

NEAT EVALUATION FOR INFOSYS:

Digital Banking

Market Segments: Overall, Managed Services/BPS Capability, Professional Services Capability, Support for New Digital Banking Models

Introduction

This is a custom report for Infosys presenting the findings of the NelsonHall NEAT vendor evaluation for *Digital Banking* in all market segments: *Overall, Managed Services/BPS Capability, Professional Services Capability,* and *Support for New Digital Banking Models*. It contains the NEAT graphs of vendor performance, a summary vendor analysis of Infosys for digital banking, and the latest market analysis summary.

This NelsonHall Vendor Evaluation & Assessment Tool (NEAT) analyzes the performance of vendors offering digital banking services. The NEAT tool allows strategic sourcing managers to assess the capability of vendors across a range of criteria and business situations and identify the best performing vendors overall, and with specific capability in managed services/BPS, professional services, and the development of new digital banking models.

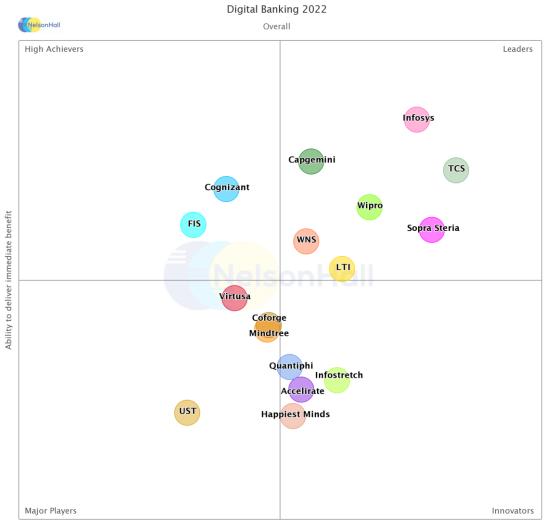
Evaluating vendors on both their 'ability to deliver immediate benefit' and their 'ability to meet client future requirements', vendors are identified in one of four categories: Leaders, High Achievers, Innovators, and Major Players.

Vendors evaluated for this NEAT are: Accelirate, Capgemini, Coforge, Cognizant, Fidelity Information Services, Happiest Minds, Infostretch, Infosys, LTI, Mindtree, Quantiphi, Sopra Steria, TCS, UST, Virtusa, Wipro, and WNS.

Further explanation of the NEAT methodology is included at the end of the report.



NEAT Evaluation: Digital Banking (Overall)



Ability to meet future client requirements

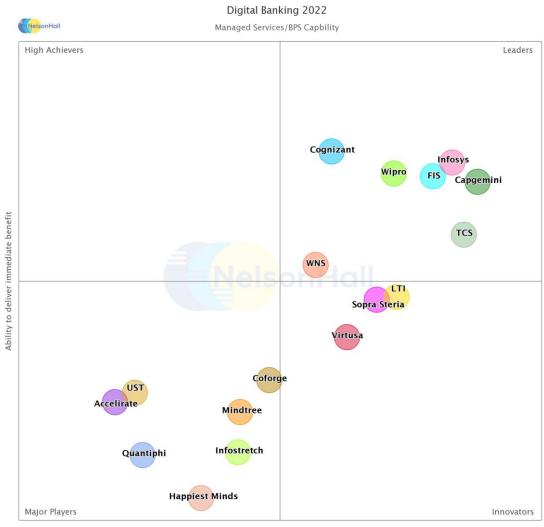
NelsonHall has identified Infosys as a Leader in the *Overall* market segment, as shown in the NEAT graph. This market segment reflects Infosys' overall ability to meet future client requirements as well as delivering immediate benefits to its digital banking clients.

Leaders are vendors that exhibit both a high ability relative to their peers to deliver immediate benefit and a high capability relative to their peers to meet client future requirements.

Buy-side organizations can access the Digital Banking NEAT tool (Overall) here.



NEAT Evaluation: Digital Banking (Managed Services/BPS Capability)



Ability to meet future client requirements

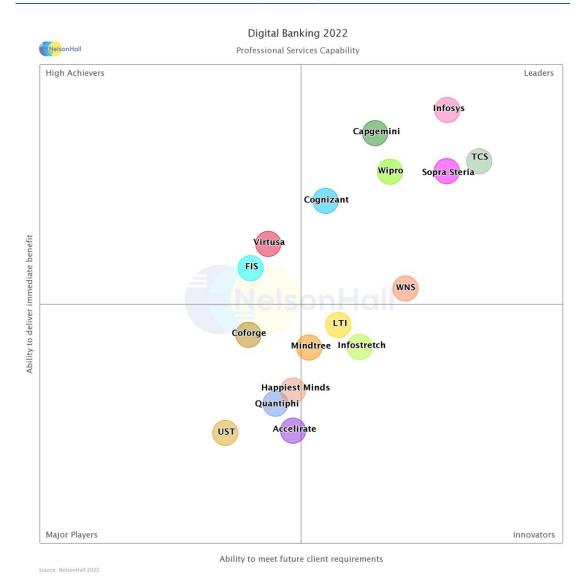
NelsonHall has identified Infosys as a Leader in the *Managed Services/BPS Capability* market segment, as shown in the NEAT graph. This market segment reflects Infosys' ability to meet future client requirements as well as delivering immediate benefits to its digital banking clients with specific capability in managed services and BPS.

Buy-side organizations can access the *Digital Banking* NEAT tool (*Managed Services/BPS Capability*) here.

Source: NelsonHall 2022



NEAT Evaluation: Digital Banking (Professional Services Capability)



NelsonHall has identified Infosys as a Leader in the *Professional Services Capability* market segment, as shown in the NEAT graph. This market segment reflects Infosys' ability to meet future client requirements as well as delivering immediate benefits to its digital banking clients with specific capability in professional services.

Buy-side organizations can access the *Digital Banking* NEAT tool (*Professional Services Capability*) here.



NEAT Evaluation: Digital Banking (Support for New Digital Banking Models)



NelsonHall has identified Infosys as a Leader in the *Support for New Digital Banking Models* market segment, as shown in the NEAT graph. This market segment reflects Infosys' ability to meet future client requirements as well as delivering immediate benefits to its digital banking clients with specific capability in supporting the development of new digital banking models.

Buy-side organizations can access the *Digital Banking NEAT* tool (*Support for New Digital Banking Models*) here.



Vendor Analysis Summary for Infosys

Overview

Infosys has invested in many proprietary digital IPs and digital accelerators, and has complemented this with a large ecosystem of digital product vendors and FinTechs.

Infosys began providing digital services in 2005 for data extraction, employing its AssistEdge solution. Its Finacle platform, developed in 2000, has been modularized for each banking product line of business and offers a front-to-back digital suite. Al initiatives began in 2012 when it deployed Al into a mortgage client to support their loan onboarding process. Today, Infosys applies Al to all banking industry processes.

Infosys has acquired capabilities in the past decade that have expanded its digital BFS consulting (e.g., Wongdoody) and product services (e.g., Guide Vision) capabilities. It has also acquired client operations where it can transform the client environment and deliver ongoing BPS services, as in the case of Stater in the Netherlands.

Infosys's digital banking services are focused on customer experience transformation, software integration, implementation, and BPS services.

Since the start of the pandemic, large financial institutions have been entering into large engagements with Infosys; these engagements are focused on cost takeout, various aaS models, vendor consolidation, captive carveouts, and digital transformation. All deals have a high digital services component (>50%). Clients are looking for their engagements to deliver:

- Expanded geographic footprint and business grow using cloud delivery, data management, and CX (~60% of engagements)
- Automation, AI, and self-service services to increase operational efficiency (~40% of engagements).

Capital markets clients (up to two years ago) were buying services focused on the back-office process, primarily custody. In the past two years, clients have been focused on services tying the custody processes into the front and middle office processes. Capital markets clients buy from Infosys based on their domain knowledge of industry processes.

Infosys delivers digitalization services to much of its installed Finacle client base. Currently, there are digital services engagements across 500 Finacle clients. All Finacle clients are using digital services.

Clients are increasingly looking for CX transformation projects that tie the front-end change to middle and back-office operations delivery transformation.

Infosys has 27k FTEs working in digital banking services, out of a total of 50k staff in BFS. Half the staff provides IT services including:

Consulting: 5%

UI and mobility: 15%

Cloud: 15%

Data: 30%

Integration and APIs: 35%.



Services for digital banking transformation are primarily delivered in a work-from-home environment (before the pandemic, from delivery centers). Software development is done from offshore development centers (with a high WFH component).

Financials

NelsonHall estimates that Infosys' 2021 full-year revenue from digital banking services is \$2,450m. The geographic breakdown of revenue contribution is estimated to be: North America 60%, Europe 25%, APAC and ROW 15%.

Strengths

- Domain expertise and experience with core banking modernization services for financial institutions across the globe
- Key proprietary core platforms, which can be deployed by module, with cognitive and digital functionality
- Experience in cloud migration services for BFS
- Design consultancies, under the WongDoody brand, with experience across multiple consumer industries, including BFS.

Challenges

- Developing more productized offerings to scale presence with regional and local financial institutions in emerging economies
- Needs to undertake more partnered engagements with hyperscalers and FinTechs to leverage the differentiation of its breadth and scale of capabilities and delivery.

Strategic Direction

Over the next five years, Infosys will focus its business on supporting clients with:

- Platform-led transformation using its proprietary core banking platform
- Sub-vertical focus on payments, mortgages, and capital markets, utilizing its COEs
- Core modernization and integration for open banking and cloud migration
- FinTech and hyperscaler partnerships to introduce new functionality.

Infosys is focusing on large banking deals.

To deliver these services to clients, it is hiring and training more employees in hard-to-find digital skills onshore to work with joint client teams to deliver projects. The in-market presence will also allow it to provide service to lower-tier financial institutions which it would have found harder to serve with a smaller onshore footprint.



Outlook

Infosys has a strong, global digital banking services business focused on large engagements with large institutions. It should have a strong year ahead, as it upsells services to existing clients and expands its partnerships with hyperscalers and FinTechs.

NelsonHall estimates that Infosys' digital banking revenues will grow by 20% per year over the next three years, based on its existing client base and domain capabilities. If it is successful in expanding its partnership offerings with hyperscalers and FinTechs, it should be able to grow its business an additional 3% per year.



Digital Banking Market Summary

Overview

Digital banking services vendors are delivering less consulting into a maturing market, but more IT services and managed services. Digital operations services is a mature business with tier 1 banks, which primarily demand design and deploy services. Adoption and usage models for hosting and managed services are growing for the mid/small/startup tier market. Vendors are delivering engagements focused on cloud migration services to support business model changes at established clients.

In the future, digital banking services vendors will deliver open banking enablement, including core platform transformation, from shared service or cloud facilities (often BPaaS) to support business model change and expand the client bank's partner ecosystem. Operational delivery will be agile to support large scale product introductions and manage volume fluctuations which previously would not have been possible.

Buy-Side Dynamics

Currently, tier 1 banks are primary adopters (60%), while local/startup banks are growing their adoption, with emphasis on BPS and managed services.

In future, the adopter profile will expand into open banking consortia (e.g., tech vendors, service vendors, hyperscalers, and product vendors). There will also be an expansion into industry utilities, industry service vendors, specialty/startups, and the emerging markets branches of larger banks, which will grow rapidly.

Buy-side drivers include:

- *Increased competition*: the rise in M&A, new market entry, and targeted products are driving down revenues/margins
- Cloud delivery: increase in competitors' agility, WFH, and new solution functionality drives the need to migrate to the cloud
- *Open banking*: this will drive changing business models. Methods for selecting models are currently unknown
- Variabilizing costs necessitate growing revenues: when margins are fixed, growing revenues is the only way to grow profits. New product introduction, and reduced time-to-market, become business imperatives.

Banks are changing operational models from a focus on variabilizing cost to increase flexibility, to using tech to change business models. They are reinventing their business models to drive sales by entering new markets; and launching offerings is driving change in operations delivery. Changing business models are driving changes to the customer base and technology, necessitating changes to delivery methods.



Key issues in digital services for BFS include:

- Changes in technologies and channels:
 - Increasing cross-channel and cross-tower consistency to improve brand integrity
 - Implementing new solution functionality to reduce time-to-market for new products and enable new channels for both third-party sales and inbound self-service
 - Building an ecosystem of emerging tech vendors (using third-party support) to identify the best tech products to meet their needs
 - Adapting best practices from other industries (especially CPG, retail, and competitors) and countries (e.g., emerging markets) to their own business

Agility:

- Working with third-party vendors in an open banking platform environment
- Employing a heterogeneous, multi-cloud environment to maximize features and functionality
- Reducing time to market for new product launches
- Partnering with third-party vendors (especially cloud) to deliver OPEX priced services without CAPEX
- Standardizing and modernizing operations across geographies, customer types, and offerings
- Changing regulations:
 - Monitoring of transaction execution, data privacy, and partner environment
 - Deciding how to approach the open banking challenge/opportunity.

Market Size & Growth

NelsonHall estimates the size of the digital banking services market was 519,200m in 2021, and forecasts that it will grow at 14.1% per year in the period 2021 to 2026.

Digital services in the BFS market start with consulting services, which account for 5 % (\$960m) of client spend and are growing at $^{15.0}$ % per year over the forecast period. ITS services account for 75 % (\$14,400m) of client spend and are growing at $^{14.4}$ % over the forecast period. Finally, hosting, SaaS, BPS, and managed services account for 20 % (\$3,840m) of client spend and are growing at $^{12.5}$ % over the forecast period.



Challenges & Success Factors

The key digital services challenges faced in BFS include:

- Creating an effective strategy:
 - Developing a new set of business models to address new market entrants, functionality, and customer demographics
 - Selecting new inputs to process: new channels (e.g. social media) with new methods of creating/identifying CSAT, and new data fields for compliance (e.g. AML, FATCA, KYC)
 - Managing operations: move to hybrid operations (hybrid multi-cloud) where control
 is attenuated and solution architecture is evolving; managing partner/vendor failure
- Opening the platform:
 - Opening legacy platforms with APIs to three key opportunities: digital technologies (new functionality), third-party vendors (open banking), and new infrastructure ecosystems (e.g., cloud, DLT, and exchanges)
 - Changing the culture to accommodate working with third-parties
 - Developing a framework with a consistent approach to standardizing global IT infrastructure, under conditions of evolving technology and continued M&A
- Cloud migration:
 - Modularizing legacy solutions and acquiring/developing APIs to integrate into each cloud vendor's stack
 - Accessing skilled staff: each cloud vendor uses a different set of technologies for native deployments, requiring multiple skill sets for employees and multiple technology toolkits for hybrid deployments
 - Widening the technology toolset: Identification of new technologies, their maturity, preferred vendors, and effective use cases
- Access to emerging technologies:
 - Capital to support new initiatives is scarce. Short implementation times and large paybacks help the business case
 - Domain expertise requires relevant cross-training of LOB/technology. Those resources are rare and tend to prefer a non-financial services employer
 - Banks do not have in-house access to sufficient numbers of qualified staff to assess or monitor the emerging technologies and vendor capabilities.

Key competitive differentiators (success factors) for vendors include:

- Domain knowledge:
 - Industry and country context to provide process improvement and compliance
 - Ability to apply AI to make predictive analyses, not just descriptive analyses
 - Understanding of siloed banking institutions and ability to orchestrate and manage across silos



Process execution:

- Cloud delivery to enhance agility. Partnerships with hyperscalers to enable multi-cloud deployments
- Proprietary IP and frameworks: solutions for low-complexity processes at lower cost and tools for managing processes/software. Frameworks to identify and execute the best business cases across the entire portfolio
- Tech partnerships: banks want to standardize on key vendors and domain knowledge
 of their solutions with APIs to many ISVs; also, industry council participation to
 understand the business side of FinTech adoption. Large ecosystems of FinTech
 solution vendors to add new functionality is required
- Ability to manage unstructured transaction data accurately and effectively
- Connecting front-end customer engagement to back-end processing, enabling STP and rapid fulfillment of promises
- Integrated ITS/BPS and human/bot delivery offerings to enable the client to choose human delivery component in operations, and then shift the mix over time as required.

Outlook

The future direction for digital banking services will include:

- Moving to open banking with the need to build ecosystems of vendor offerings. Partner vendors will include RIAs, prime brokerage, service providers, etc.
- Increasing new offerings and markets, on an as-needed basis, for shorter periods
- Increasing focus on the less affluent by delivering lower-cost offers with high margins from automation
- Reducing capital to operations with service delivery from the cloud, variable pricing, and STP
- Addressing 'unbanked' requirements: cost-effective standardized products focused on retirement and savings
- Addressing mass affluent requirements: efficient delivery of complex products previously only available to high-net-worth individuals (HNWIs)
- Addressing HNWI requirements: a 360° view to confirm that relationship goals are met across complex delivery points. Lifecycle approach to customers requires the ability to continuously deliver service
- Increasing use of low-code/no-code development, so domain experts can ideate and implement offers with new functionality rapidly
- Building/acquiring product offerings specific to a given market, often low growth, high margin
- Multi-channel access with self-service analytics as a differentiating service offering.



NEAT Methodology for Digital Banking

NelsonHall's (vendor) Evaluation & Assessment Tool (NEAT) is a method by which strategic sourcing managers can evaluate outsourcing vendors and is part of NelsonHall's *Speed-to-Source* initiative. The NEAT tool sits at the front-end of the vendor screening process and consists of a two-axis model: assessing vendors against their 'ability to deliver immediate benefit' to buy-side organizations and their 'ability to meet client future requirements'. The latter axis is a pragmatic assessment of the vendor's ability to take clients on an innovation journey over the lifetime of their next contract.

The 'ability to deliver immediate benefit' assessment is based on the criteria shown in Exhibit 1, typically reflecting the current maturity of the vendor's offerings, delivery capability, benefits achievement on behalf of clients, and customer presence.

The 'ability to meet client future requirements' assessment is based on the criteria shown in Exhibit 2, and provides a measure of the extent to which the supplier is well-positioned to support the customer journey over the life of a contract. This includes criteria such as the level of partnership established with clients, the mechanisms in place to drive innovation, the level of investment in the service, and the financial stability of the vendor.

The vendors covered in NelsonHall NEAT projects are typically the leaders in their fields. However, within this context, the categorization of vendors within NelsonHall NEAT projects is as follows:

- **Leaders**: vendors that exhibit both a high ability relative to their peers to deliver immediate benefit and a high capability relative to their peers to meet client future requirements
- High Achievers: vendors that exhibit a high ability relative to their peers to deliver immediate benefit but have scope to enhance their ability to meet client future requirements
- Innovators: vendors that exhibit a high capability relative to their peers to meet client future requirements but have scope to enhance their ability to deliver immediate benefit
- Major Players: other significant vendors for this service type.

The scoring of the vendors is based on a combination of analyst assessment, principally around measurements of the ability to deliver immediate benefit; and feedback from interviewing of vendor clients, principally in support of measurements of levels of partnership and ability to meet future client requirements.

Note that, to ensure maximum value to buy-side users (typically strategic sourcing managers), vendor participation in NelsonHall NEAT evaluations is free of charge and all key vendors are invited to participate at the outset of the project.



Exhibit 1

'Ability to deliver immediate benefit': Assessment criteria

Assessment Category	Assessment Criteria
Offerings	Breadth of application of digital services to setting up new banks Application of digital services to retail banking processes Application of digital services to capital markets processes Application of digital services to compliance Application of Al/cognitive technology to banking Ability to offer new process models with digital technologies Ability to benchmark processes and offer roadmap Digital banking processes implementation capability Ongoing digital technology management Combined digital/people-based exception handling capability
Delivery Capability	Scale of digital banking process delivery capability Cognitive delivery capability Delivery capability – U.S. Delivery capability – Europe Delivery capability – ROW Use of pre-existing Digital banking technology implementation templates Digital banking process change management capability Maturity of Digital banking services delivery model Digital banking services governance capability Design thinking capability
Client Presence	Overall presence in digital processes U.S. presence Europe presence ROW presence
Benefits Achieved	Revenue uplift Improved speed of new process roll-out Improved speed of new product roll-out Improved speed of new market roll-out Level of process cost savings achieved Improved CSAT Perception of "value for money" Process error reduction Process cycle time reduction



Exhibit 2

'Ability to meet client future requirements': Assessment criteria

Assessment Category	Assessment Criteria
Service Innovation Culture	Perceived suitability to meet future client needs in supporting digital transformation
	Perceived suitability to develop new digital banking business models & processes
	Ability to apply automation to financial services processes
	Ability to introduce new digital business models
	Service culture
	Innovation & creativity
Level of Investments	Level of investment in digital technologies
	Level of investment in cognitive/AI
	Level of investment in digital technologies in support of retail banking
	Level of investment in digital technologies in support of capital markets
	Level of investment in own tools & platforms in support of digital banking
	Level of investment in new digital systems of engagement for banking sector
Market Momentum	Digital transformation momentum

For more information on other NelsonHall NEAT evaluations, please contact the NelsonHall relationship manager listed below.



research.nelson-hall.com

Sales Inquiries

NelsonHall will be pleased to discuss how we can bring benefit to your organization. You can contact us via the following relationship manager: Beth Lindquist at beth.lindquist@nelson-hall.com

Important Notice

Copyright © 2022 by NelsonHall. All rights reserved. NelsonHall exercises its best efforts in preparation of the information provided in this report and believes the information contained herein to be accurate. However, NelsonHall shall have no liability for any loss or expense that may result from incompleteness or inaccuracy of the information provided.