

NEAT EVALUATION FOR SOROCO:

Intelligent Automation Platforms

Market Segment: Ability for Business Users to Develop Automations

Introduction

This is a custom report for Soroco presenting the findings of the NelsonHall NEAT vendor evaluation for *Intelligent Automation Platforms* in the *Ability for Business Users to Develop Automations* market segment. It contains the NEAT graph of vendor performance, the latest market analysis summary, and a summary analysis of Soroco's intelligent automation platform.

This NelsonHall Vendor Evaluation & Assessment Tool (NEAT) analyzes the performance of vendors offering intelligent automation (IA) platforms. 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 end-to-end process identification & automation, incorporating ML, enabling business users to develop automations, and human-bot co-working.

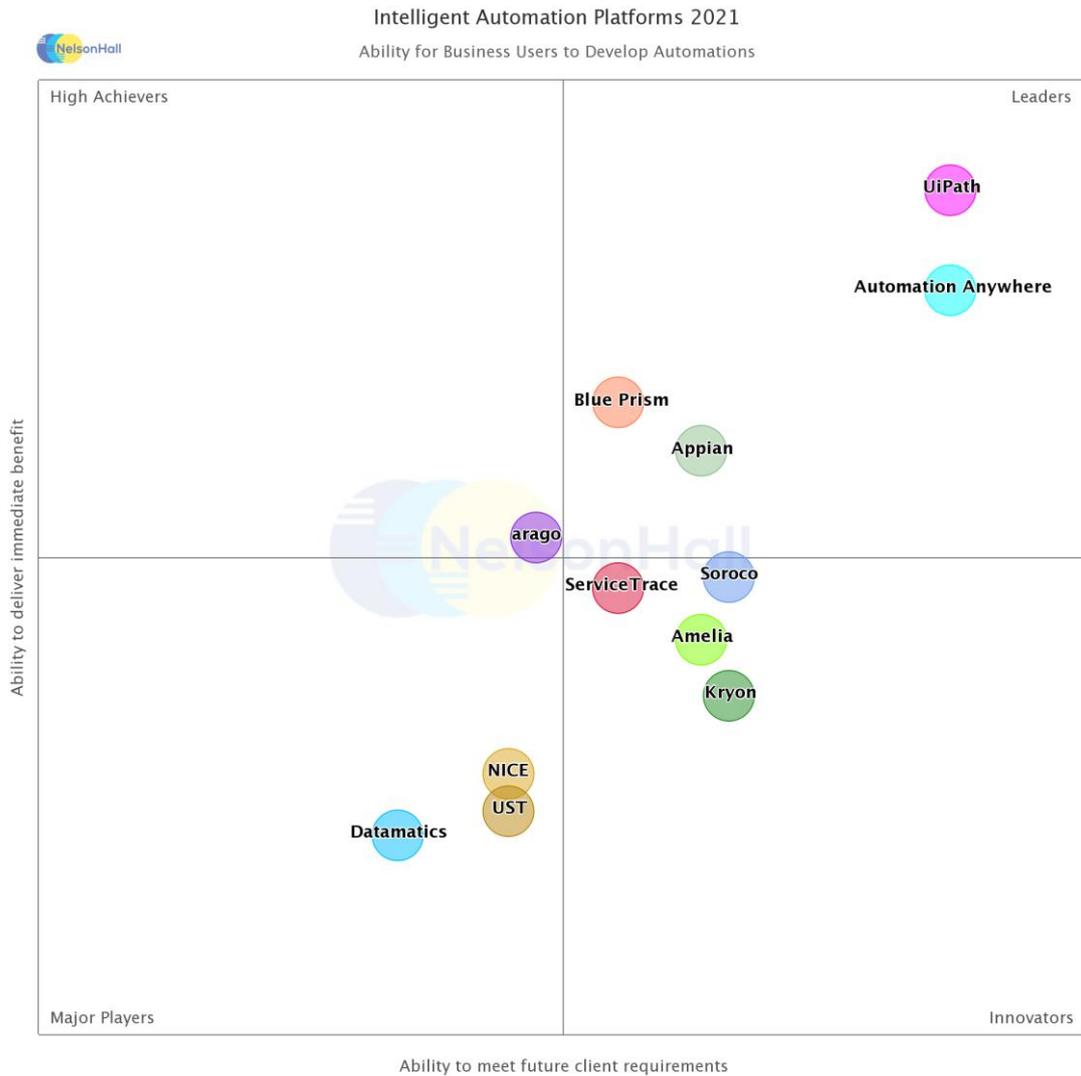
Evaluating vendors on both their 'ability to deliver immediate benefit' and their 'ability to meet client future requirements', vendors are identified in one of four categories: Leaders, High Achievers, Innovators, and Major Players.

Vendors evaluated for this NEAT are: Amelia, Appian, arago, Automation Anywhere, Blue Prism, Datamatics, Kryon, NICE, ServiceTrace, Soroco, UiPath, and UST.

Further explanation of the NEAT methodology is included at the end of the report to help buy-side organizations understand the precise criteria that were applied in evaluating vendors.



NEAT Evaluation: Intelligent Automation Platforms (Ability for Business Users to Develop Automations)



NelsonHall has identified Soroco as an Innovator in the *Ability for Business Users to Develop Automations* market segment, as shown in the NEAT graph. This market segment reflects Soroco’s ability to meet future client requirements as well as delivering immediate benefits to its clients with specific capability in enabling business users to develop their own automations.

Innovators are vendors that exhibit a high capability relative to their peers to meet future client requirements but have scope to enhance their ability to deliver immediate benefit.

Buy-side organizations can access the *Intelligent Automation Platforms* NEAT tool (*Ability for Business Users to Develop Automations*) [here](#).

Intelligent Automation Platforms Market Summary

Overview

Intelligent automation platforms are increasingly using supporting technologies to expand the scope of automation. Vendors offering these supporting technologies have in part developed simple automation capabilities. At the same time, automation platform vendors are increasingly developing or acquiring technologies that extend the reach of automation. Therefore, *intelligent automation platforms* (IAP) has become an expansive topic which now includes process understanding, low code application development capabilities, digital assistants, and document understanding and other supporting ML modules.

In the current IAP market:

- Primary drivers for intelligent automation deployment remain FTE reduction, process cycle time improvement, and reduced error rates
- The primary focus of intelligent automation remains on mostly back office tasks with high volumes, low variability, and high value. However, IA platform vendors are investing in more conversational intelligence which will support more attended/front office tasks
- Organizations having more than one IA platform is the norm, as organizations select new platforms for the best feature sets for a process and avoid costs in rebuilding existing investments
- Deployments are led by organizations in the BFSI, healthcare, and manufacturing verticals, which benefit from high volumes of repetitive tasks, high compliance requirements, and high levels of technology investments
- SaaS-based deployments are increasing and now represent ~20% of new deployments
- Process discovery is an area with high levels of investment. However, currently, the majority of processes are not being discovered or mined, and the majority of bots by far are still constructed without information on the process from these technologies
- Low code application development and digital assistants, while not currently heavily leveraged by organizations, will be the main driving forces in attended automation.

Buy-Side Dynamics

Key drivers for buyers looking to implement IA platforms include:

- *Cost reduction* – the time to achieve a positive ROI is decreasing as the maturity of automation increases. In some more extreme use cases, organizations are currently targeting a ROI of 2-3 months, down from ~6 months previously
- *Improved customer experience* – with automations delivered in the front office, automation can be leveraged to support more positive outcomes for customer journeys. Automation projects are becoming increasingly focused on measuring outcomes via CX metrics such as NPS or CSAT scores. Enhanced customer experience can be achieved with automation through the reduction of cycle times, reduction of errors, and automation of repetitive tasks to allow organizations to focus on customer/agent interactions
- *Adherence to process standards* – automations can adhere to a standardized process much closer than a human worker. The advantage of this adherence can be increased regulatory



compliance, improved transparency, and reduced error rates. Automations can also be audited through one portal, whereas manual processes may require data to be extracted from numerous applications

- *Ability to scale* – in particular when they are cloud-based, bots can be scaled up and down at a much faster rate in comparison to human employees
- *Enhanced change management* – similar to the increased ability to scale, if an organization wishes to change a process (for example to run A/B testing), rather than having to send the changed process to a large number of employees, the organization is only required to update the process in the automation once
- *Improved employee experience* – with automations in place, employees can be free to focus on more engaging tasks and move away from legacy interfaces.

Key inhibitors for buyers looking to implement IA platforms include:

- Difficulty in obtaining buy-in across the organization – while buy-in from the C-suite no longer tends to be an issue for organizations, there are often issues in assigning responsibilities for automations between business operations and IT. Intelligent automation platform vendors have worked to expand automation hub capabilities to support business and IT users to work more effectively together
- Lack of skilled resources to build and manage bots
- Understanding which processes to automate
- Reducing the development costs and time to develop automations
- The ability to build automations which can be easily manageable so that when a process requires change, the organization can implement those changes quickly with minimal rework
- Difficulty in selecting the best-of-breed technologies, such as the technologies which are easier to scale beyond PoCs, or the best technologies to integrate ML and AI
- The application of intelligent automation in customer interaction use cases is still in the embryonic stages of development
- The ability to effectively build and manage automations across a number of intelligent automation platforms.

Market Size & Growth

The current global IA platform market size is estimated by NelsonHall at ~\$2.4bn and will grow to ~\$20.7bn by 2025, a growth of 54% CAGR.

North America accounts for 48% of the IA market, and is the most mature region, followed by EMEA.

Intelligent automation growth remains tied somewhat to employee costs, therefore as the size of the middle class in Asia grows, the CAGR growth in intelligent automation is expected to follow, with higher growth towards the end of the period.

In the U.S. and EMEA, an acceleration of growth will be triggered by the IA providers offering more support for advanced automation, in particular automations which leverage conversational intelligence/chat bots and digital assistants.



BFSI remains the leading industry for IA; however, the highest growth industry will be the public sector as governments struggle with poor efficiencies and hiring freezes that reduce bandwidths. A relatively large portion of the functions of central and local governments are fairly standardized, rule-based operations and a prime opportunity for automation.

In more customer-facing industries such as retail, growth will be driven by a heavier focus on conversational intelligence and attended automation.

Success Factors

Critical success factors for vendors within the IA platform market are:

- Understanding each of the automation platforms, the strengths of each, and areas in which they can be more applicable than competitors. This selection process must include understanding the scaling requirements of the organization and the processes to be automated
- Find and select the best ideas for automation. This will more often than not require business users to be part of the conversation alongside automation specialists, combined with metrics on a process, estimated automation/optimization ROIs, and PoC deployments
- When selecting a process for automation, an organization must truly understand and define that process, including the degree to which a process relies on structured and unstructured data, any compliance requirements that need to be in place, and disaster and recovery controls that should be considered
- For customer-facing processes, the organization should invest in running projects to understand the requirements of the customers and how to target the customer-facing parts of the process to improve customer experience; for example, understanding how conversational a chatbot would be depending on its use case
- Ensure quality control exists within automation development, through the use of A/B testing of workflows, considering the majority of variations of a workflow, and a strong exception management process. In particular if citizen developers have been involved in the development process, ensure automations are thoroughly tested before and after being put into production
- Ensure that adoption of attended automation is driven through training and ongoing support for end-users. Management should sponsor and continuously reinforce the benefits of the automation and the vision for automation in the organization
- Understand that automation of poorly optimized processes will not resolve a poorly designed process; instead, automation should be considered as a component of process transformation alongside new process models and optimization of existing models.

Outlook

Over the next few years:

- The public sector will heavily adopt automation as governments look to deal with poor process efficiencies
- The primary drivers for new intelligent automation deployments will be value creation, employee and customer experience, and new business models



- The focus of intelligent automation will shift from heavily rule-based operations to those that will leverage machine learning to handle more variable operations
- The use of process understanding will enable organizations to more easily transition traditional rules-based RPA between platforms
- The majority of automation deployments will be cloud-based
- Process discovery and mining, along with process optimization before bot creation, will become the norm, as will automating the creation of bots with data from the process understanding modules
- Assisted and unassisted machine learning will be used more heavily in training bots and to reduce the number of exceptions and improve KPIs such as CSAT scores
- New UIs developed through the use of low code application development will provide employees and customers with access to legacy applications, which will in turn trigger automations.



Vendor Analysis Summary for Soroco

Overview

Scout is Soroco's task and process discovery platform designed to collect all the information on all the interactions between people, documents, and applications in the enterprise.

Scout uses its Scout Go desktop client deployed onto the end-user machines to perform standalone exploration. Scout Go has multiple ways to ensure clients maintain complete control over their data. This includes configurations for what applications Scout collects data from and the ability to pause data collection at any time. In addition, for all collected data, end-user information is anonymized, and Personally Identifiable Information (PII) is automatically removed.

Instead of using computer vision or log files of the endpoint to perform process discovery, Scout uses a proprietary 'deep capture' mechanism integrated with the user's OS to gather process information for Windows-based browser runtimes, terminal agents, and behind the firewall on Citrix. In 2018, Soroco examined computer vision as a basis for its process discovery model, getting to the stage of building its OCR engine to embed, in order to perform the process discovery.

From data gathered on the process, Scout stitches together the insights from the tasks to estimate the prioritization of automation value, which can then be viewed as part of a product journey. Analytics on the process include estimations for the percentage benefits of cleaning the process and from automation.

Scout can output discovered tasks and processes into its Process Designer for designing and documenting processes, which are then moved to the Automation Suite IDE to develop automations.

Soroco's IDE is a Python-based automation development environment designed to use Scout's information to develop automations. Whereas Scout has been developed with the business user in mind and is centered around a business user-friendly GUI, the IDE is entirely focused on the IT user and does not have pictorial representations of the automation.

The Intelligent Document Processing engine is integrated into the IDE and supports the client's extraction of process-related information from different input sources to be used in the automation. The document processing engine can leverage Soroco's own OCR capabilities and be integrated into third-party platforms.

Soroco's automation pricing model is based on consumption, with organizations charged by bot runtimes for the automation engine and transaction-based pricing for the document processing engine.

Its bots can be deployed on AWS, Azure, or on-premise, with bots running on Windows or Linux-based systems. The Automation Suite is cloud-native with auto-scaling capabilities allowing it to scale up or down with demand optimized through its Kubernetes integration. Soroco has several clients in which a single VM is running multiple bots.

Soroco's Automation Suite is SOC 2 Type 2 certified and is certified HIPAA secure.



Financials

NelsonHall estimates Soroco's 2020 revenue to be \$17m, with the revenue split by service as follows:

- Task and process discovery: \$7m
- Automation: \$10m.

Client Case Studies

Bayer (Pharmaceuticals)

At the start of Soroco's engagement with Bayer, the company had no pipeline and no discovery tools used by its automation COE. The team in Bayer collected ideas for automation with a manual process discovery process.

Soroco began with performing process discovery using Scout for 45 FTEs across Bayer's supply chain and logistics teams. Across 12 weeks, Scout captured ten supply chain processes and eight logistics processes, of which a total of five processes were consolidated into one simplified process. The process had 100 steps between four applications. In addition to simplifying the process, as Scout's automation capability was higher than Bayer had expected, the company asked Soroco to illustrate that the automation capability data was achievable. The automation is triggered when an email is received and completes the 100 steps for the process.

This automation has reduced the average handling time from 15 minutes to under one minute. The team is now only required to access the document processing dashboard to review and approve the extracts details. Soroco has since expanded the use of Scout and Automation across other Bayer geographic units and business units that perform similar processes.

Amazon (e-Commerce)

Amazon was looking for opportunities to add technologies to facilitate scaling. One area of improvement identified was the financial operations team's vendor statement reconciliation process, which represented billions of dollars in financial transactions from a million third-party sellers.

The financial operations team was required to perform manual intervention of non-standardized Excel-based statements, resulting in a high average handling time of 120 minutes per statement, which restricted the team's throughput to 20% of its workload.

Through Soroco automation, the team uploads the vendor statement to the Automation Suite, which uses heuristics to pull 42 pieces of relevant vendor information such as invoice numbers, order status, and payment-related information. If the Automation Suite cannot extract the information to a high level of confidence, it notifies the financial team to verify the data. Through this automation, 98% of transactions are handled without automation, with the AHT reduced to 30 minutes. Soroco has continued to expand its partnership with Amazon using both Scout and Automation, delivering 1.1m hours of effort savings per year in 2020.

Chubb (Insurance)

Chubb operates in 54 countries, providing P&C, life, and underwriting services. The company was undergoing an operational excellence program to reduce spend by \$300m by 2023 and increase customer satisfaction rates.



One of the company's processes that was looking to reduce costs and boost customer satisfaction was automobile insurance endorsement work order processing, which the policy administration team handled.

The company had tried to tackle process automation with its existing RPA tooling but was failing due to the use case's complexity, it being five tasks with 223 steps in the process. Using Scout and then the Automation Suite, Chubb has reduced the number of steps in the process to 27 standardized steps, reduced the average handling time from 40 minutes to 11 minutes, and thereby reduced the team's size from 14 FTEs to 8 FTEs. Through the use of Soroco automation, Chubb saved \$330k per year. Soroco expanded its work from this one process to seven additional related processes in this business unit, helping Chubb realize \$3m savings per year. The company has since established an automation COE in India, which now manages Soroco's automations and is expanding its use of Scout to scale its pipeline of automation use cases across additional business areas.

Strengths

- Strong process discovery capabilities, which have lent themselves to clients' process reengineering efforts and underwriting the automation capability of processes more accurately than competitors
- The process discovery capabilities of Scout leverage OS primitives rather than the less accurate and more bandwidth-intensive OCR methods, and the use of plugins via the Scout app store such as Soda data monitoring allow for deeper interrogation of the tracked processes
- Document processing capability, which can lean on the extensive set of open-source Python scripts to extract the relevant information from documents across languages, and in cases leveraging Soroco's prebuilt models such as invoices or Acord forms, low development times
- Meets SOC type 2 security requirements, currently the go-to gold standard for automation platforms
- Transactional-based pricing does not punish clients for having underutilized bots.

Challenges

- The IT-focused IDE requires either a reliance on Soroco's team to develop automations or a strong Python skillset within the client organization. While this move matches Soroco's aim not to target the citizen developer market, it also makes it less suitable for organizations with smaller IT teams or those that have mainly outsourced IT services
- Scout requires demonstration of a process as a baseline to discover variations of the process detected in process discovery using fuzzy logic, and could benefit from tighter integrations with log mining technologies to better understand a process as it passes through different individual users in the client's operations. The company does have plans to introduce hybrid mining with generalized log mining powered by SODA as part of its roadmap, which will eliminate this challenge
- Less suitable in building automations for processes that require even minimal handoff between the bot and the user. Soroco has firmly targeted operations with minimal handoffs and is not developing around increasing the ease of use of interactions in these cases (as competitors are with low code form building, for example). While this is not a



problem within its ideal target market, there are long process chains with minimal handoff between the bot and human, which are less supported than ideal.

Strategic Direction

Soroco has a strong focus on targeting end-to-end processes and does, to a degree, avoid automating processes that have a high number of handoffs, as Soroco sees little value in this approach for the client. Instead, the company's strategy revolves around discovering large process chains, getting to the root of these process chains to understand the right lever to improve them, and then recommending the most impactful sequence of change – in which automation is typically the last step. To assist the company in pursuing this goal, Soroco intends to use the process discovery data to drive the cleanup of the process and its variations to reduce the required number of handoffs. This approach ensures that the low-hanging fruit of process cleanup is executed first before process automation, which in turn ensures the highest ROI and the most durable automation projects.

Soroco focuses on using Scout's process discovery to underwrite the ROI and automation capability to prospective clients. Soroco reports clients are moving away from the big three automation providers (who are failing to deliver stated automation targets) and are looking to complement existing task automation use cases with larger-scale and more complex use cases. The latter is especially true for clients with a mature Automation COE vs. those who are early in their journey. Soroco does not expect clients to always transition from process discovery and excellence with Scout to automation and has said that clients opting to automate a process 25% of the time would be a good target number. Instead, Soroco believes that the act of performing the process discovery and excellence through Scout can deliver a heavy proportion of the value which clients aim to achieve.

Soroco believes that the missing element in the automation journey is the IT team, with the majority of automation it sees being business or citizen developer-led. It aims to have the process discovery phase using Scout as business-led. As the client wants to bring in automation, Soroco provides two options. First, it helps augment RPA investments by making it easy for Automation COEs to execute on high-value task automations and improve the utilization of their existing RPA licenses. Secondly, it complements task automation initiatives by enabling clients to scale to larger, more complex use cases. For this objective, Soroco targets the IT team as an active participant. Soroco believes that because IT teams have been charged with scaling technologies in the past, they are more adept at ensuring automation is scaled with enterprise-grade reliability, security, and performance. As Python is the main development language of machine learning, deploying and managing ML requires Python skills.

In supporting clients developing automations, the typical use case has Soroco supporting the client's IT team for approximately two years while learning the platform and taking ownership of the bots and development.

Outlook

Soroco does not aim to be the be-all-and-end-all automation platform. It does not target automation for short process chains with multiple handoffs between the bot and the user or automate all of the processes discovered with Scout (although Scout can hand off these processes to other RPA platforms). Neither does the company target the citizen developer market with business users designing and building automations.

For what it aims to do, i.e., discovering long, unbroken process chains with minimal handoffs, Soroco succeeds in using alternate methods than most competitors for process discovery using



OS primitives. The company's business/IT is split between process design and build to automate highly-scaled processes, particularly in automation around document processing.

These long processes, which require minimal handoff, have traditionally been the first targets for automation and designated in some cases as the low-hanging fruit. However, some previous investments in that space are fragile automations that are likely to require rework with changes to the process. In this way, Soroco's Automation Suite, which splits the automation into its dependencies, can be more stable and easier to manage in the long term. Therefore, long processes which are likely to change, and complex processes with a high number of variations, are the ones that could best benefit from Scout process discovery and Soroco's Automation Suite.



NEAT Methodology for Intelligent Automation Platforms

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 future client 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 future client requirements
- **Innovators:** vendors that exhibit a high capability relative to their peers to meet future client 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	<ul style="list-style-type: none"> Process understanding capabilities Ability to have ideas for automation Automation development module Ability to incorporate ML models Support for testing development Bot orchestration and management Exception handling capabilities Computer vision/NLP capabilities Conversational intelligence/chatbot capabilities Low code development for forms Bot analytics capabilities
Delivery Capability	<ul style="list-style-type: none"> Citizen developer support Cloud native Attended bot capabilities Native integrations Bot store capabilities Bot security Support for bot scaling Maturity of partner base Account management and engagement
Client Presence	<ul style="list-style-type: none"> Americas EMEA APAC
Benefits Achieved	<ul style="list-style-type: none"> Speed of development Speed of implementation Low levels of BOT downtime Ability to handle variations in a process Estimated RoI Support to spread a transformational culture Overall vendor satisfaction



Exhibit 2

‘Ability to meet client future requirements’: Assessment criteria

Assessment Category	Assessment Criteria
Level of Investments	<ul style="list-style-type: none"> Investment into process understanding Investment into bot development capabilities Investment into bot orchestration capabilities Investment into ML and supporting integrations Investment into computer vision technology Investment into conversational intelligence and chatbot capabilities Investment into low code app development for human bot interactions Investment into cloud capabilities

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



research.nelson-hall.com

Important Notice

Copyright © 2021 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.