



AUTOMATION

Allied Advisers Sector Update on Automation Software

2H 2023





The automation technology industry has seen strong growth over the last few years due to growing market needs and rapid technological innovations

- **There is a clear requirement across all industries to enhance productivity, process efficiencies and reduce human error.** In addition, businesses are increasingly focused on improving performance and gaining better control over operations. As labor gets more expensive and inflation increases the cost of operations, automation becomes even more important to save costs and increase profits
- Significant technology innovations have enabled and improved automation technologies – these include **advanced data analytics, cloud, Industrial IoT (IIoT), and AI/Machine Learning.** AI/ML in particular will continue to drive step-change improvements in automation across an increasing number of use cases



M&A deal volumes in automation have continually trended up over the last few years. Despite the market slowdown in 2022 and 2023, **M&A volume increased almost 40% over 2021 to \$39B**, with participation from Pes and strategic buyers both within and outside the automation industry. **There has been a decline in 2023 which is consistent with the overall market**, but the automation industry is outperforming other technology sectors



VC activity in the automation industry has increased steadily, resulting in a significant increase in capital investments. From 2018 to 2022, the industry experienced an increase from **\$7 billion to \$14 billion in VC funding.** This upward trend can be attributed to the increasing demand for **enhanced efficiency, cost reduction, and advancements in technology**

Introduction to Automation

Automation involves the creation and application of technologies that help produce and deliver goods and services with minimal human intervention. It helps businesses improve the efficiency, reliability, and speed of repetitive or labor-intensive tasks. Overall, automation has the potential to revolutionize industries and enhance the efficiency and effectiveness of various processes, leading to increased productivity and economic growth



Key Industry Stats

\$1.3T - \$2.6T

Expected contribution of automation software to the world economy by 2025, as per McKinsey Global Institute

0.8% - 1.4%

Potential increase in growth of annual global productivity fueled by automation, per McKinsey & Company

20%

Savings in labor costs through the use of automation technologies, according to a study by McKinsey Global Institute

39%

Share held by North America in the global automation software market in 2021



“Automation has the potential to solve the hardest problems that companies face whilst improving employee experiences.”

**– Robert Enslin
Co-CEO, UiPath**

Growth Opportunities for Automation Software



The rising adoption of emerging digital industrial technologies, such as IIoT and cloud-based solutions, is driving the growth of the automation software market



The growing need to solve labor shortages, eliminate human error and improve time efficiency, along with the rising demand for enhanced performance in everyday operations, is expected to contribute to market growth



Favorable business drivers such as government incentives and support, the emergence of SMEs offering innovative solutions, and an increase in investment in automation across industries are driving innovation



The automation space offers ample opportunities for acquisitions due to its fragmented nature, enabling companies to pursue inorganic growth via M&A and expand their market presence

Types of Automation Software

The Automation Software Industry can be broadly categorized into 3 buckets based on the degree of automation; Basic, Process, and Intelligent Automation



Basic Automation

Involves the digitization, streamlining, and centralization of simple, rudimentary, and routine tasks

Key Technologies include:

Robotic process automation: Involves the use of automation technologies to mimic back-office tasks such as extraction of data, filling of forms, etc.

40%

CAGR: 2018 - 2027

Notable Players

blueprism

PEGA

UiPath



Process Automation

Manages business processes for uniformity and transparency, boosting efficiency and productivity

Key Technologies include:

Process mining: Companies can leverage data mining and process analytics to gain insights into their performance and pinpoint areas for improvement

49%

CAGR: 2018 - 2030

Notable Players

appian

IBM

LANA

Workflow management software: Optimizes task assignments, delivers relevant information, and nudges employees to expedite work

27%

CAGR: 2023-2033

nintex

workato

zapier

Business process management: As per Gartner, BPM employs methods to model, analyze, measure, and optimize business processes

11%

CAGR: 2020-2025

appian

BP LOGIX

Hyland



Intelligent Automation

Involves the use of AI to enable machines to “learn” and make decisions based on past situations

Key Technologies include:

Intelligent document processing: Involves the use of AI to automate data extraction and transformation

30%

CAGR: 2022-2030

Notable Players

Infrd

KOFAX

WorkFusion

Conversational AI: Uses LLM, Generative AI, NLP, NLU, and ASR to process human speech or written text and provide answers

23%

CAGR: 2023-2028

Airtable

AUTOMATION ANYWHERE

OpenAI

Intelligent integration tools: Platforms such as iPaaS are cloud-based that integrate data, applications, and processes

30%

CAGR: 2022-2026

boomi

MuleSoft

SAP

Increasing Adoption of Automation Software in Different Industries



Logistics Industry



- Logistics automation helps reduce labor and inventory costs by enabling real-time fleet and goods tracking, automated accounting, and automatic document generation, and enhancing the efficiency of repetitive tasks
- It is estimated that logistics companies in the US gain \$12-\$20 for every \$100 in e-commerce sales due to the adoption of automation, compared with \$3-\$5 spent on logistics in traditional brick-and-mortar retail operations



Healthcare Industry



- Automation is gaining momentum in healthcare due to benefits such as ease of use with apps, greater flexibility, well-defined operations, staffing projects, budget reductions, etc.
- ~80% of healthcare professionals have observed significant cost and time savings through the use of electronic prescriptions
- Automation helps cut down labor expenses by 50-60%, boosts quality by eliminating human error, and reduces wastage by automating traditional paperwork tasks



Financial Services Industry



- Financial services companies are increasingly adopting automation software as these solutions seamlessly integrate with other systems and provide comprehensive 360-degree visibility into financials
- According to the Institute for Robotic Process Automation, humans make 10 errors in every 100 steps involved in loan processing. Automation can mitigate these errors. Additionally, automated predictive analytics enables improved fraud detection
- RPA systems operate 24x7 around the year on existing cloud infrastructure, streamlining loan sanctioning and closing processes



Manufacturing Industry



- The adoption of automation software in manufacturing is increasing because it improves the quality and flexibility of manufacturing processes and eliminates data redundancy while automating repetitive, rule-based tasks with a scheduled setup
- Deloitte's survey on the adoption of automation in the manufacturing industry shows that 93% of manufacturing companies believe that AI will be a "pivotal technology to drive growth and innovation"

Societal Impact of Automation

Automation can be used to improve efficiency, accuracy, and productivity across industries. The speed and scale of recent developments are likely to have a significant impact on businesses and, by extension, our societies

"Automation is not a problem to be solved, but an opportunity to be embraced."

- Klaus Schwab, Founder and Executive Chairman, World Economic Forum



Automation is projected to displace ~400 million workers, equivalent to ~15% of the global workforce, by 2030, resulting in substantial declines in certain occupations

Technical Automation potential

~50%

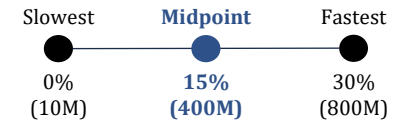
of current work, activities are technically automatable by adapting currently demonstrated technologies

6 of 10

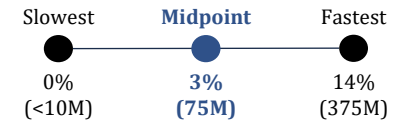
current occupations have more than 30% of activities that are technically automatable

Impact of Adoption by 2030

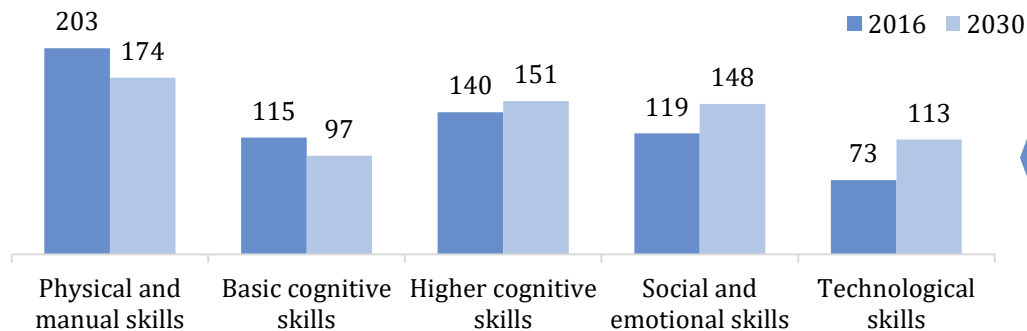
Work potentially displaced by adoption of automation, by adoption scenario, % of workers (FTEs)



Workforce that could need to change the occupational category, by adoption scenario, % of workers (FTEs)



Total hours worked in Europe and US, 2016 vs. 2030 estimate, billion



The workplace of the future will necessitate workers to acquire new skills, as automation will accelerate the demand for advanced technological skills like programming, along with increased need for social, emotional, and higher cognitive skills such as creativity, critical thinking, and complex information processing

Over the past 25 years, 1/3rd of job positions in the US have newly emerged, and as technology displaces more jobs globally, workers must adapt, acquire new skills, and seize the opportunity for higher value jobs, improved productivity, and enhanced life satisfaction for both employees and employers

Select Private Automation Companies (1/2)



zapier

- No-Code Automation platform that connects apps into automated workflows
 - **5,000+ app** connections
 - Trusted by **2M+ businesses**
 - Go-to solution for businesses of all sizes
- People who set up a **Zap** **save an average of 4 hours** their first week
- Allows one to automate processes without a developer
- **Technologies:** Integrates OpenAI's 'Disruptive' Transcription and Translation Whisper API
- Acquired Makerpad in Mar-21 to enhance offerings, add customers, and boost the broader use of no-code tools
- **Bootstrapped company** with a \$5B valuation solely from a secondary market sale of investor shares



workato

- Single platform for integration and workflow automation across the organization
 - **300** automations running
 - **1,500** pre-built connectors
 - **6,500** saved hours each month
 - **90%** of all IT provisioning automated
 - **1,000+ partners**
- **Named as a leader 5 years in a row** by Gartner and Customers' Choice by Forbes
- Acquired Rails Data in Mar-22, to scale up connections for business applications
- Raised a total of \$421.2M, with a recent funding round valuing the company at \$5.7B in Oct-21

Select Private Automation Companies (2/2)



- Cloud-based collaboration platform, combining the functionality of a spreadsheet with the power of a database
 - **450,000+** users
 - Trusted by the world's largest organizations
 - **\$1.36B** Total funding
 - **6 offices** around the world
 - Won multiple awards including Forbes Cloud 100, Most Loved Products Award, CNBC Disruptor 50, etc.
-
- Acquired Bayes in Aug-21, to enhance the data visualizations on the Airtable platform
 - Raised a total of \$1.4B, with recent funding round valuing the company at \$11.7B in Dec-21



- AI-powered digital workforce platform powering the world's leading companies with intelligent automation
 - **2.8M+** Bots deployed for RPA
 - **1M+** A-People community members
 - **1,200+** Bot Store products
 - **90+** Countries with customers
 - Recognized leader in the era of digital transformation
 - **Recognitions:** Named a leader each year of Gartner Magic Quadrant for Robotic Process Automation
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- Acquired ForetressIQ in Dec-21, to expand its platform to identify software-based processes which can be automated
 - Raised a total of \$1.2B

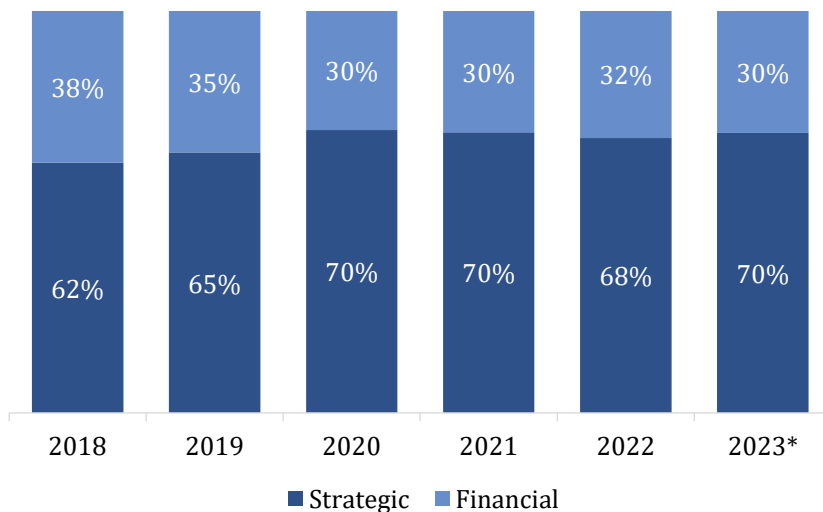
Overview of M&A Activity in Automation Sector

The automation sector is of interest to both strategic buyers and financial sponsors. Strategic buyers are actively searching for acquisitions to achieve competitive advantages and enhance product offerings. Financial sponsors are seeking companies as new platforms for investment

- The RPA market is a major contributor to the momentum in automation, which is driven by factors such as favorable perceptions of growth and consolidation opportunities
- Companies are automating more and more procedures because of a lack of skilled workers, impending recession, and rising competition. According to Intelligent Automation Network, the growth of the automation market is showing no signs of slowing down and will continue to expand over the coming years and reach approximately \$20 billion by 2030

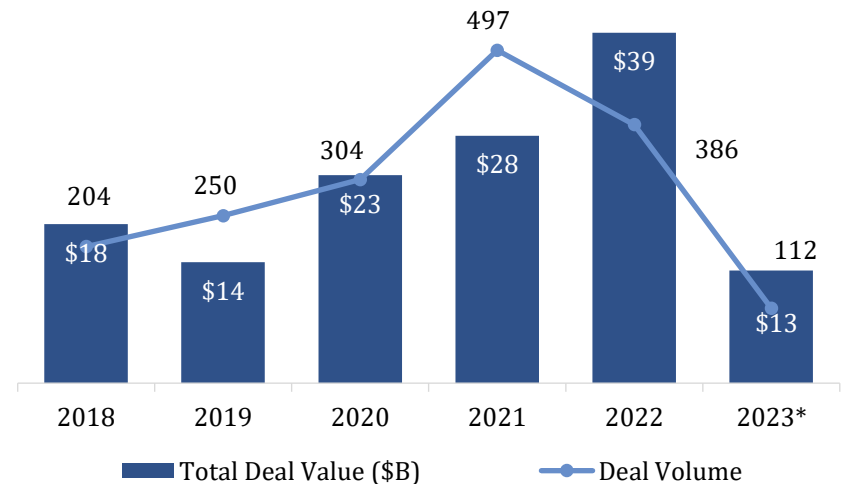
Deal Activity by Buyer Type

Strategic and financial buyers' interest in automation-related M&A activity has remained consistent over the past few years, with the deal value and volume in the sector increasing from 2018 to 2022

















Deal Volume and Total Deal Value

The M&A deal volume in the automation space has shown an upward trend over the past few years. The number of deals as well as the capital invested in the sector has increased significantly during 2018–22. There has been a decline in 2023 which is consistent with the broader overall market decline



Note: *2023 deal metrics are as of 30th May 2023

Recent M&A Deals (1/2)

Deal Date	Target Company Name	Buyer Company Name	Rationale
Jun 26, 2023	 APPTIO		IBM is set to acquire Apptio for \$4.6bn, a deal expected to boost IBM's IT automation capabilities and allow enterprises to enhance business value across technology investments
Mar 2, 2023	 RPAbox	 AGGRANDA	The acquisition helps Aggranda to bring more know-how and capabilities to deliver automation solutions
Jan 4, 2023	 TIDAL		The acquisition adds increased depth and breadth to Redwood Software's already extensive suite of automation solutions, which includes RunMyJobs, ActiveBatch and JSCAPE
Aug 18, 2022	 EPHESOFT		The acquisition is aimed at strengthening Kofax's position in the intelligent automation software market and enhancing its intelligent document processing capabilities
Jul 29, 2022	 Reinfer		With this acquisition, UiPath intends to expand its AI-powered automation capabilities and unlock new automation opportunities for its customers
Mar 16, 2022	 blueprism		The Acquisition will enhance SS&C's position as a leading provider of software and services to the financial services and healthcare industries with deep expertise in intelligent automation and robotic process automation
Feb 15, 2022	 KRYON		The acquisition is aimed at enabling Nintex to expand its scale and strengthen its digital process automation (DPA) capabilities

Recent M&A Deals (2/2)

Deal Date	Target Company Name	Buyer Company Name	Rationale
Dec 23, 2021			Through this acquisition, the companies will enable organizations to accelerate their automation efforts and undergo digital transformation
Sept 2, 2021			New RPA capabilities will enhance Salesforce's Einstein Automate solution, enabling end-to-end workflow automation across any system for Service, Sales, Industries, and more
Aug 11, 2021			With the addition of native process mining, Appian can now deliver the world's most complete Low-Code Automation Suite
Aug 1, 2021			The acquisition is aimed at expanding Rockwell Automation's cloud-native smart manufacturing offering
Apr 16, 2021			Intellibot has helped expand ServiceNow's core workflow capabilities by helping customers automate repetitive tasks
May 15, 2020			With this acquisition, Microsoft will expand low-code robotic process automation capabilities in Microsoft Power Automate
Jan 7, 2020			The acquisition makes Appian a one-stop shop for Automation, with best-in-class solutions for workflow, AI, and RPA

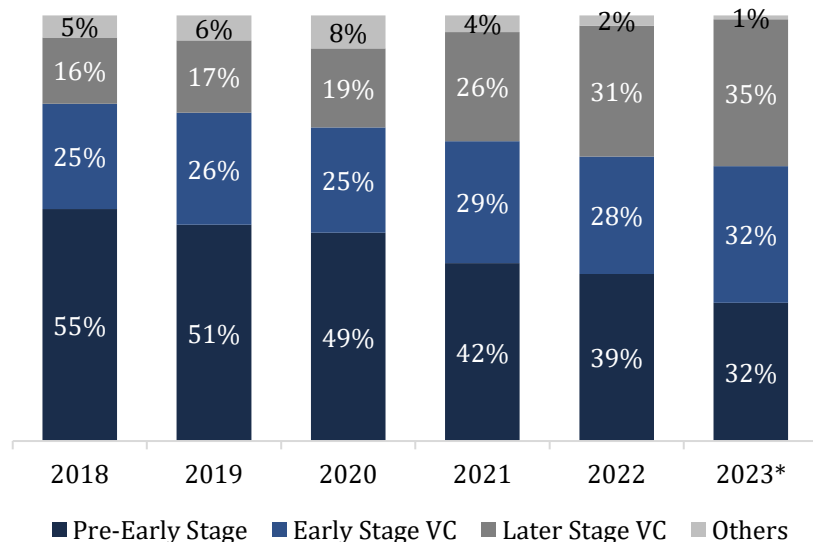
Venture Capital Funding Activity in Automation Sector

With the exception of 2022 and 2023 consistent with the overall market slowdown, the automation sector has seen strong VC funding, driven by the growing demand for efficiency, cost reduction, and technological advancements. Start-ups leveraging robotics, AI, and automation technologies have attracted significant investments, which have enabled them to further develop and scale their solutions to address industry-specific challenges

- VC activity in the automation industry has increased steadily over the past five years, peaking in 2021. However, it decreased in 2022, in line with other industries
- An increasing number of investments went toward later stage companies, indicating that companies have scaled successfully

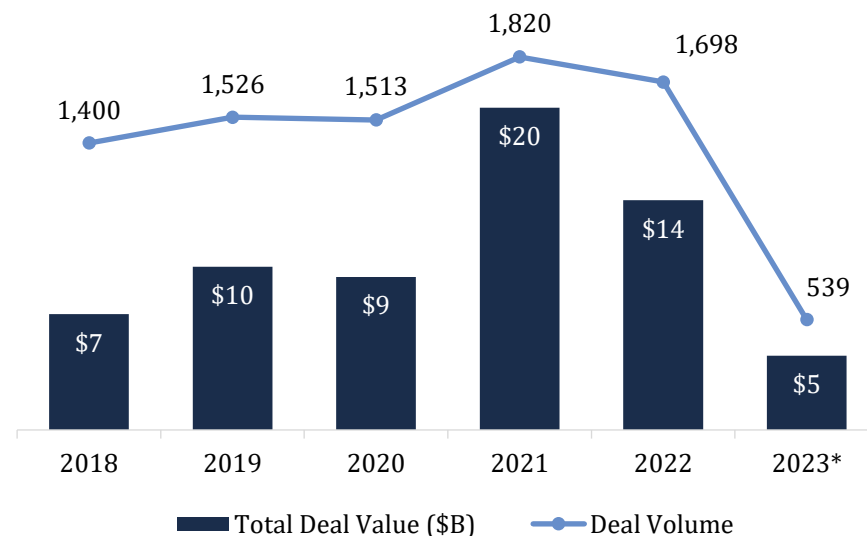
Deal Volume by Deal Type

As companies have matured, funding in late stage companies has gradually increased despite the slowdown in the IPO market, though the lack of IPOs is severely impacting late stage funding























Deal Volume and Total Deal Value

The VC deal volume in the automation space has increased over the past five years, and the capital invested has doubled from \$7B in 2018 to \$14B in 2022. 2023 is a slower year consistent with the overall market

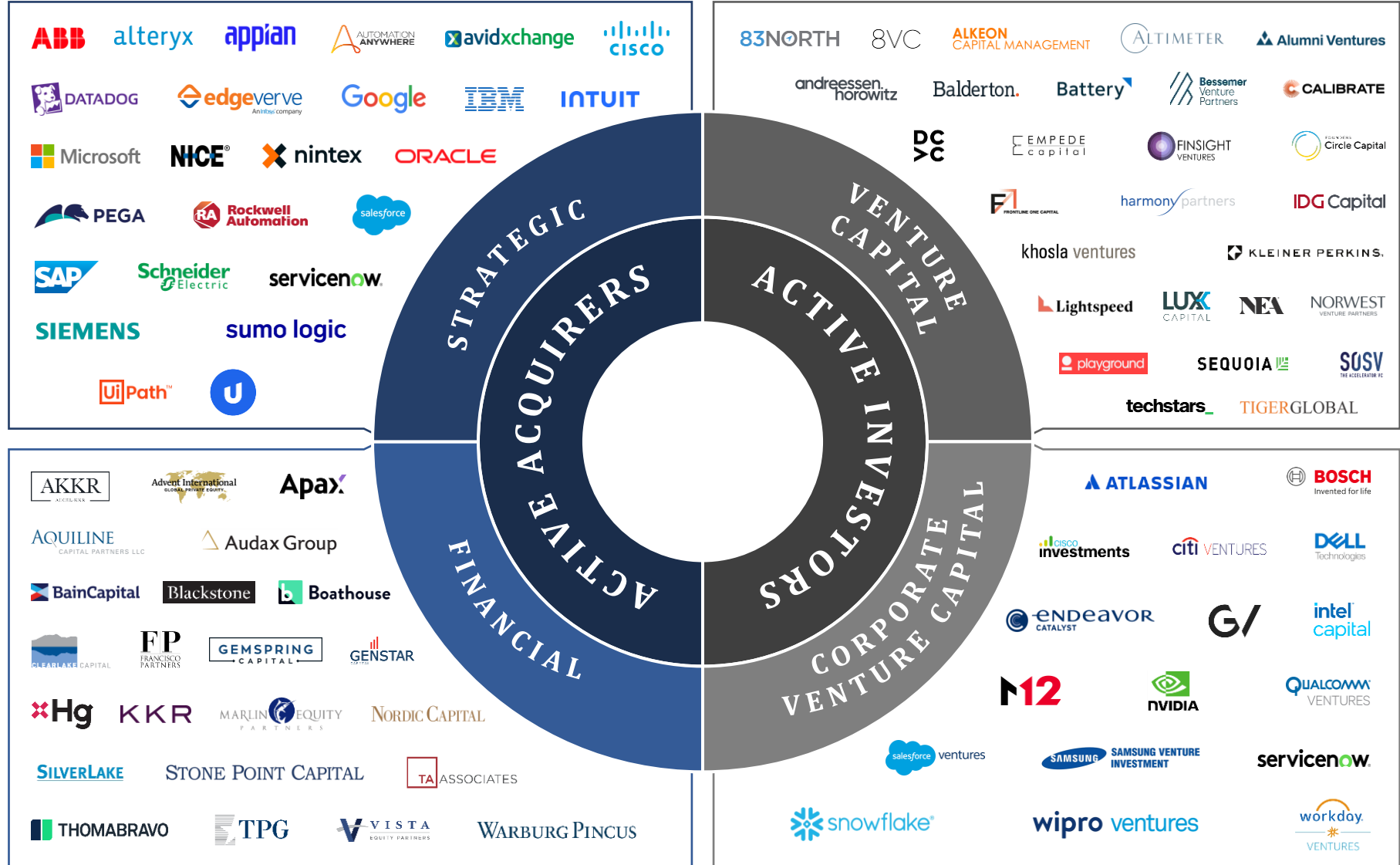


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Recent VC Investments

Deal Date	Target	Investor	Key Takeaways	Funding Round / Amount Raised
Mar 7, 2023		 	This funding round will give Amelia the financial foundation to extend its leadership position in the market and double down on serving its customers with innovative, explainable AI products	\$175M
Mar 9, 2022			The company intends to use the funds to scale sales and marketing efforts and to advance its HyperApp platform which combines Robotic Process Automation, Intelligent Document Processing, and no-code workflow management and software creation	Series B / \$53M
Feb 22, 2022			The proceeds will be used to expand its team and accelerate the development of its platform	Series A / \$43M
Feb 3, 2022		 G SQUARED	The company intends to use the new funds to expand automation capabilities and communities allowing users to get more productivity from their business documents and data	Series B / \$52M
Feb 1, 2022		 	The proceeds will help fund scale-up and expand deployment of automation in lab workflows, in the UK and internationally	Series B / \$50M
Nov 15, 2021		 	The funding will be used to bolster the company's hyperautomation capabilities and products with an objective to expand customer coverage as well as global partnerships	Series C / \$150M
Oct 18, 2021			The funding will be used to expand EMEA customer success team and senior leadership, setting up a customer advisory board in Europe and expanding its ecosystem of partners	Series E / \$200M
Jan 14, 2021		 	Sequoia Capital and Steadfast Financial bought shares from some of the company's original investors in January 2021, raising Zapier's valuation to \$5 billion	NA

Select Investors & Buyers for Automation Sector - M&A, VC & CVC ALLIED ADVISERS



About Allied Advisers

A hand in a suit sleeve points towards a futuristic digital interface. The interface features a large central circle with the word 'AUTOMATION' in a glowing blue font. Surrounding this are several smaller circular elements containing various data visualizations: a bar chart with an upward arrow, a globe, a gear, and a network diagram. The background is a dark blue with a grid of light blue dots and lines, suggesting a digital or technological environment.

Contact us: info@alliedadvisers.com

Allied Advisers: Investment Banking for Technology Companies and Investors

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