NEAT EVALUATION FOR HCL TECHNOLOGIES:

RPA & AI in Banking

Market Segments: Overall, RPA Capability, AI Capability,
New Digital Banking Models Capability

Introduction

This is a custom report for HCL Technologies (HCL) presenting the findings of the NelsonHall NEAT vendor evaluation for *RPA & AI in Banking* in the *Overall, RPA Capability, AI Capability,* and *New Digital Banking Models Capability* market segments. It contains the NEAT graphs of vendor performance, a summary vendor analysis of HCL for RPA & AI in banking services, and the latest market analysis summary for RPA & AI in banking.

This NelsonHall Vendor Evaluation & Assessment Tool (NEAT) analyzes the performance of vendors offering RPA & AI services in the banking sector. 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 around RPA, AI, and supporting 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: Atos, Capgemini, CGI, Firstsource, Genpact, HCL Technologies, Infosys, LTI, Mphasis, NIIT Technologies, NTT Data, Tech Mahindra, Wipro, and WNS Global Services.

Further explanation of the NEAT methodology is included at the end of the report.
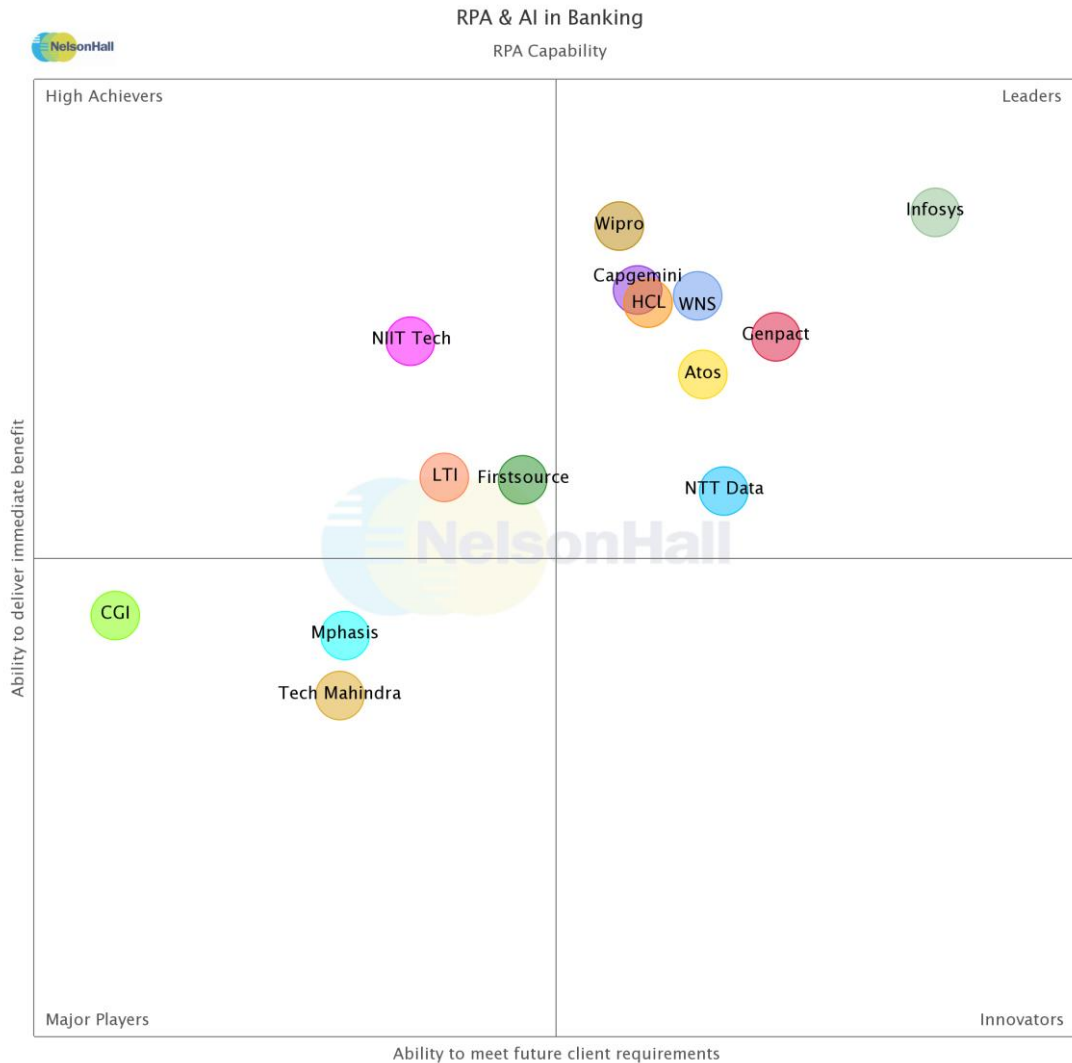
NEAT Evaluation: RPA & AI in Banking (Overall)

NelsonHall has identified HCL as a Leader in the *Overall* market segment, as shown in the NEAT graph. This market segment reflects HCL's overall ability to meet future client requirements as well as delivering immediate benefits to RPA & AI clients in the banking sector.

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 RPA & AI in Banking NEAT tool (Overall) here.
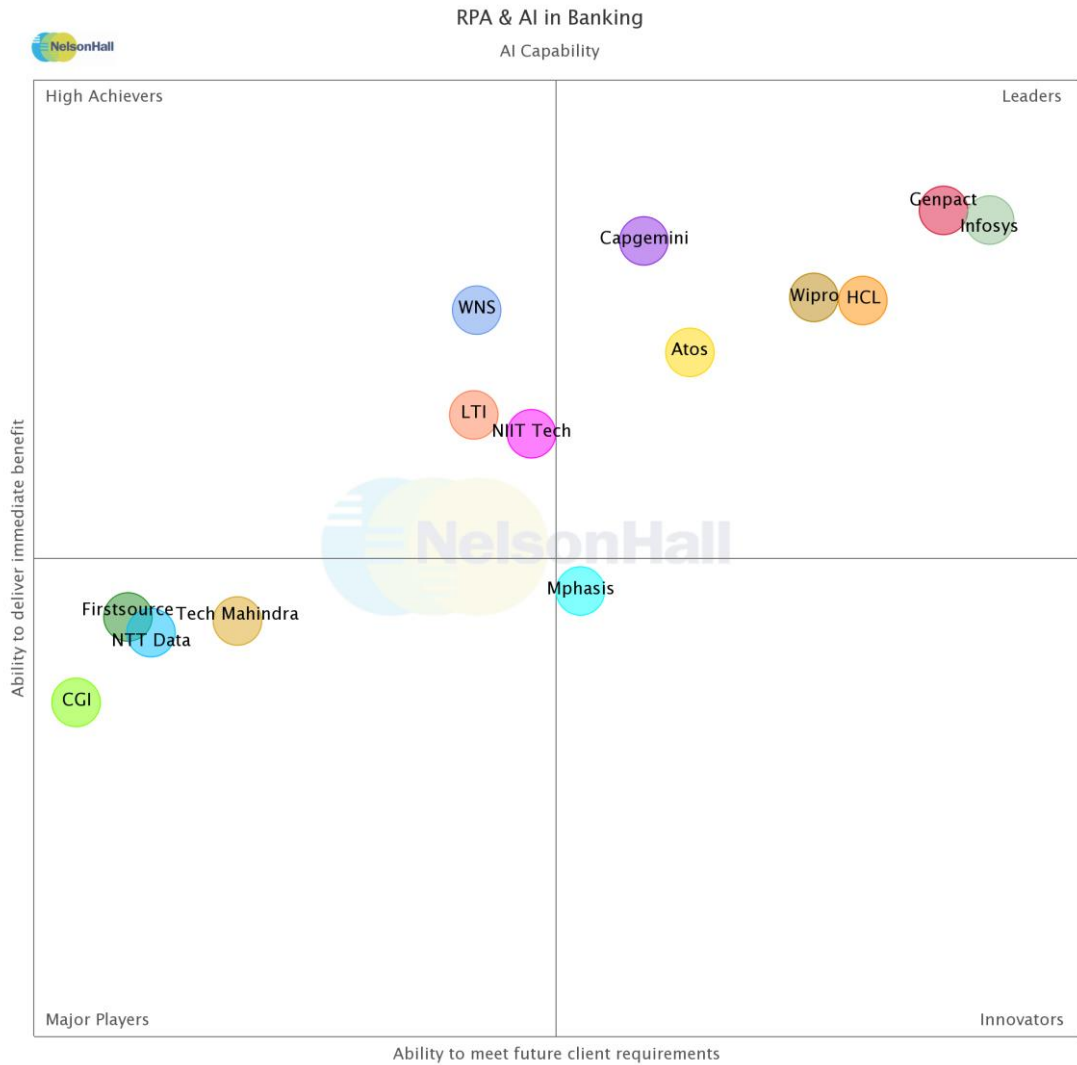
NEAT Evaluation: RPA & AI in Banking (RPA Capability)

NelsonHall has identified HCL as a Leader in the *RPA Capability* market segment, as shown in the NEAT graph. This market segment reflects HCL's ability to meet future client requirements as well as delivering immediate benefits to RPA & AI clients in the banking sector with a specific focus on RPA.

Buy-side organizations can access the RPA & AI in Banking NEAT tool (RPA Capability) here.

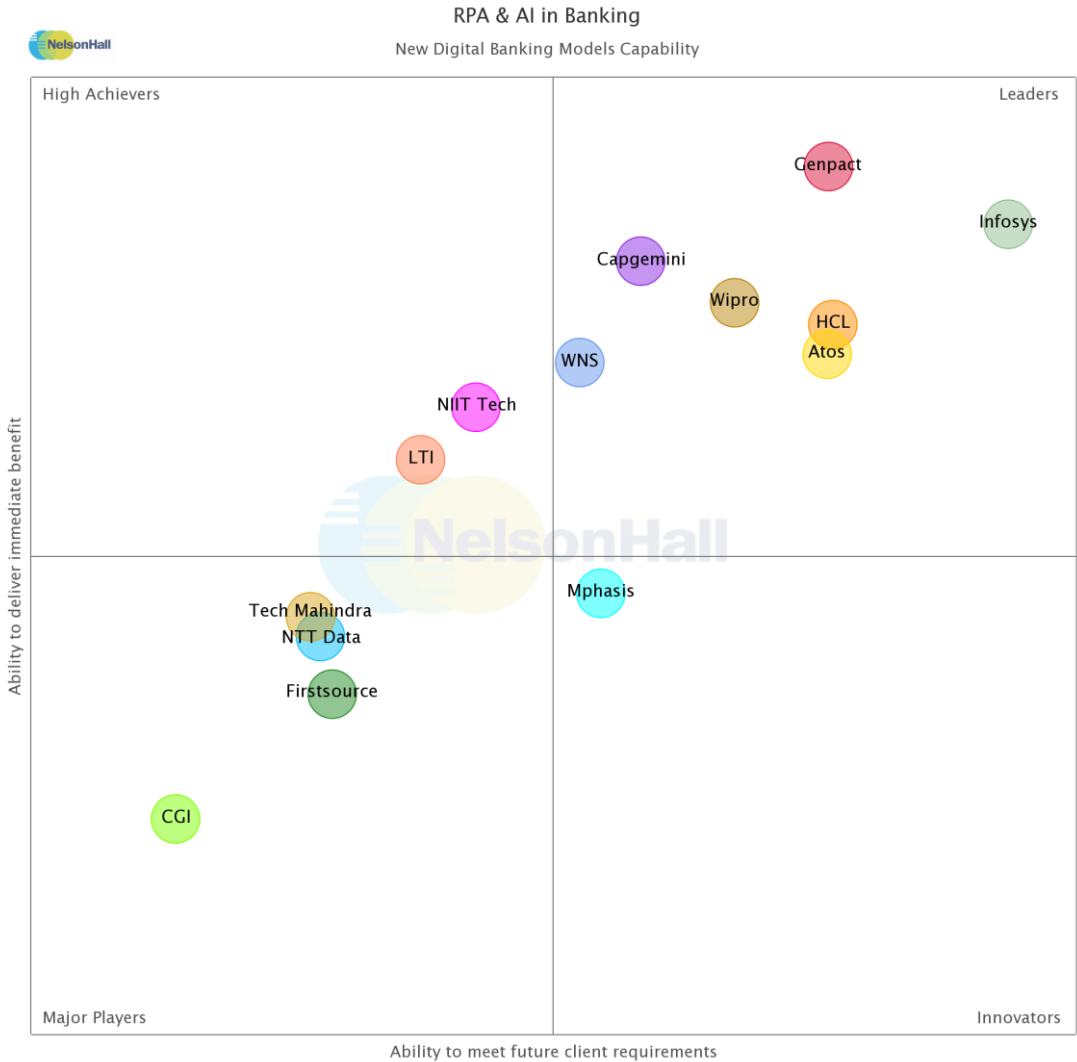# NEAT Evaluation: RPA & AI in Banking (AI Capability)

NelsonHall has identified HCL as a Leader in the *AI Capability* market segment, as shown in the NEAT graph. This market segment reflects HCL's ability to meet future client requirements as well as delivering immediate benefits to RPA & AI clients in the banking sector with a specific focus on AI.

Buy-side organizations can access the RPA & AI in Banking NEAT tool (AI Capability) here.

NEAT Evaluation: RPA & AI in Banking (New Digital Banking Models Capability)

NelsonHall has identified HCL as a Leader in the *New Digital Banking Models Capability* market segment, as shown in the NEAT graph. This market segment reflects HCL's ability to meet future client requirements as well as delivering immediate benefits to RPA & AI clients in the banking sector with a specific focus on enabling new digital banking models.

Buy-side organizations can access the RPA & AI in Banking NEAT tool (New Digital Banking Models Capability) here*.*

Vendor Analysis Summary for HCL

Overview

HCL started working with RPA and AI in late 2013. RPA and AI services started as part of HCL's autonomics and orchestration business. HCL has developed frameworks and built tools for managing RPA and AI, including:

- DRYiCE framework: an autonomic and orchestration framework

- Toscana: a business process management solution for operations

- EXACTO: Artificial intelligence driven content digitization platform

- Lucy: a cognitive use agent for cloud operations.

HCL's first banking RPA engagement began in 2014, for a global bank based in Europe. The engagement goal was to reduce the TAT for account opening and residential mortgage approvals. Using RPA tools, HCL was able to reduce average handle times by 80%, Reduce TAT from 96 hours to same day processing and overall costs by 41%. This was achieved by improving the sourcing of information across disjoint systems in the bank and increasing the accuracy of processing the data using automated processing.

Strengths

- DRYiCE Framework for autonomics and orchestration

- Tools integrated into its RPA and AI solutions for automating data acquisition, including OCR, ICR, BPM, text mining, and machine learning

- Broad IT services skills and experience with industry standard solutions especially Blue Prism and UIPath at many banks.

Challenges

- A limited number of AI engagements and use of LUCY in BPS engagements

- Needs to productize RPA capabilities into operations-based offerings, especially RPA in BPS offerings.

Strategic Direction

HCL is targeting global and super regional banks for simple, manual processes with a large data movement component. Over the next few years, HCL intends to expand its capabilities with integrated RPA/AI offerings. To succeed with its combined RPA and AI offerings, it will need to increasingly focus on customer contact and sales enhancement, which banks are increasingly demanding.

HCL has also partnered with Leading US Based Universities to develop its own AI technologies in areas such as NLP and machine learning in support of its EXACTO and DRYiCE process & service automation platform.

HCL differentiates itself by using a proprietary framework, to provide autonomics and orchestration. HCL also uses its Toscana platform to manage business processes. It engages with clients who require both BPS and IT services to achieve the changes in operations required to improve operating efficiency.

HCL is looking to grow its RPA and AI business, by:

- Expanding the range of processes, it covers

- Combining RPA and AI to enhance the effectiveness of its offerings

- Reusing existing IP from engagements to expand its client base with rapidly deployable offerings.

Outlook

HCL has aggressively grown its RPA and AI business over the past two years. It will continue to rapidly grow its RPA and AI business in the next 12-18 months in the triple digits (~100%) based on the contractual ramp-up of existing engagements. It can increase that growth rate by:

- Successfully expanding operational deployment of current engagements across geographies and LOBs within existing clients

- Successfully closing additional POCs for processes which are not currently enabled by RPA and AI

- Winning mandates at new clients for RPA & AI-based services which have already been deployed at current clients.

Combining the expansion of existing relationships and new clients, HCL should be able to grow its banking RPA and AI business by 30% to 50% per year for the following four years (years 2-5).

NelsonHall
Success through insight

RPA & AI in Banking Market Summary

Overview

The banking industry is adapting to new business conditions where they need to drive revenues from faster introduction of new products which will have lower profit margins than in the past. To deliver these products profitably will require highly standardized, consolidated, automated operations across multiple products and markets. Operations need to be able to scale up/down with a very low cost of delivery.

Drivers in the market for banking RPA and AI services include:

- *Cost*: need to achieve operations cost reduction at all volumes without re-platforming. Compliance has been the major driver of operations cost increase (10X increase) for the past five years

- *CUX*: to drive improved customer acquisition and retention

- *Need to change business models*: agility, efficiency, and accuracy are needed to enable emerging models

- *Need to increase revenues to offset margin declines*: improved sales/marketing campaigns, improved coordination across silos, and faster time to market for new banking products.

Buy-Side Dynamics

RPA and AI services are established with tier one banks in mature markets. Lower tier banks are beginning to consider widespread adoption due to severe cost pressures.

The primary client profile is:

- *Current*: Tier 1 banks are primary adopters, but regional banks represent 20% of revenues, up from 1% 24-months ago

- *Future*: Expand into regional banks, local banks, specialty/startup banks, and emerging markets. Expand into industry consortia (e.g., exchanges): support cloud delivery and industry shared services.

Clients are buying service bundles including:

- Consulting (20%), design & deploy (50%, up from 40% two years ago) and operations support (30%, up from 10% two years ago)

- Internal bank operations deployment 60%, cloud/SaaS 20%, and BPS delivery 20%. RPA (70% overall) and AI (30%).

Market Size & Growth

NelsonHall estimates the size of the RPA and AI Services in Banking market to be ~$635 m in 2018, and that it will grow at 14.9% per year in the period 2018 to 2023.

The RPA and AI Services in banking market starts with Consulting, which accounts for ~20% ($130m) of client spend and is growing at 10.0% over the forecast period. Design & Deploy accounts for ~50% ($320m) of client spend and is growing at 15.0% over the forecast period.

Finally, Operations support accounts for ~30% ($185m) of client spend and is growing at ~18.9% over the forecast period.

Challenges

The key challenges in the market for banking RPA and AI services include:

External challenges

- Improving yield on use cases: low yield on POCs has created client demand for improved use case development

- Security: increasing use of cloud environments, shared environments, and open environments

- Ability to offer new digital process models, both in services delivered and internally delivered ops

- Developing plugins for legacy platforms, new platforms, and business ecosystems

- Deciding when to partner, use open source, acquire, or share products

- AI remains a very early stage technology, far behind RPA in adoption. Key AI functionality to date is focused on customer attitude interpretation via manipulation of unstructured data. Many product vendors are likely to fall behind as the technology matures

- Regulations: All FIs need to increase regulatory reporting and standardization of processing. The current focus is on AML/KYC/FATCA, which impacts account opening and customer onboarding and is the primary use case for RPA and AI to date

- AI applied to transactions data is only useful in tier one banks, which have large, statistically meaningful transactions data pools to draw inferences from. Smaller banks, if they are to use this technology will need to draw from industry wide data pools. The same applies for data sets from small markets and limited bank product runs.

Internal challenges

- Combining RPA and AI into unified offerings to enhance functionality of bots

- Managing and coordinating groups of bots and redeploy bots as operational needs change

- Vendors need to assume project delivery risk; most clients expect vendors to retain implementation risk via pricing

- Assessing machine learning capabilities prior to implementation to ensure QC gains

- Implementing quality control metrics as part of pricing scheme

- Tier one banks make each project a custom one, limiting reuse of IP. Need to increase reuse of IP

- Talent development: RPA and AI qualifications are in short supply, and new methodologies and technologies are both in flux and not widely taught. Services vendors need to provide strong training and recruiting resources

- Expanding addressable operations footprint: savings are very high (>50% cost reduction), but currently applicable to very few processes, limiting overall business impact. Need to penetrate further into client operations to deliver high impact to overall operations

- Standardizing process execution: Successful implementation of RPA and/or AI requires a redesign of processes. However, standardizing across multiple markets and products remains a challenge in addressing local regulations

- Hosting/cloud/systems integration/consolidation: small/medium banks have limited internal staff, requiring support for IT/BPS offerings. Vendors looking to expand to this market must be able to deliver automation as a BPaaS

- Process quality: RPA/AI reduces human error and transaction rework. They do not improve process adaptation to changing industry conditions or process execution where inputs are flawed (data source is compromised). Working with suppliers such as product/data vendors is required to identify and scrub best data feeds.

Success Factors

Key success factors for clients include:

- Strategy development:
  - Developing a roadmap to achieve agile/flexible operations delivery using cloud/BPS/heterogenous delivery environment
  - Building an ecosystem of vendors and decide how each of them are to interact with client to deliver effectively.

- Vendor selection:
  - Multiple grades of vendors include established product vendors for robust ops, emerging vendors for new functionality, and services vendor IP for low software cost/low complexity services
  - Selecting product vendors for functionality, roadmap, and financial strength
  - Preferred vendors should have the widest pool of IT services providers supporting them.

- Execution:
  - Redefining the external/internal operations split: ability to articulate required proprietary operations (high-value, non-repetitive processes) and outsourceable operations (lower-value/less differentiation), and still integrate the two sets of processes effectively. RPA and AI deliver high cost savings, but on a small operations footprint. Enlarging the footprint is the highest cost saver undertaken by successful banks
  - Accurate selection of processes for RPA and AI (currently over 60% of POCs fail to meet business case). Use case libraries are mitigating this challenge
  - Sharing the overheads of internal operations by standardization and SSCs; and external operations by cloud delivery and BPaaS.

NEAT Methodology for RPA & AI in 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.

Exhibit 1

'Ability to deliver immediate benefit': Assessment criteria

Assessment Category	Assessment Criteria
Offerings	Breadth of application of RPA & AI to banking
	Application of RPA and AI to retail banking processes
	Application of RPA & AI to capital markets processes
	Application of RPA & AI to compliance
	Application of RPA technology to banking
	Application of AI/cognitive technology to banking
	Ability to offer new process models with RPA & AI
	Ability to benchmark processes and offer roadmap
	RPA & AI implementation capability
	Ongoing bot/AI management
	Combined RPA/people-based exception handling capability
Delivery	Scale of RPA & AI delivery capability
	UIPath delivery capability
	IPSoft delivery capability
	Automation Anywhere delivery capability
	Blue Prism delivery capability
	Cognitive delivery capability
	Delivery capability – U.S.
	Delivery capability - U.K.
	Delivery capability - Continental Europe
	Delivery capability – Rest of EMEA
	Delivery capability - APAC
	Delivery capability - LATAM
	Use of pre-existing RPA templates
	RPA & AI change management capability
	Maturity of RPA & AI delivery model
	RPA & AI governance capability
	Design thinking capability
Presence	Overall banking RPA presence
	Overall banking AI presence
	Retail banking RPA presence
	Retail banking AI presence
	Capital Markets RPA presence
	Capital Markets AI presence
	U.S. presence
	U.K. presence
	Continental Europe presence
	Rest of EMEA presence
	APAC presence

	LATAM presence
Benefits Achieved	Level of process cost savings achieved
	Process error reduction
	Process cycle time reduction
	Improved CSAT
	Improved speed of RPA/AI roll-out
	Ability to meet future client requirements

Exhibit 2

'Ability to meet client future requirements': Assessment criteria

Assessment Category	Assessment Criteria
Service Innovation	Perceived suitability to meet future client RPA & AI needs
	Perceived suitability to develop new banking business models & processes
	Ability to apply automation to banking processes
	Ability to introduce new digital business models
	Service culture
	Innovation & creativity
Level of Investments	In RPA
	In cognitive/AI
	In RPA & AI in support of retail banking
	In RPA & AI in support of capital markets
	In own tools & platforms in support of RPA & AI in banking
	In new RPA & AI-based systems of engagement for banking sector
Market Momentum	RPA market momentum
	AI market momentum

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

Sales Enquiries

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NelsonHall will be pleased to discuss how we can bring benefit to your organization. You can contact us via the following relationship manager:

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