AntWorks completes RPA toolset, will iterate fractal ANTstein platform this quarter

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451 Research®

AntWorks has built out a comprehensive robotic process automation (RPA) environment for ANTstein, its enterprise-focused intelligent automation platform, and believes the offering is now complete in terms of the core feature/functionality set. It will iterate the platform this quarter.

THE 451 TAKE

In the digital era, the need to quickly respond to customer expectations and aggressive actions of rivals demands a persistent transformative approach – one that discovers and automates efficiencies, crafts engaging user experiences, and readily adapts when needed. These will be the roles of the emerging generation of digital automation platforms, RPA tools, and the process-mining technology needed to discover and automate the delivery of customer value. The direction of travel for AntWorks here is to enable customers to automate the whole process (achieve straight-through processing) rather than just one part of it, as is the case with RPA, and to deliver it as a machine-driven process without any human involvement.

CONTEXT

AntWorks positions itself as an artificial intelligence and intelligent automation company that offers enterprises new opportunities to leverage data via digitization, automation and intelligence. It claims its platform can understand every data type and digitize every bit of data. Moreover, enabling bots to be created in code-free environments, AntWorks believes it can find new ways to automate complex processes that are not constrained like traditional approaches. For AntWorks, RPA (or what it calls data transport) is not the key action here. AI, natural language modelling, machine learning and cognitive processing all need to come together.

Getting clean data is the most important factor to increase the probability of solving a task, and requires a strong data ingestion engine. AntWorks claims its fractal approach improves on typical OCR (optical character recognition) approaches, which are limited to structured data and require 100% quality checking. Its RPA offering uses a code-free interface while its fractal network approach to AI and machine learning works with finite data sets with no dedicated resources required. AntWorks claims fractal networks can be used even with limited representative data sets; require less training time; provide a higher recall precision with deterministic results, as compared with probabilistic; lower the cost of ownership because of low computing power; and require fewer skilled resources.

TECHNOLOGY

ANTstein, the firm's automation platform, provides data capture and integrates machine reading, RPA and cognitive ability with supervised and adaptive (unsupervised) learning. ANTstein uses machine learning and pattern recognition techniques, and operates on structured, semi-structured, unstructured, image and inferred data, including forms, images (signatures, notary stamps) and handwriting.

Crucial to its entire value proposition is ANTstein's use of a fractal network approach to data analysis, which looks for patterns in data and applies the learning (hence cognitive) about these similarities to wider data sets. In this case, as the data set gets bigger, the self-similarity becomes amplified. More traditional neural network approaches work their way through nodes and division trees. AntWorks believes this becomes cumbersome at scale, because it slows down as the number of combinations increases. It says it was actually trying to solve a different problem – image recognition using fractal science (self-similarity and pattern recognition) – and realized its machine-reading engine could be applied to other algorithms to get outcomes, and could be used as a building block for a more versatile approach.

PRODUCTS

AntWorks spent 2018 building an RPA environment that enforces the use of a comprehensive library of components to model processes using drag-and-drop assembly, rather than coding each individually, which helps reduce variation and prevent a cottage industry of different codes from emerging. It won't ever encompass 100% of tasks, but AntWorks believes its approach means that 80% of a business process can be found in the AntWorks RPA

environment and the other 20% can be coded in any language, unlike other RPA approaches, which are prescriptive. AntWorks says bots can be built by business users, and may only require a little input from a data scientist/ML expert/programming language coder for development, deployment, execution and insight.

The company has adopted a bold marketing program, using fracted text in order to position its product's differentiation – for example, 'Fcatral: An aivnteltrave rutoe to ML.'

With AntWorks, if the target system changes, its state changes to adapt enabling bots to post data to that changed target. AntWorks uses the example of trying to scrape flight prices from Expedia, where the proliferation of pop-up ads means that where data is extracted from is constantly changing. It believes ANTstein's dynamic wait state and exception handling to be a key differentiator from other RPA offerings, which require intervention.

BUSINESS MODEL

Singapore-headquartered AntWorks was cofounded by business process outsourcing and technology veterans Asheesh Mehra (formerly of Infosys) and Govind Sandhu (formerly of Capita). AntWorks recently secured a $15m round of funding from Softbank spinoff SBI Ven Capital, which is focused on investments in Asia. It says it took the round principally to gain credibility with customers by bringing an institutional name on board, and purposely kept the round small. It's using the funding to hire 100 new staff globally across all functions, establish global operations, and invest in R&D, marketing and brand building.

Its goal is to generate 30% of sales from a wide range of channel partners taking its data-transport offering to market. The data-ingestion offering is a much more complex full-stack sale, and AntWorks will need to carefully pick channel partners that can grow contract value. The 220-person company has sales operations in six countries and has delivery centers in the US, Singapore and India. It claims some paying customers – North America is the biggest revenue contributor. We estimate revenue to be about $20m.

AntWorks acquired Benchmark Systems in the healthcare sector in 2015 to get into this market, but other verticals gaining ground in terms of customer base include financial services, banking, mortgage, life sciences, transport and logistics, telco, media technology and consulting, and consumer packaged goods.

Its targets include consultants, systems integrators and technology vendors, and its partners include Genpact, DXC Technology, EXL, Capgemini, HCL, Cognizant, Mindfields, qBotica, Deloitte, KPMG, EY, Accenture, CGI and Workday. AntWorks counts the likes of HDFC Bank, Standard Chartered, Aon, Nielsen, KPMG, Accenture, ANZ, Mphasis, TCS, Capgemini and IAG as partners or customers. It has a joint venture with London-based consultant Alchemmy.

Its software is priced in a traditional per-transaction, per-page or per-bot model, and can be hosted on cloud or on-premises. It has consciously adopted conventional pricing because its technology model is so differentiated. Deal sizes are $100,000-200,000 a year, although most companies start smaller. It says only 7% of customers are using more that 10 bots at this time.

COMPETITION

AntWorks points to the likes of Nokia and BlackBerry to characterize where it thinks RPA vendors are today. Those companies, successful as they were, failed to move forward at the same time as being successful. The majority of RPA firms are now having to scramble to buy or build additional technologies as the problem set widens to 'end-to-end business processing.'

While Blue Prism, UiPath and other RPA businesses position themselves as intelligent automation companies, a great many rely on the use of third-party technologies and connect their various components with APIs, which in AntWorks' view is both suboptimal and not seamless.

Competitors in various parts of the automation stack in the structured data market include Blue Prism, UiPath, Accelirate (formerly AutomateWork), Automation Anywhere, WorkFusion, NICE, Catalytic, Contextor (acquired by SAP), Figure Eight (formerly CrowdFlower), Kofax, Kryon, Pega, Thoughtonomy and ServiceTrace. AntWorks does not believe it has any competitors in the unstructured data market.

SWOT ANALYSIS

STRENGTHS
AntWorks believes it uniquely integrates the key capabilities needed to deliver 'end-to-end automation.' Typically, machine learning/AI, data ingestion and RPA must be purchased separately from companies like IBM (expensive), OCR vendors (can't handle unstructured data) and pure-play RPA vendors (high cost, structured data input only).

WEAKNESSES
The raft of market participants have done a god job of convincing the world that RPA is automation, which is an issue for AntWorks, which believes RPA is only one action for intelligent automation (the data transport).

OPPORTUNITIES
Continued consolidation in this space is inevitable as systems integrators, consultants, and technology vendors buy, build or partner for capability. AntWorks says it's already been asked to license its data ingestion engine for use in a third-party offering.

THREATS
Over time, RPA platform vendors will need to extend their capabilities to enable more comprehensive business process automation tooling than is now available. AntWorks will need to communicate its differentiated approach and portfolio above the tremendous amount of noise out there.