital transformation relatively slowly compared with front-office areas such as customer relationship management and sales management. The rise of robust cloud solutions and the advent of intelligence financial applications have tipped the scales. Businesses are rapidly seeking and deploying modern cloud-based applications to support the office of the CFO. IDC forecasts that the worldwide financial applications market will reach $44.7 billion by 2025, growing at a CAGR of 6.2%. Concurrently, public cloud deployments are set to grow at 13.9% through 2025, and financial applications users want technology solutions with the following characteristics:

» **Greater analytics.** Enterprise organizations are typically more complex financial environments, with procurement, payables, expenses, and collections accounts spread over multiple business units, multiple countries, and multiple account profiles. As a result, their analytical needs are more advanced. Enterprises need detailed functionality, including dashboards, predictive analytics, and robust visualization capabilities.

» **Investment in microservices.** Enterprise-level financial application vendors are more likely to have made heavy investments in the microservices architecture for their software development protocol. Microservices provide vendors with the ability to create highly maintainable yet loosely coupled services that can combine and be recombined to form large applications dynamically. This provides vendors with the necessary flexibility/agility to meet the demands of a highly dynamic market landscape.

» **More predictive features.** So much of financial management has been backward facing, examining historical data to predict the likelihood of payments, revenue, or expense patterns. Finance has been so backward focused that it has been difficult switching gears to look up and see what's coming next. The potential of predictive analytics in finance is where the software uses algorithms to predict patterns to determine past due risk and then account stability and credit worthiness and estimate late payment likelihood. Predictive analytics is picking up momentum, especially among larger and more complex finance environments.

Data Management Moves to the Forefront for the CFO

The uncertainty brought on by the pandemic and other disruptions has highlighted the growing data management initiatives within the office of the CFO (see Figure 1). Many businesses experience data management issues and inefficiencies when moving data from one back-end system to the next. This process delays essential insights and slows decision making at a time when speed is most critical.

FIGURE 1: ***Data Management Initiatives in the Coming Year***

74%

of companies cited using technology to **attain contextualized data** as it relates to financial operations as an important area of focus **in the coming year**

76%

of companies cited using technology to achieve **real-time decision making** as it relates to financial operations as an important area of focus **in the coming year**

Source: IDC's SaaSPath Survey, 2021

Technologies that have appropriate APIs and can be more easily managed by the business teams, working closely with IT and related governance teams, have the potential to automate data and processes in real time without human intervention. This not only speeds up the manual tasks associated with compiling financial information but also greatly reduces the risk of human error.

Benefits

The past 24 months have highlighted the need for a tighter marriage between data analytics and financial operations. The emphasis among financial leaders has shifted toward transparency and shortening the time between transaction and decision. These are places where financial analytic solutions have a major impact. Key benefits of financial analytics software are as follows:

» **Reduced manual effort.** Introducing automation into key financial processes such as forecasting, monthly or quarterly financial closings, and other related regulatory reporting can dramatically reduce the manual effort needed to support those tasks. This allows businesses to reallocate those resources to higher-value tasks.

» **Increased operational speed and reporting frequency.** A highly manual financial management process slows down the flow of business-critical information on key operations trends and details to those in position to make decisions. Faster processes result in more frequent analysis and more opportunities for value and risk identification.

» **Enhanced business insight.** Greater analytic capabilities can be gained by moving away from manual financial processes and incorporating a modern solution. A modern financial application will allow organizations to support advance modeling and scenario building.

Key Trends

The following trends are driving the importance of financial analytics and operations management:

» **Tighter collaboration between the CIO and the CFO.** There is demand for a more strategic/analytical skill set for finance teams. The necessary skill set among financial team members will evolve to include more strategy/analytical skills. The ability to look at financial data and see the opportunities and strategic insights within the data will become an essential part of the job. Discussions with CFOs have revealed a shift away from being a gatekeeper toward a heightened focus on innovation. CFOs and CIOs will come together to support the business as digital transformation accelerates and digital-first business models emerge and proliferate. This collaboration will also impact the buying preferences for financial applications going forward. Vendors looking to thrive must have a compelling message for both the CIO (security, modern infrastructure, etc.) and the CFO (functionality, ease of use, etc.).

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- **Shifting roles from rear-facing details to forward-looking insights.** In the past, much of the financial leader's role was to manage rear-facing details such as closing the period, reconciling GL transactions, invoice matching, or cash application. While those activities will always be important, the uncertainty of 2020 put more focus on forward-looking activities such as forecast, budgeting, and planning. With the pace of change in overdrive in 2020, financial leaders had to invest lots of time trying to anticipate the next major change in business dynamics or trying to develop a financial strategy to anticipate future shifts in market dynamics. IDC sees greater demand for more reporting and data visualization tools in the future. This trend will continue to accelerate and shape buying decisions for financial leaders.
- **Convergence of adjacent workflows.** The traditionally siloed nature of financial functions such as accounts receivable, treasury, expense management, and accounts payable is rapidly changing. IDC's latest *SaasPath Survey* reveals that 76% of finance respondents prefer an integrated suite for their financial applications. The deep-seated desire among financial leaders is to have a single real-time view of their financial data so that they can confidently make strategic decisions.
- **Demand for a more strategic/analytical skill set for finance teams.** The necessary skill set among financial team members will evolve to include more strategy/analytical skills. The ability to look at financial data and see the opportunities and strategic insights within the data will become an essential part of the job. CFOs and CIOs will come together to support the business as digital transformation accelerates and digital-first business models emerge and proliferate.
- **Growing demand for accountability in environmental, social, and governance (ESG) and environmental, health, and safety (EHS) issues.** The CFO's analytic and reporting mandate is quickly growing beyond financial statements to include keys areas such as ESG and EHS. The latter will be especially relevant as the work-from-home movement continues to shift and develop.
- **Cybersecurity becoming more essential.** Security is now a multifaceted challenge because of the rise of cybersecurity threats and payment fraud. Organizations with modern financial solutions are better able to analyze customer/supplier transaction flows for fraudulent patterns.
- **Remote and hybrid work models.** The pandemic thrust remote work upon many different types of businesses, creating a new sense of urgency to move away from legacy financial solutions. Businesses already deploying modern online/cloud tools found themselves better suited to the changed circumstances.

The current uncertainty has shifted the emphasis toward speed and business resiliency. The processes of financial close, budgeting, forecasting, and cash management are being forced to become faster and more efficient overnight as the market dynamics force operational changes and modification of business goals from week to week (day to day in some cases). This is ushering in a new way of thinking about the future of financial operations and the tools needed to be effective in an uncertain future.

Considering PwC and Alteryx

PwC's purpose is to build trust in society and solve important problems. PwC helps clients through professional services to build trust and deliver sustained outcomes through the company's Trust Solutions and Consulting Solutions segments. Capabilities include cloud and digital, ESG, cybersecurity and privacy, governance, risk, transformation, and tax services. Across PwC's global network of firms in 156 countries with over 295,000 employees, the company is committed to advancing quality and technology to support its employees and clients.

Alteryx brings together data science and business process automation in a single platform. Named the Analytic Process Automation (APA) platform, Alteryx's solution brings cutting-edge analytics to line-of-business users via low-code/no-code capabilities and a rapid setup capability. The APA combines automation of analytics with machine learning to empower data-driven decisions at scale and at speed.

The combination of PwC and Alteryx presents customers with the opportunity to accelerate their digital transformation by harnessing the rivers of operational and financial data and applying PwC's vast experience with building and maintaining complex business solutions that feature both products and services.

Key Use Cases

- **Audit.** The total market capitalization for publicly traded securities worldwide was well over $90 trillion in 2021. The entirety of that number is based upon the full faith and accuracy of financial statements. It's not a stretch to say that the global economy is kept afloat based on the belief that the data on financial statements is accurate and trustworthy. The corporate audit is a tool to establish and maintain that trust between businesses and their stakeholders. As a result, businesses are under more compliance pressure than ever before.
- **Forecasting and planning.** CFOs and COOs find themselves building new models and running new scenarios based on unprecedented market conditions. Unfortunately, many businesses are still too dependent on spreadsheets for budget and forecasting. According to the most recent IDC *SaasPath Survey,* 43.3% of financial leaders cited using spreadsheets to support forecasting processes.
- **Sales tax.** Tax is only one link in the financial value chain that spans front-office applications such as CRM and ecommerce applications and back-office applications such as ERP, accounts payable, and billing applications. As a result, the solution's ability to collaborate and gather data from other departments is crucial for controllers and tax managers.

Challenges

The PwC/Alteryx joint solution faces the following challenges:

- **Multiple layers of uncertainty.** The turbulence the business world experienced in the past 24 months has multiple layers beyond the pandemic itself. As mentioned previously, a modern financial solution is essential to weathering the storm of disruption. Already in 2022, markets saw the regulatory landscape continue to shift and become more complex with new/updated lease accounting, einvoicing, and payment mandates throughout the various global regions. Markets also saw the geopolitical landscape in constant flux. Further, there were extreme shifts in the global capital markets that have not been seen in more than a decade. All this change created a financial minefield that business of all sizes had to negotiate. However, for PwC and Alteryx, this uncertainty, while on one hand a challenge, presents an opportunity to help businesses contend with turmoil. Analytics, especially intelligent analytics, has the potential to provide some certainty amid all the current uncertainty.

- **Burden of educating the market about analytics possibilities.** While the idea of artificial intelligence applied to financial operations has been around for some time, the typical financial business leader still needs education around the rapidly evolving possibility brought forth by AI/ML. Part of the challenge for solutions in this market will be showing modern use cases from respected peers to help frame the vast opportunity presented by intelligent financial analytics solutions. Over the past 12 months, PwC and Alteryx have made significant investments to demonstrate the true potential of their solution, and more investments are planned for 2022.

Conclusion

Organizations that recognize the opportunity to introduce automated processes that address existing and future gaps in financial information gathering and knowledge building will be best positioned to thrive in rapidly changing markets. Moreover, in today's challenging labor market, the ability to attract, develop, and retain workers depends in no small part on instilling confidence in the organization's financial soundness and agility. Outcomes from intelligent financial analytics solutions include lowering the cost of fixed processes, integrating formerly siloed financial applications in a cost-effective manner, and realizing business value faster via analytically driven decision making.

About the Analyst

Kevin Permenter, *Research Director*

As a research director, Kevin Permenter provides insights and analysis across multiple fintech market segments including accounting, revenue management, corporate tax, accounts payable, accounts receivable, and treasury and enterprise payment management. Kevin leads qualitative research efforts that drive a series of technology buyer-focused documents and end-user surveys. Kevin's research includes a particular emphasis on the interplay, challenges, and trends driving financial application deployment and its role in the evolution of the complex financial technology ecosystem.

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More About PWC and Alteryx

Leveraging Data Automation to Leverage Digital Transformation

The Alteryx Analytics Automation Platform, combined with PwC's digital transformation experience and global market reach, helps empower organizations to achieve solutions—faster. The Alteryx Platform delivers end-to-end automation of analytics, machine learning, and data science processes; enabling the agility needed to accelerate digital transformation. This helps organizations and individuals improve their digital acumen and can allow them to share their innovations across an enterprise and accelerate business outcomes. PwC is proud to be an Alteryx Global Elite Partner* of Alteryx—we have a comprehensive set of services and products designed around delivering value to organizations. Additionally, we are now an authorized reseller of the Alteryx Platform (US only) and have expanded our alliance globally to over 20 territories.

IDC Custom Solutions

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