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R E S E A R C H

Digital Orchestration, Not Only Automation, is the Real Triumph

While Automation Results in Quick Wins, Orchestration Can Deliver Long-term Value for CFOs

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Introduction

The role of enterprise back-office functions, including finance operations, has changed significantly over the past 5 to 10 years. While previously viewed as support functions and cost centers, back-office functions are now seen as having the potential to impact business outcomes. Finance and Accounting (F&A), in particular, is a critical function given its interaction with other organizational functions.

EXHIBIT 1

How the F&A function closely connects with other functions

Source: Everest Group (2019)
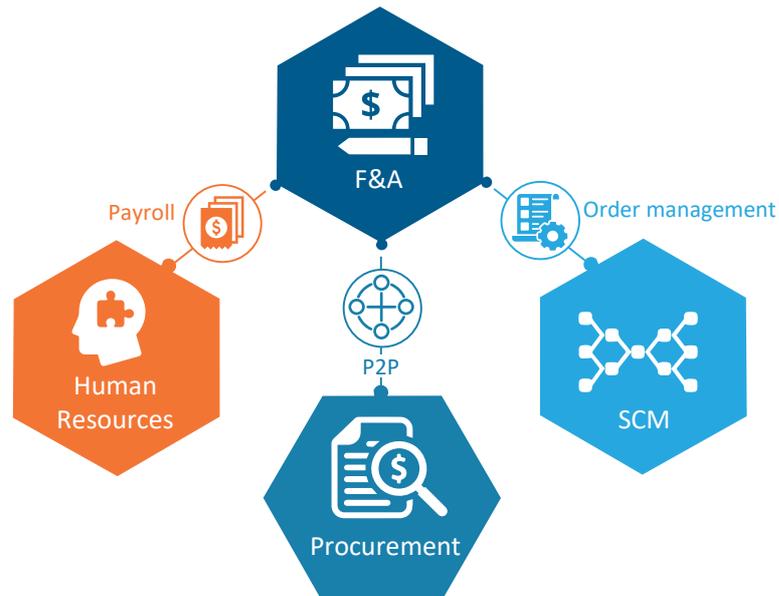
Given the significance of the finance function and the potential impact it can create in an organization, the expectations of the CFO are evolving, and there are multiple next-generation digital technologies in development that can potentially transform the finance function to help the CFO to meet these rising expectations.

In this paper, we discuss:

- The rising and changing expectations of CFOs in recent years and the evolution of the F&A function from cost center to strategic function
- The impact of various next-generation digital levers in F&A processes and the benefits it can deliver when they are orchestrated
- The role of third-party providers in driving transformation through orchestration

This paper will help CFOs, F&A executives, service providers, and other CXOs who are looking to transform their F&A processes and understand the impact of next-generation digital levers on the transformation journey. The paper also describes the importance of orchestrating multiple digital levers to achieve the full benefits of transformation.

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Rising CFO expectations

The roles of both F&A operations and the CFO have shifted over the years. Enabled by the evolution of best practices and technologies to meet changing expectations, the result has been a series of "eras," each with their own characteristics.

Cost era

Constantly changing macro-economic factors such as globalization, an exponential change in consumer expectations, and increasing market competitiveness called for organizations to focus on their core operations, while optimizing the cost of back-office operations.

Until the late 20th century, the CFO's primary role was to reduce the cost of operations to maintain/improve the bottom line. In the late 1990s, the global economy opened up, and many enterprises around the globe started to move their back-office operations to low-cost countries such as India and the Philippines to further reduce costs.

Operational efficiency era

In the early 2000s, as the economy opened up further, enterprises scaled up rapidly across regions; finance and accounting operations demanded both standardization and centralization of processes across geographies, while addressing individual regions' geo-political and economic nuances. In this era, the expectations of the CFO were not only to reduce costs but also to optimize operations and drive efficiency.

Business outcomes era

In the last three to four years, the CFO's role and expectations have changed drastically. CFOs are expected to contribute significantly to business outcomes by assisting other CXOs in making business decisions. At this point, the F&A function no longer holds a support role; instead, it has significant impact on the top line and other business outcomes.

Realizing the importance of F&A operations in an enterprise, many organizations have started to transform their F&A processes by leveraging various best practices and digital technologies, both in-house and with the support of third-party providers. Traditional F&A levers such as workflows, reconciliation, digitization, reporting, and data management have become table stakes; F&A functions are expected to implement next-generation digital technologies such as automation, analytics, and artificial intelligence to transform their operations and realize business value. In particular, Robotic Process Automation (RPA), has seen a relatively increased adoption in F&A.

Automation is transformation – myth vs. reality

Automation has been leveraged in F&A processes for some time in various forms such as scripting, macros, and workflows to streamline highly transactional processes like accounts payable and account reconciliation. The primary objective of these basic automation levers is to reduce manual touchpoints and mundane tasks. The introduction of basic automations improved productivity and efficiency.

RPA, on the other hand, is task-oriented and can replicate and process high volumes of rules-based processes at higher speed and with greater accuracy. Examples include fetching and updating data in the ERP, generating auto-trigger e-mails, and automating tasks that require manual intervention in workflows. RPA can significantly reduce processing time from days to a few hours.

Among all next-generation digital levers, RPA has seen a significant increase in adoption in F&A processes primarily for two reasons:

- The prevalence of highly standardized and transactional processes in the F&A value chain
- The availability of multiple RPA tools in the market

Everest Group estimates 40-50% of Finance and Accounting Outsourcing (FAO) contracts have RPA implementations

EXHIBIT 2

Current level and potential impact of RPA in F&A processes

Source: Everest Group (2019)

Degree ◯ Very low ● Very high

Key processes	Current level of automation	Automation potential
Procure-to-Pay (P2P) *(Accounts payable and T&E)*	◕	●
Accounts receivable and collections	◔	◕
Order management and billing	◔	◔
Record-to-Report (R2R) *(Primarily General Accounting and reconciliations)*	◐	◕
Financial Planning & Analysis (FP&A)	◯	◔

RPA – myth vs. reality

We have seen the impact and potential that RPA can bring to F&A operations. RPA technologies can drive operational impact by improving processing productivity, efficiency, and accuracy. If implemented properly, RPA has the potential to reduce the cost of operations by an average of 20-25%.

However, a commonly held myth is that RPA can transform the F&A function. It is vital to understand: RPA can make a process faster and error-free, but it alone cannot make the process intelligent nor can it achieve business impact. In Exhibit 2, we have demonstrated

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the impact of RPA in transactional processes such accounts payable, billing, and account reconciliation. However, RPA's impact is low in highly complex processes such as Financial Planning & Analysis (FP&A) and also in relatively less transactional processes such as order management and collections.
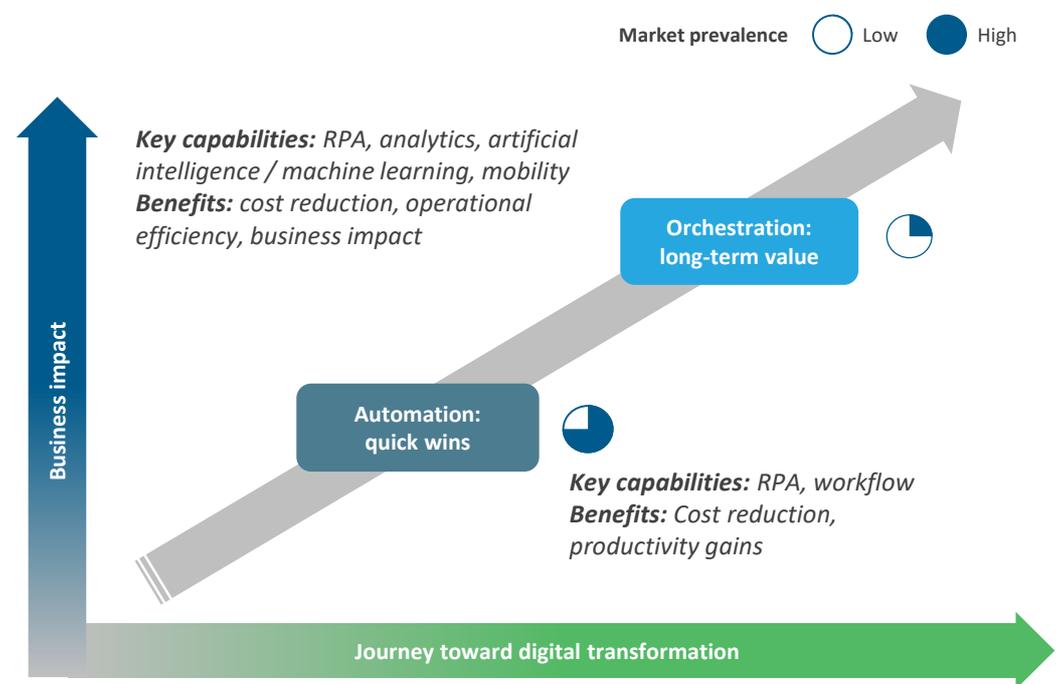
For example, RPA can process invoices, reconciliations, and billing very quickly. However, automation alone cannot handle certain cases, such as when information does not match the defined rules or there are unique exceptions. Also, RPA cannot help the CFO by providing insights to improve the process or aid in business decision-making.

In other words, transformation of the F&A function is more than just making processes smoother and faster. Real F&A transformation introduces cost reduction through operational efficiency, improved business outcomes through smart insights, and increased external stakeholder satisfaction through better usability. Organizations cannot achieve these benefits without filling the gaps that automation alone leaves. Exhibit 3 highlights how automation, while essential to transformation journey, is only the first component.

EXHIBIT 3

Illustration of the role of RPA in the transformation journey

Source: Everest Group (2019)

Market prevalence ○ Low ● High

Key capabilities: RPA, analytics, artificial intelligence / machine learning, mobility
Benefits: cost reduction, operational efficiency, business impact

Orchestration: long-term value

Business impact

Automation: quick wins

Key capabilities: RPA, workflow
Benefits: Cost reduction, productivity gains

Journey toward digital transformation

RPA can have a potential impact on cost and productivity, but it needs to be orchestrated with other next-generation digital levers to achieve long-term value through transformation.

Potential of other digital levers beyond automation

In this section, we discuss next-generation digital levers beyond automation and their capabilities and impact when orchestrated.

EXHIBIT 4

Impact of other next-generation digital levers

Source: Everest Group (2019)

Analytics

Most enterprises are already leveraging basic analytics and visualization tools for dashboarding and reporting purposes. However, with the increasing pressure of F&A processes to deliver business impact, the sophistication and maturity of analytics solutions are evolving. Advanced analytics solutions leverage both internal and external data to predict meaningful insights and sometimes prescribe action items.

Collections, where analytics is highly leveraged, provides an good example. An analytics solution can analyze customers' payment patterns and external information to provide insights on devising collection strategies.

Cloud

Cloud technologies not only offer cost savings but also enable mobility to enhance the user experience through web-based and mobile apps. In the past, CFOs were reluctant to move the finance function to the cloud: in 2017, adoption of cloud-based platforms in FAO was around 10%, while that of Procurement Outsourcing (PO) and Human Resource Outsourcing (HRO) were approximately 30% and 60% respectively. However, the adoption of cloud platforms in FAO is increasing exponentially, driven primarily by an increase in the number of sophisticated BPaaS solutions with improved data security and compliance.

Cloud-based digital solutions combined with mobility can significantly reduce process cycle times. For example, cloud-based P2P platforms enable the availability of information and dashboards on mobile devices and allow reviews and approvals of invoices on-the-go, shortening cycle times and improving efficiency.
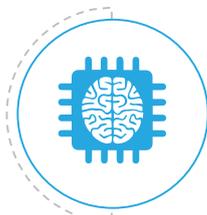
Artificial intelligence

Cognitive digital solutions with machine learning capabilities can augment humans in performing judgment-oriented tasks and make processes smarter. Its Natural Language Processing (NLP) capabilities can improve the user experience by enhancing the way various stakeholders interact with the system.

For example, in the Accounts Payable (AP) helpdesk, an AI-based conversational solution that can understand semi-structured vendor queries and fetch relevant information immediately would not only eliminate significant work for the AP team, but also would improve the way vendors interact with the system.

Another interesting example is invoice processing exception handling: Cognitive tools can learn how humans handle exceptions and eventually handle them without human intervention when similar instances occur.

While all digital levers have unique capabilities, the relevance and importance of each lever varies based on the maturity and complexity of the processes. Exhibit 5 demonstrates the importance and impact of different levers in various F&A processes to achieve transformation.

EXHIBIT 5

Importance of different levers in various F&A processes to achieve transformation

Importance: Low (grey) | Medium (light blue) | High (dark blue)

	Procure-to-Pay (P2P)	AR & collections	Order management & billing	R2R	FP&A
Talent	Low	Medium	Medium	High	High
Best practices & methodologies	← - - - - - - - -	- - - - Across value chain	- - - -	- - - - - - - - →	
RPA	High	Medium	High	High	Low
Cognitive/AI	Low	Medium	Medium	High	High
Analytics	Low	High	Medium	Low	High
Mobility	High	Low	High	Low	Medium

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Orchestration of multiple digital technologies

Need for technology orchestration

While there are multiple digital levers to enable the transformation of F&A processes, proper orchestration of these technologies is essential to deliver superior impact, as in the following analogy.

Marvel introduced multiple superheroes such Captain America, Hulk, and Iron Man, each with unique abilities, who could fight the struggles and obstacles in the world. But the introduction of the Avengers – bringing together this group of remarkable heroes to fight for the greater cause – proved greater than the sum of the parts.

Next-generation digital levers such as RPA, analytics, and cognitive intelligence are much like those superheroes – while they can deliver impact in F&A processes individually, the impact is much greater when they are orchestrated and implemented collectively.

Data orchestration

F&A processes sit on a vast set of data that is either siloed or, at best, has limited integration. True transformation of the finance function can only be achieved through breaking down data silos. A strong Master Data Management (MDM) solution is essential to achieving the full benefits of other technologies in the digital-led transformation of F&A.

For example, the insights from the integrated data of accounts payable and collections can aid CFOs in their work to optimize the strategy to improve working capital.

Technology orchestration

Having discussed the impact of each digital lever and the importance of data orchestration in F&A processes, integration of these levers can drive cost reduction, operational efficiency, business outcomes, and customer satisfaction. Exhibit 6 offers a framework of a suite of digital levers that guides enterprises to remain focused on outcomes.

EXHIBIT 6

Digital Capability Platform – an entire ecosystem of possibilities

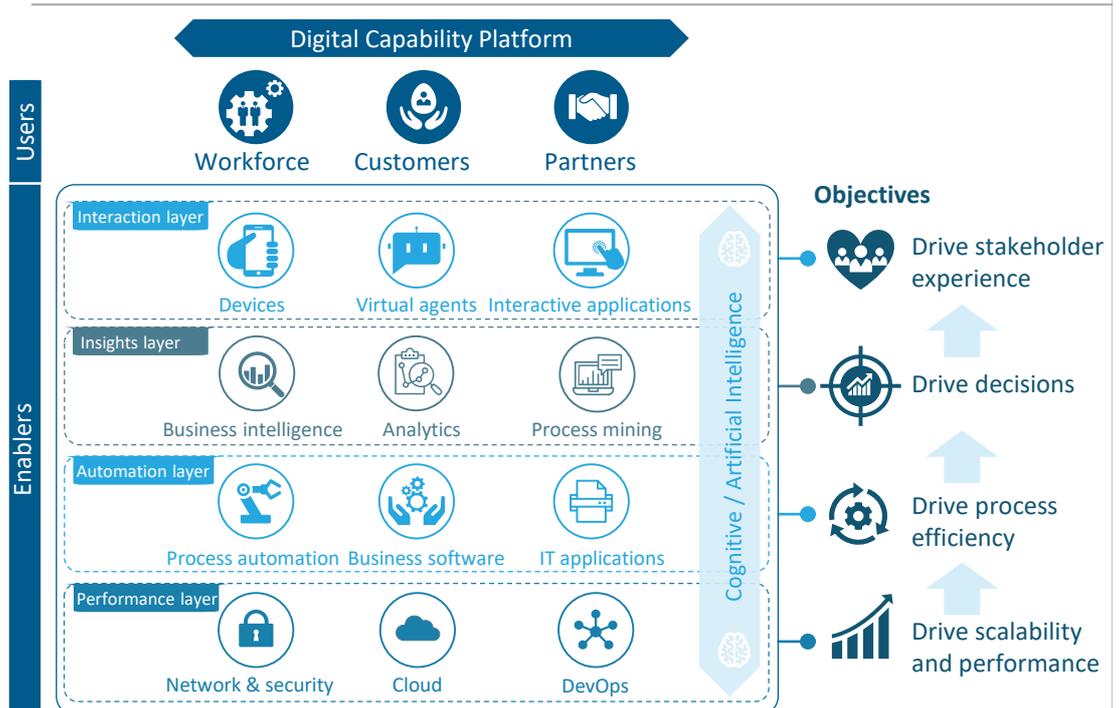Source: Everest Group (2019)

Innovation ecosystem

API ecosystem

IoT

Digital Capability Platform

Users: Workforce · Customers · Partners

Enablers

Interaction layer: Devices · Virtual agents · Interactive applications

Insights layer: Business intelligence · Analytics · Process mining

Automation layer: Process automation · Business software · IT applications

Performance layer: Network & security · Cloud · DevOps

Cognitive / Artificial Intelligence

Objectives
- Drive stakeholder experience
- Drive decisions
- Drive process efficiency
- Drive scalability and performance

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EXHITBIT 7

Use cases: how orchestration can transform F&A processes

Source: Everest Group (2019)

P2P example

Orchestration of Intelligent Optical Character Recognition (IOCR), machine learning, AI-based conversational bots, RPA, and advanced analytics can transform the P2P process

As-is

- Data ingestion from invoices is done either manually or through an OCR
- The invoices that matched the defined rules are processed automatically and those with exceptions are handled manually
- The processed invoices are sent for approval and, once approved, are forwarded for payment processing
- Basic analytics are leveraged to report defined metrics and status
- Vendor queries are handled either though a vendor portal or through emails

To-be

- IOCR with cognitive capabilities can fetch data from different formats of invoices
- Cognitive automation with machine learning capabilities can handle exceptions, improving processing time
- RPA can auto-trigger emails for approvals, and mobile-based apps enable faster approvals and eliminate bottlenecks at the approval stage
- Advanced analytics can leverage the data and provide insights that aid the CFO in decision-making, such as contract negotiation, and to identify scope for improvement
- A vendor portal with an AI-based conversational bot helps vendors to monitor the progress of their invoices and enquiries

O2C example

Orchestration of MDM, predictive analytics, automation, and cognitive assist applications can enable a better O2C process

As-is

- Customer data in silos limits the insights that can be generated to optimize collections
- Billing invoices are prepared based on the order placed, and any errors in the invoices are noticed and resolved at a later stage, which affects collection timing
- Reports are prepared for the collections team, and the payment due date and order amount is the primary criteria in determining the collection strategy
- Manual cash application not only delays the process but also is prone to human error

To-be

- MDM solutions can enable a single instance of customer master data and aid the collections team to better segment customers and customize their approach leveraging analytics
- Predictive analytics can be leveraged for better customer segmentation based on payment patterns and history, and also can be used to predict invoice errors and flag issues upstream for quick resolution
- Automation of transactional processes such as customer onboarding and cash application can help reduce Days Sales Outstanding (DSO)
- Mobile apps such as order assist apps can provide an interactive user interface to engage and interact with order management executives

EXHITBIT 7 (continued)

Use cases: how orchestration can transform F&A processes

Source: Everest Group (2019)

R2R example

Orchestration of automation, machine learning, and cloud can result in a real reduction of FTEs and enable faster period-end closing in R2R processes

As-is

- Highly manual-intensive work is involved in extracting data from multiple systems
- Automation solutions or reconciliation tools only reconcile the exact matches; entries with slight variations are handled manually and take significant human effort
- Workflow tools are used to route items for review and approval
- Clearing exceptions requires manual updating of core systems

To-be

- The combination of RPA and cognitive automation extracts and normalizes structured and unstructured data from multiple systems
- Cognitive tools with machine learning capabilities can be integrated with reconciliation tools, which can suggest potential matches for exceptions and significantly reduce human effort in period end closing
- RPA can be leveraged to route exceptions and auto-trigger email notifications for faster resolution of open items
- Cognitive tools to prioritize work items and RPA to create and post adjusting transactions

Key factors to consider to achieve technology transformation

While we have seen the benefits of technology orchestration and its potential to transform F&A processes, it is also important to understand that implementation of digital solutions alone does not transform a process. Transformation is a journey that takes significant effort and time to deliver results such as cost reduction, improved turnaround times, increased customer satisfaction and top-line growth.

There are several factors to consider to ensure a successful transformation journey.

Technology can drive negative impact if implemented on an inefficient process

Process improvement – setting the stage for digital enablement

Enterprises need to assess their current level of process maturity and the integration of their systems. They also should leverage best practices to reengineer, standardize, and centralize their processes across geographies.

In this digital era, a different approach to this process discovery phase has led to a new set of technologies called Process Mining. Process Mining is the use of specialized software to look at and analyze process-related information that is captured in enterprise software logs. It leverages recordings of event logs and allows organizations to hold up processes for scrutiny, analysis, re-casting, and improvement as business requirements change. It blends the power of data-based analysis techniques and machine learning to add value to traditional process simulation and process management techniques. It can help organizations build a detailed picture of a process rather than the usual view that is constrained by the highly manual nature of many tasks and the lack of data. Enterprises that leverage process mining in combination with other best practices set the stage for digital enablement.

While standardization and centralization are essential, enterprises should also consider region-specific nuances across geographies. This process assessment exercise will help in identifying the scope for technology intervention.

Enterprises also must develop a proper future roadmap for technology intervention in various processes considering the organization's current investment in technology, systems, growth strategy, etc. A best practice is to develop a three- to five-year horizon of the digital journey to achieve the to-be state from the as-is state.

Organizational acceptance and resource planning

Technology orchestration and transformation significantly affect the way processes are executed and the resources performing the operations. Hence, the acceptance and support of the stakeholders involved in the operations are essential. The key stakeholders should be trained to use new systems and processes. As the transactional processes become significantly automated, SMEs' time is freed up to spend on judgement-oriented and complex processes. Exhibit 8 highlights the gradual shift in the finance function's staffing pyramid from a doers-heavy to a thinkers-heavy model due to technology interventions. Proper communication, planning of resource utilization, and change management are vital to success.

Leaders

Thinkers

Doers

Adaptability/nimbleness

Finance is one of the few functions that is highly impacted by externalities including geopolitical issues, constant tax changes, and compliance requirements such as GST in India and GDPR in Europe. Digital solutions should be nimble enough to adjust to constantly changing regulatory and other external requirements.

Role of a third-party provider

In the current scenario, there are multiple best-in-class tools and technologies developed by both third-party service providers and technology vendors. Enterprises can begin the transformation journey either through in-house capabilities or by leveraging third-party service providers; both models have their advantages. While setting up a GIC enables greater data privacy, control, and talent, outsourcing to third-party providers enables access to the latest technologies, scalability, and best practices and methodologies for process improvement and technology implementation.

Most of the leading FAO service providers are shifting their focus from operator to orchestrator, as enterprises increasingly require strategic partnerships. Many service providers have made strategic alliances with leading technology vendors and have developed best practices and in-house tools to help enterprises through the transformation journey. Because of the availability of best-in-class technologies in the FAO market, many service providers are moving from a build/operate model to a broker/integrator model for better process orchestration.

Exhibit 9 illustrates the benefits of transformation through orchestration of best practices and next-generation digital levers including automation, cloud, analytics, and AI.

EXHITBIT

A leading global airliner case study

Source: Everest Group (2019)

Client details

Solution

Results

How a leading airliner transformed its end-to-end F&A operations

Challenges

- A high degree of manual intervention and paper-based invoices resulting in high cost of invoicing and negative impact on supplier relationships
- Lack of foresight and visibility into invoice exceptions leading to revenue leakage
- Outdated, disintegrated, and reactive collection model with low collections efficiency impacting cash flow
- Manual reconciliation delaying books closure
- Leakage in Travel & Expense (T&E) and p-card expenses with static audit sampling

Objectives

The key objective was to improve cash flow and transform and digitize end-to-end finance operations, leveraging next-generation digital levers such as automation, AI, and analytics

Approach

The airliner leveraged TCS as a third-party FAO provider and utilized TCS' proprietary model and digital components such automation, analytics, cloud solution, and cognitive technologies to help achieve its objectives

Components deployed

- A cloud-based P2P platform to digitize invoice operations and enable real-time visibility for invoice exception
- A cognitive engine to deliver predictive insights on T&E to identify and fix leakages due to non-compliance to policy and out-of-pocket expenses
- Intelligent automation to automate the transaction-intensive processes across the F&A value chain

- Reduced Total Cost of Operations (TCO) through improved Straight Through Processing (STP) and digitization of invoices
  - Reduced the cost per invoice by 40-60%
  - Increased digitized invoices from 30% to 100%
  - Improved electronic payments to 75%
- Delivered business outcomes leveraging predictive and prescriptive analytics
  - P-card leakage identification of around US$8 million through predictive insights
  - US$180 million cash flow through improved proactive collections strategy

Conclusion

F&A is no longer stuck in the back office; it is increasingly viewed as a function that can aid enterprises in achieving better business outcomes and sustaining competitive advantage.

The related rising expectations of CFOs, the evolution of multiple digital levers, and the need for F&A functions to deliver business outcomes have made transformation a necessity, not an option. Next-generation digital levers such as automation, advanced analytics, artificial intelligence, and cloud are evolving rapidly and could have a significant impact on F&A processes.

The market is evolving quickly in this digital era; enterprises need to be proactive in taking measures to transform. And, though digital plays an important role in the transformation journey, process improvement and proper orchestration of digital levers are vital to ensuring success.

Third-party F&A service providers can play an important role in expediting and orchestrating this journey. Service providers' constant and rapid investments in technologies and talent, coupled with their experience, help them to be a strategic partner in the transformation journey.

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