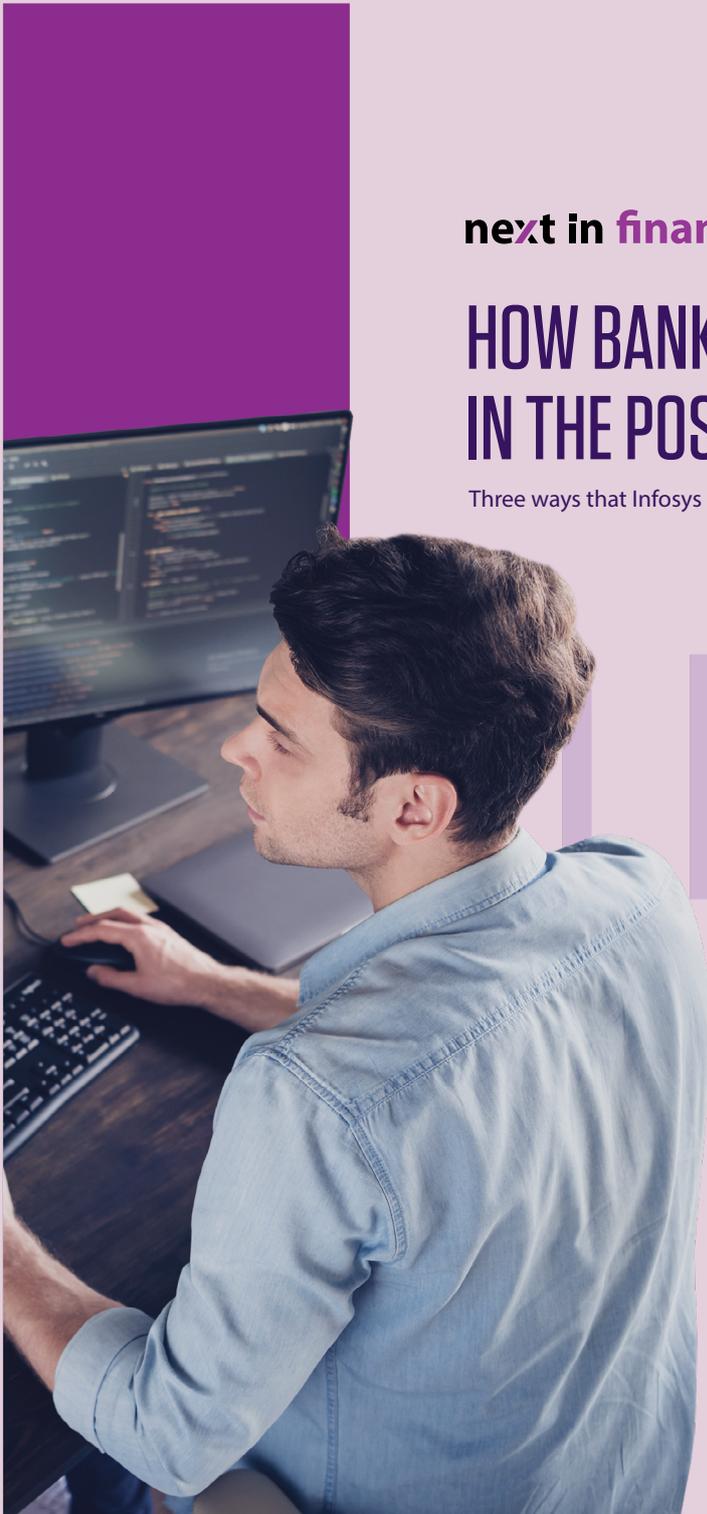


next in financial services

HOW BANKS CAN OPTIMIZE COSTS IN THE POST-PANDEMIC ECONOMY

Three ways that Infosys helps banks to drive efficiencies





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Today's world faces an extremely challenging economic outlook and a turbulent, unpredictable marketplace. Banks are faced with rapidly evolving external dynamics that are squeezing margins from every side.

Pressure is on for banks to urgently deliver efficiencies to remain competitive, react to new threats and exploit new opportunities. As a result, cost optimization has become an imperative for banks across the world.

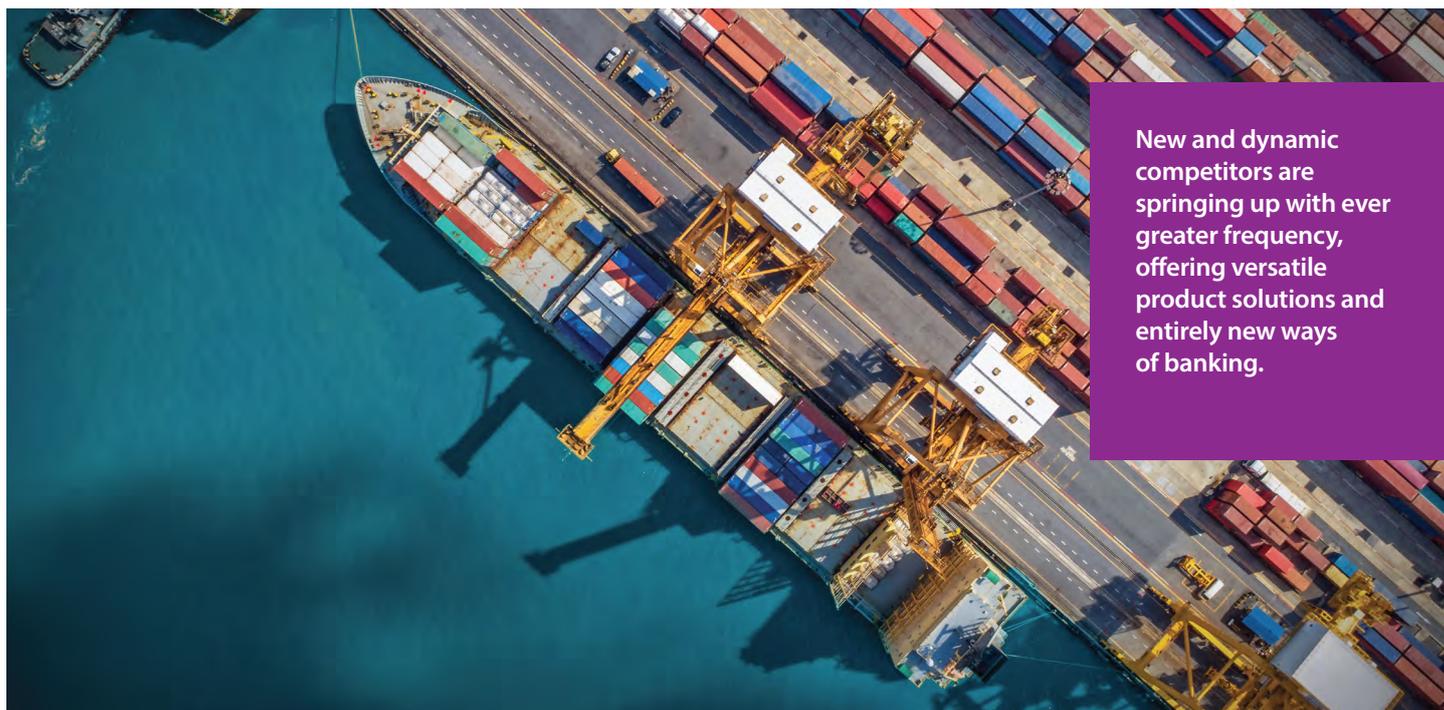
As with all businesses, banks will be looking to drive efficiencies in every single

pocket of their organization, depending on their own unique circumstances and cost-base. Holistic digital transformation, as a framework to optimize costs, has become a key imperative for banks across the world. Digital transformation touches all facets of the organization from the customer experience, processes, data and core platforms that deliver the capabilities. Bank CIOs are reassessing how the organization consumes and procures technology, the infrastructure that supports its use of technology, and the way in which deployment of new technologies can enable and accelerate cost savings across the business.

This paper presents three areas where Infosys, a world leader in digital

transformation can help banking clients to deliver significant cost savings, over short and long-term. While cost optimization programs can provide immediate relief to the mounting financial pressure, if properly managed, they can deliver viable and long-term effects in steering the organization toward a more efficient, self-funding, operating model and new revenue opportunities. Therefore, it is vital for business and technology leaders to take a strategic approach to cost optimization; to ensure that every decision is ultimately aimed at aligning digital transformation with the future vision of the organization and driving most value out of the technology deployment.

02. THE NEW COST ENVIRONMENT



New and dynamic competitors are springing up with ever greater frequency, offering versatile product solutions and entirely new ways of banking.

The pressure on banking institutions to cut costs while also transforming their operating models has become the key challenge for banks across the world.

Over the last two years, the global pandemic accelerated and amplified many of the cost challenges that banks were already facing up until 2020 and brought them to the boiling point.

Customer demand for seamless and multi-channel experiences has soared during the pandemic, as people all over the world switched to digital and mobile channels while living in lockdown. Consumers are no longer willing to put up with poor digital experiences and they are immediately turning their backs on brands that are unable to provide faultless customer service.

The recent supply chain challenges, rising inflation and the geo-political and economic turbulence caused by the Russian invasion of Ukraine is increasing operating costs and risks for banks. Corporates are demanding greater levels

visibility into their cashflows to be able to make financial decisions in real-time.

New and dynamic competitors are springing up with ever greater frequency, offering versatile product solutions and entirely new ways of banking. This is putting pressure on banks to ramp up their digital transformation initiatives and reduce the time to launch new and innovative applications and digital services to attract and retain customers. Banks have had no choice but to invest heavily in digitization initiatives to meet rapidly evolving customer needs, as well as to compete with new digital-first disruptors in the market.

Security and fraud threats have risen considerably throughout the pandemic, as bad actors have looked to expose loopholes in (legacy) applications, digital services and new (rapidly) developed technology solutions to take advantage of the millions of consumers that have been forced to use digital channels for the first time.

At the same time, and linked to this heightened security risk, banks are now operating within an increasingly complex and dynamic regulatory environment.

They are having to adhere to ever stricter rules and guidelines, and to be completely transparent in how they demonstrate compliance and governance. Consumers are increasingly vocal about demanding more transparency and commitment around ESG from their banks.

However, many established banks continue to rely on legacy systems and technology with little integration or interoperability between systems.

This 'technical debt' is not only hampering banks' efforts to modernize their IT infrastructure and drive innovation, but it is also opening vulnerabilities to potential fraud and security breaches. Banks are having to spend significant sums of money in maintaining and running their existing capabilities.

So, while cost optimization has long been an important objective for banking leaders, the stakes have been raised to a new level over the last 12 months. Banks have no option but to find ways to reduce their costs, while embedding the operational agility and resilience they will need to compete in an uncertain and volatile market in the coming years.



Within banks of all shapes and sizes, there is an urgency to identify opportunities to strip out cost from their operating model.

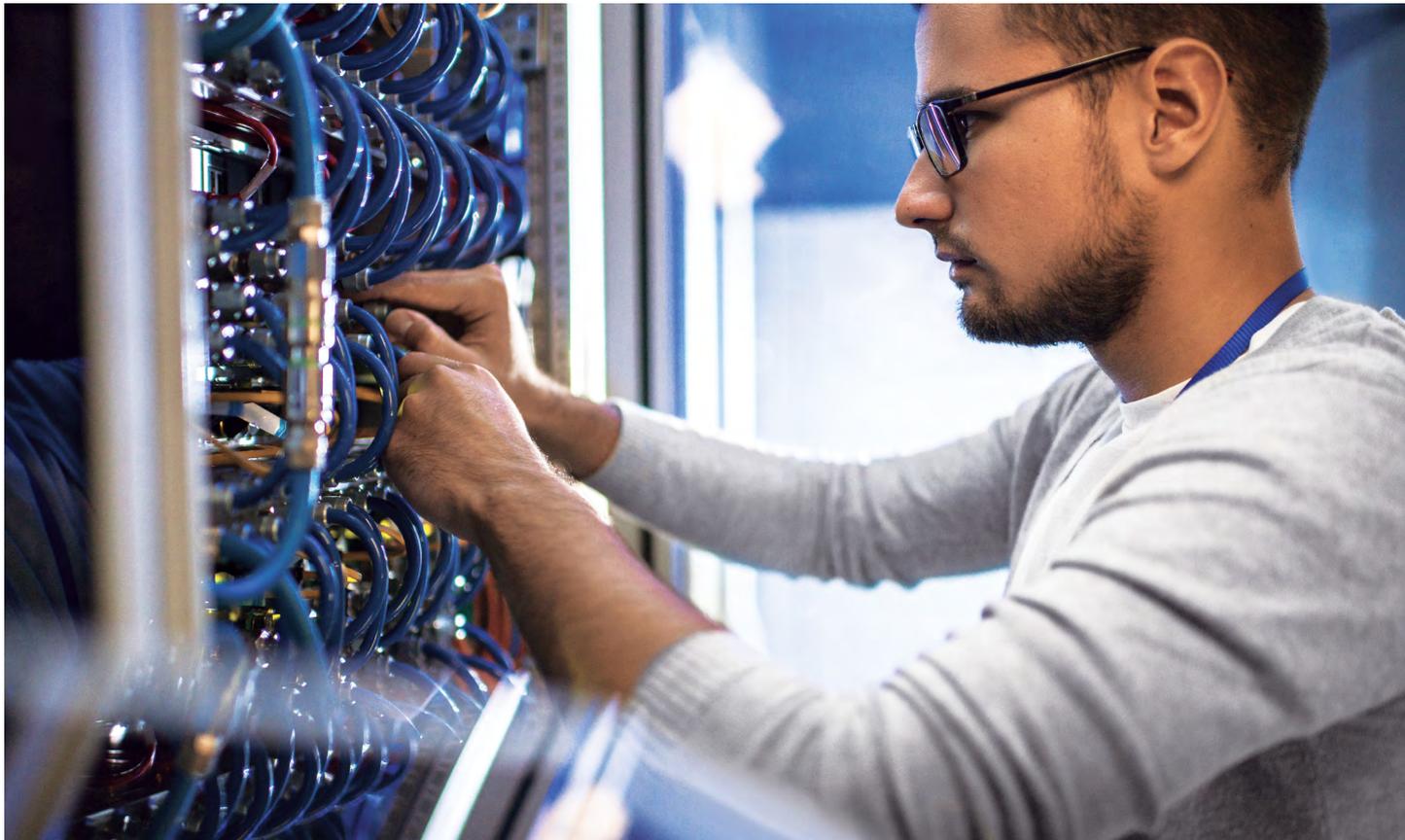
From energy efficiency and property rationalization through to business restructuring and workforce optimization, banks are scrutinizing their costs, arguably like never before. Depending on the applicability to a specific program, improvement levers are applied.

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Banking CIOs need a holistic, integrated approach to cost optimization to maximize the scale of cost savings and do so in a sustainable, efficient and transparent way.

These are some of the key questions that CIOs should be considering when setting out their strategy:

- 1 How do we make our digital transformation initiatives self-funded?
- 2 How do we reduce per transaction costs for the bank?
- 3 How can we strip out silos to avoid duplication in software and infrastructure licensing?
- 4 How can we achieve offshoring without sacrificing velocity and productivity?
- 5 How can we cut through complexity to ensure we have more time to focus on our core business?
- 6 How can we modernize while also reducing our legacy costs?
- 7 How can we re-deploy our workforce rather than hiring more people at higher costs?



At Infosys, we follow a structured approach to cost optimization which focuses on enhancing business value for our clients at every stage.

Our approach breaks down into three phases, with exponential increases in business value as organizations progress through each stage:

- 1 Baseline and Increase Service Delivery Effectiveness**

This includes increased offshoring, optimizing offshore-nearshore-onsite models, role ratio optimization, and integrating service delivery models.
- 2 Standardize and Optimize Processes, Capabilities and Tools**

Improve operational efficiency and automation through process and tools standardization; advanced automation; shift left and self-help; knowledge management strategy; continuous improvements and zero distance; lean and six sigma initiatives; and quality management.
- 3 Innovate and Transform**

At this stage, the focus moves to reducing infrastructure footprint; rationalizing application portfolios; reducing licensing costs; legacy modernization; leveraging captive/BOT models; multivendor and contractor consolidation; risk reward models; consumption based pricing model; managed services; business process reengineering; and digitization.

04. THE INFOSYS APPROACH TO COST OPTIMIZATION

Multiple initiatives addressing key areas are executed at each of these stages to create a successful digital transformation journey. The following sections outlines three key areas where Infosys can help banking customers to optimize their costs.



1. Modernizing legacy infrastructure

Across the banking industry there is widespread recognition that fragmented legacy technology is a key hurdle to a successful digital transformation. Disconnected systems and infrastructure are resulting in data silos, which in turn are slowing down or preventing innovation and transformation.

Faced with this urgent need to modernize, many banks are now moving away from their legacy infrastructure and embracing more open, API-driven architecture. Throughout 2021, there has been a rapid increase in the deployment of microservices, container and serverless environments. This trend is likely to accelerate further during 2022. Banks are increasingly looking to standardize technology platforms and tools across markets and business units to reduce the number of legacy platforms and tool-chains.

Infosys has developed robust strategies and process to help banks wind down legacy assets and decommissioning of legacy applications. The modernization process typically involves moving from mainframe-based legacy platforms to solutions built on cloud and other modern digital technologies. As banks move from a customized set of legacy mainframe applications to a configurable set of Cloud Native applications, it is essential to preserve the valuable intellectual property within existing business rules.

In-depth and accurate knowledge of business rules can help your organization resolve critical issues that could impede your efforts at application modernization and digital transformation. What's more, the right modernization approach can build on this knowledge in ways that preserves hidden intellectual property for use in upcoming projects.

Infosys takes a systematic view of application modernization and follows a structure process where Infosys evaluates

legacy systems given the business and technology context, assesses technology options available to address the business need(s), and following that, creates technology solutions that adds value and aligns with business' strategy

Infosys' successful legacy modernization programs follow six principles –

- leave data at the edge of modernization programs and build a flexible data platform over time rather than starting from scratch.
- hollow out the core and migrate customization to microservices.
- avoid arbitrary system modernization, and instead focusing on categorizing and modernizing capabilities required for specific customer journeys.
- prioritize integration over simplifying systems.
- move all non-differentiating functions to SaaS/PaaS.
- build global platforms that support local customization.

Solutions based on these principles help banks to develop a holistic strategy which drives the widest possible set of cost savings including:

- Mainframe upgrade: While mainframe will continue to be relevant for multiple reasons, we help banks to rethink their mainframe strategy in the post Covid world and take relevant modernization approaches across the environment. Areas such as transaction banking & treasury, they have several interconnected processes, may undergo a mainframe upgrade to mimic the benefits offered by cloud.
- Automated migration to modern technology stacks: We deploy multiple tools and services to migrate legacy stacks (such as COBOL-based) to a newer stack (such as Java based or .Net based) in an automated fashion. Given the variety of mainframe languages, databases and infrastructure technologies going into migration, we ensure banks have the right custom migration approach.

04. THE INFOSYS APPROACH TO COST OPTIMIZATION

The potential benefits of cloud computing for banks are enormous, enabling them to move more quickly and be more responsive to the changing needs of customers.



- Wrapper API approaches: In the short term, instead of migrating away from mainframe, we support banks to augment their infrastructure with agile data services that enable data interoperability across their different environments. Similarly, our clients can also run emulators on the cloud and host legacy application code with minimum charges.
- Phased retiring of applications: For applications that can work as effectively on cloud as on mainframes, we help banks to develop new cloud-based applications and slowly phase out the old ones from their mainframe. This approach eliminates business disruption and potential downtime and helps IT teams to quickly build new services, while still being able to access real-time mainframe data.
- Mainframe as a service (MaaS): We support enterprises looking to go asset-light to adopt MaaS, where existing mainframe assets are transferred to a third party service provider. Larger banks gain the most value from MaaS when they use it in conjunction with phased retiring of applications, because it allows benefits of a consumption model, while preparing for the cloud environment in parallel.

2. Cloud migration and infrastructure

The potential benefits of cloud computing for banks are enormous, enabling them to move more quickly and be more responsive to the changing needs of customers. They can also embed the operational agility and resilience they need to cope with spikes in demand and react to disruptive market forces.

At the same time, the cloud migration can also deliver huge cost savings. Indeed, a recent [survey from the Economist Intelligence Unit](#) found that cost reduction remains the most commonly cited driver for cloud technology adoption by banks. The Global Public Cloud Market size is [expected to reach \\$488.5 billion by 2026](#), rising at a market growth of 16% CAGR during this period.

This sharp rise in the use of public cloud services, especially relational databases, data warehouse, and container-as-a-service, combined with convenient private cloud options from public cloud providers that offer near on-premise experiences, is now driving migration of workloads that banks have typically been reluctant to move to the public cloud.

After turning to cloud for non-critical workloads and for international operations and new lines of business that required quick time to market, banks are now exploring options to move higher workloads to the public cloud in their home countries here they have a more sizeable customer base.

Infosys deploys a cloud led transformation in form of Platform as a Service (PaaS) to advise, build, and co-evolve solutions for banks looking to migrate to cloud. Infosys approach to cloud is based on a suitability analysis model and involves three stages:

Discovery – The process begins with understanding business initiatives, ongoing projects, and corresponding business needs (agility, time to market, cost optimization, customer experience, tool inventory, application documentation etc.)

Assessment – Infosys conducts a wide technical and business parameter assessment to understand application criticality (for the business) and current application host regions. A detailed overview of technology map i.e. development tools, architecture, integration type, security compliance, regulatory compliance etc is undertaken at this stage.

Target Disposition – if business is adopting Native Cloud (refactor) then UI is refactored, pre-existing business logic is exposed as API, Application component distribution is modified for cloud suitability. If business is going Fully Cloud Native (re-architect), then functional decomposition of application is undertaken, information architecture adopts micro-services architecture, and APIs are leveraged.

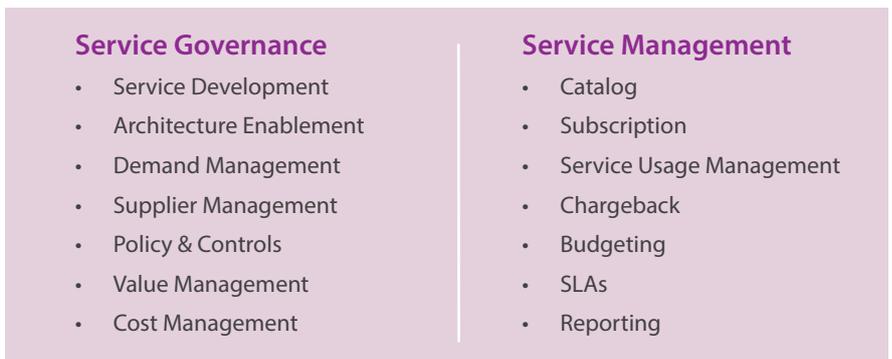
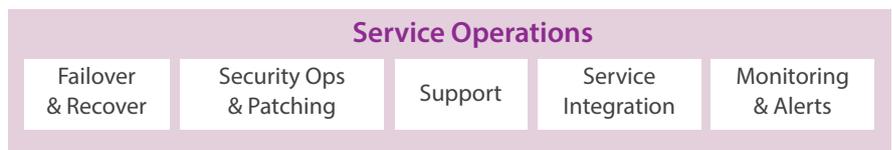
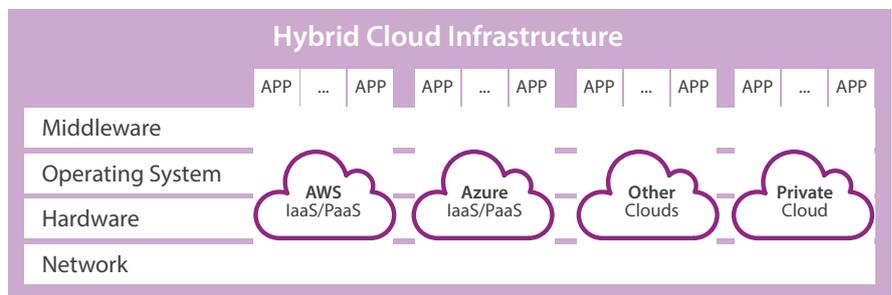
04. THE INFOSYS APPROACH TO COST OPTIMIZATION



To make digital transformation a success, Infosys deploys a operating model designed with cloud native processes (such as PaaS based architecture) rather than retro-fitted to on-premise processes.

The Digital applications have architectural considerations like microservices, auto scaling, server-less architecture, containerization which would help in multi cloud support, scales easily and are secured & isolated.

PaaS provides these features out of the box and are perfect fit for future generations of applications. Apart from these, PaaS also provides a wealth of "Services" ranging from Operational Services of tools/accelerators for enhanced efficiency, quality, and productivity such Infosys cloud migration assistant (CMA), workload migration solution suite (WLM), microservices and API platform (IMAP), and Infosys AI led QA testing.



04. THE INFOSYS APPROACH TO COST OPTIMIZATION

The simple validation of customer information from two systems can take a few seconds using a bot instead of the several minutes it takes a human worker. Introducing bots for such manual processes can reduce processing costs by between 30% to 70%.



3. AI and automation

AI and automation represent a massive opportunity for banks to strip out costs right across their organizations, while also enhancing customer experience, streamlining processes and freeing up employees from repetitive, process-driven tasks to focus on higher-value work.

Automation can be deployed to automate repeated (manual) processes, reducing human interventions and improving accuracy to enhancing overall efficiency. This in turn can improve customer satisfaction, minimize churn and drive loyalty, leading to increased revenue and cash flow. Automation can also improve compliance and standardize best practice across the organization, while also optimizing fraud detection and cyber security processes.

By deploying Robotic Process Automation (RPA), enterprises can easily streamline functions like accounting by efficiently assembling and consolidating data. RPA can also significantly reduce expenses across different branches.

Critically, RPA can be integrated with AI to manage and optimize massive volumes of customer data from which, up until now, banks have struggled to derive any meaningful value. It eliminates the human errors which are inevitable when employees are asked to handle such overwhelming volumes of data across multiple systems – for instance, the simple validation of customer information from two systems can take a few seconds using a bot instead of the several minutes it takes a human worker.

Introducing bots for such manual processes can reduce processing costs by between 30% to 70%. And given the number of these types of processes that exist within all banks, the accumulated savings are truly vast. And it means that highly skilled (and expensive) employees can be deployed on more strategic work which drives the business forward.

Infosys works with banking clients to integrate AI and automation into their operations in a strategic and sustainable way. In doing so, we enable clients to realize significant cost savings, while also speeding up delivery times, improving customer experience, accelerating innovation and driving competitive differentiation.

To overcome barriers to adoption (particularly around the upfront costs involved in implementing an RPA solution), we work with clients to build a robust business case for automation. In doing so, we are able to demonstrate a rapid time-to-value (where automation starts to cover its own costs), alongside the game-changing cost-saving benefits down the line.

Indeed, the cost of implementing RPA is minuscule compared to the cost savings and other benefits that your organization can leverage over the long term. By automating time-consuming manual tasks or activities (e.g. data entry), your organization can save thousands of man-hours, improve workflows, and reduce expenses. When you automate, you also get greater accuracy, visibility, control, and auditability of your processes and systems.

We work with clients to develop a holistic, long-term automation strategy, which demonstrates how automation can be used to re-imagine how work is resourced within the organization, to maximize the strengths of both human and digital workers (bots).

We then help banks to identify the plethora of different applications where automation can be deployed. These processes include: Customer Service, Accounts Payable, Mortgage Processing, KYC, Report Automation, Account Origination & Receivable, Collection, Compliance, Credit Card Processing, Fraud detection, General Ledger, Account Closure Process, Surrender, Underwriter Support.

INFOSYS: PARTNER FOR THE FUTURE THAT IS NOW

By addressing the key areas outlined above, Infosys partners with banks on a digital transformation journey to rationalise their cost base, create a cloud native organization, and drive the future that is now.

For more information, contact askus@infosys.com



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