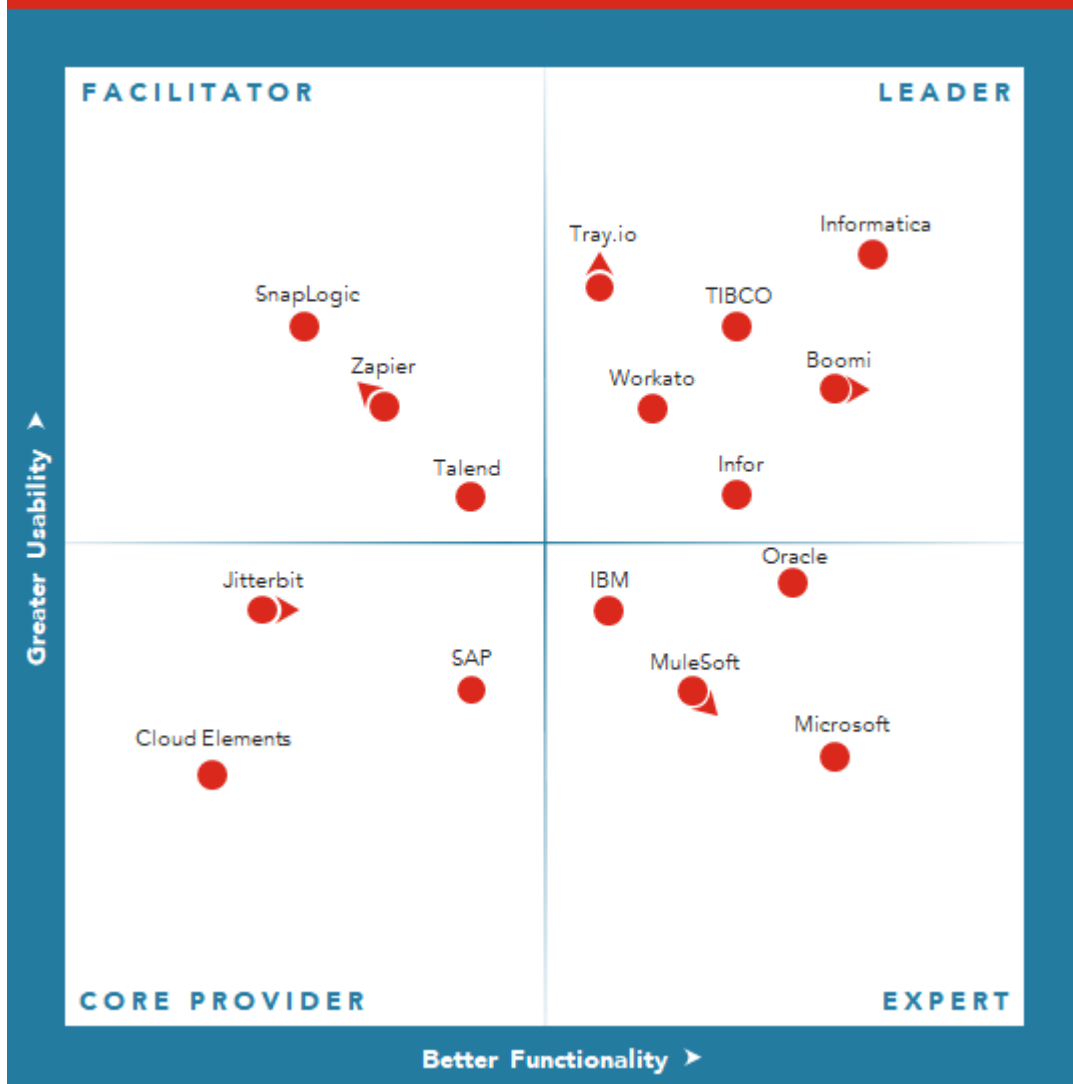**NUCLEUS RESEARCH**

IPAAS TECHNOLOGY VALUE MATRIX 2023

ANALYST
Alexander H. Wurm

THE BOTTOM LINE

In 2023, organizations continued to adopt digital systems at a rapid clip, extending the size and complexity of corporate technology stacks. As a result, Integration Platform as a Service (iPaaS) solutions have become crucial, providing organizations with a centralized hub to develop integrations, automate workflows, and monitor/manage integrations across disparate systems. Looking ahead through the following 18 months, Nucleus expects further adoption of iPaaS solitons, especially as businesses lean on centralized monitoring and automation to cut costs without sacrificing scalability.

iPaaS
Value Matrix | May 2023

NUCLEUS RESEARCH

FACILITATOR | LEADER

Tray.io
Informatica
SnapLogic
TIBCO
Zapier
Boomi
Workato
Talend
Infor

Greater Usability ▲

Oracle
Jitterbit
IBM
SAP
MuleSoft
Cloud Elements
Microsoft

CORE PROVIDER | EXPERT

Better Functionality ▶

OVERVIEW

Over the past few years, corporate technology stacks have continued to expand, bringing with it additional cost and complexity. This "rising tide" has lifted the entire middleware market, although, integration platform as a service (iPaaS) solutions have continued to stand with their ability to drive down total cost of ownership (TCO), reduce integration costs, and automate workflows. This is especially critical in 2023 as macroeconomic conditions have

stressed the value of cost savings, especially the value generated by eliminating unproductive tasks and automating repetitive processes. iPaaS solutions provide businesses with a unified platform to manage data flows, ensure data quality, and automate workflows, which helps them overcome the hurdles of integrating disparate systems and applications in their ever-evolving software ecosystems. By streamlining processes and executing tasks efficiently, these platforms simplify the complexities associated with managing diverse data sources and applications.

When it comes to customer adoption, priorities have shifted to reflect the changing market landscape in 2023. Customers are now focused on addressing specific pain points and use cases rather than seeking a one-size-fits-all solution. At the same time, businesses are looking to reduce costs with the rise of no-code and low-code tools, and Integration Platform as a Service (iPaaS) solutions that offer extensive functionality while remaining user-friendly for non-technical users have seen significant growth in adoption.

Vendors in the middleware market have responded to these customer priorities by targeting investment in features and capabilities that align with prospective users' needs. One area of focus has been the development and integration of machine learning technologies to monitor and manage APIs, support data quality solutions, and automate workflows.

In this Value Matrix, vendors are positioned according to the relative usability and functionality of their respective solutions, as well as the value that customers realized from each product's capabilities (Nucleus Research V67 – *Understanding the Value Matrix* – April 2021) and presented as a snapshot of the current market rather than an empirical ranking of vendors. The arrows indicate perceived momentum in the indicated direction with respect to usability and functionality. Positioning and momentum are informed primarily by conversations with end-users, along with the most recently released capabilities/features and areas of vendor investment.

LEADERS

Leaders in this year's Value Matrix include Boomi, Infor, Informatica, TIBCO, Tray.io, and Workato.

BOOMI

Boomi is placed as a leader in the 2023 iPaaS Technology Value Matrix. Boomi offers a cloud-native iPaaS, delivering flexibility, scalability, and availability for organizations deploying applications and data across diverse environments. Boomi utilizes its lightweight runtime engine, the Boomi Atom, to support a scalable and distributed architecture, and

customers can cluster multiple Atoms to create a Boomi Molecule and run multiple Atom processes concurrently. The platform features various capabilities supporting API management, application integration, ELT, electronic data interchange (EDI), B2B integration, master data management (MDM), data cataloging, and low-code automation, giving users a unified tool for data integration, data management, and process automation. Boomi iPaaS also features over 500 prebuilt application connectors and starter processes to accelerate time to value. With these capabilities, Boomi iPaaS enables citizen integrators and seasoned developers to drive faster time to market for connected services, react faster to dynamically changing business conditions, and reduce costs from legacy applications and processes.

Over the past year, Boomi has continued to extend the value proposition of Boomi iPaaS with the following announcements and releases:

- Boomi added over 130 connectors, including over 37 new AWS connectors. Boomi also released an automated pipeline for customer submission from Boomi's open-source repository on Bitbucket.

- Boomi announced the general availability of the API Policy Adapter, enabling users to configure customer API Gateway policies. With this feature, users can enable additional routing, validation, or data manipulation before the request is processed by runtime. The vendor also released API Management Metrics and an API Dashboard and extended its B2B and EDI capabilities with ODETTE support for the automotive industry.

- Boomi added over 100 new solutions to the Boomi Discover Portal, including integration and workflow automation recipes. The vendor also released Custom Catalog in early access to enable customers to build private marketplaces.

- Boomi introduced capabilities for smart creation of a Master Data Hub data model from the data catalog.

- Boomi released Integration Runtime QuickStart accelerators for provisioning Boomi Runtime on Microsoft Azure IaaS, one click API creation from an integration processes, and established new infrastructure in Japan to support mounting data sovereignty requirements.

- Boomi also released the Integration Design Quick Start Wizard to help users rapidly build integrations between their applications in an intelligent guided experience in a few clicks.

INFOR

Infor is positioned as a leader in the 2023 iPaaS Technology Value Matrix. The vendor's iPaaS offering is delivered as a standalone solution or as a part of the Infor OS platform, a multi-domain enterprise technology platform utilized by all Infor CloudSuites. Infor's iPaaS consists of two products: Infor Intelligent Open Network (ION) and ION API gateway. With Infor ION, customers can integrate both Infor and non-Infor systems and support complex hybrid, edge, and multi-cloud approaches. Users can also connect applications to the events in their business process, automate data movement across systems, monitor for business exceptions, or trigger workflows with an event-driven architecture. Infor ION API Gateway is the common gateway where Infor hosts its RESTful APIs. Users can also use the ION API Gateway to proxy and access third-party APIs in the same place. The Infor OS Platform also delivers 'Big Data' management, data transformation across all popular data formats, and support for synchronous and asynchronous integration patterns. Infor OS also works out of the box with Coleman AI to automate the training, retraining, and live evaluation of ML models. Infor Coleman AI also provides tools for intelligent automation, natural language processing, and machine learning to enable various user personas.

Over the past year, Infor has continued to deliver improvements to Infor OS and its iPaaS offering.

- Infor announced the integration of Jupyter Notebook with its Coleman AI platform. Users can now leverage built-in Python libraries and features, including an intelligent editor to explore data, develop algorithms, and test them efficiently to drive faster time to market for ML applications.

- Infor announced Backend as a Service (BaaS) as a dedicated API lifecycle platform to build standalone serverless cloud-native microservices and expose them as REST APIs in the Infor OS API Gateway. The Infor BaaS framework lets the API developers focus on building their business logic as APIs while freeing them from the complexity of managing the underlying cloud infrastructure and deployment.

- The complete Infor OS platform, including iPaaS, data management, extensibility, and AI/ML, is now being offered as a standalone platform on AWS marketplace as Infor looks to build on its success in the enterprise software market and broaden the reach of its technology platform.

INFORMATICA

Informatica is placed as a leader in the 2023 iPaaS Technology Value Matrix as recognized for Informatica Data Management Cloud (IDMC). Informatica iPaaS, a service of IDMC, provides a centralized data management platform that enables organizations to connect, curate, and consume data in real time across multi-cloud and hybrid environments. The

vendor combines capabilities for application integration with adjacent functionality for API management, data integration, data quality, data governance, master data management, and data sharing, operating as a one-stop shop for end-to-end data management. Specific to application integration, Informatica iPaaS gives organizations the tools to connect various cloud and on-premises applications, manage APIs, and automate business processes across applications and environments. It does so with a codeless interface featuring a drag-and-drop UI to upskill non-technical users and eliminate complex coding requirements. The vendor also offers discovery-centric marketplaces, and business interoperability portals, all within a single platform to empower self-service integration and standardize API creation and management. Informatica enhances the efficiency of its services with the metadata-driven artificial intelligence of its CLAIRE engine and microservices architecture putting AI-powered intelligent data management and digital transformation capabilities in the toolbox of enterprise IT teams.

Over the past year, Informatica has continued to deliver improvements to Informatica iPaaS. offering.

- Informatica released the Informatica Process Integration Package (iPiP), enabling communities of designers, developers, and technologists to collaborate better across organizations. iPiP will support outbound and inbound community sharing of integration.

- The vendor introduced the Human Workflow & the Human Task Inbox, giving customers the chance to define and manage business processes that require human approval, validation, verification, or review to ensure accuracy compliance. These can range from simple processes with a couple of steps to extremely complex semi-automated business processes.

- In April 2023, Informatica launched API Center, a new service running on Informatica IDMC to simplify API lifecycle management. This service oversees an API from its creation to retirement by taking care of the three core stages of the API lifecycle process: design and implementation, deployment and governance, and operation and monitoring.

- Informatica introduced Advanced Data Integration, which analyzes workloads and selects the appropriate execution engine to ensure optimal performance and manages execution styles to promote cost efficiency.

- The vendor also released InfraCore, which simplifies efforts for data scientists and developers by delivering accessible and reusable function calls that consolidate thousands of lines of code.

TIBCO

TIBCO is placed as a leader in the 2023 edition of the iPaaS Technology Value Matrix, as recognized for its TIBCO Cloud Integration product. The platform caters to a wide range of users, from business professionals to seasoned developers, with integration capabilities tailored to specific use cases. This adaptability enables organizations to meet a variety of connectivity requirements. Application integration, B2B integration, edge processing, IoT integration, streaming use cases, web and mobile integration, and process automation are all supported by TIBCO Cloud Integration. For on-premise and hybrid environments, TIBCO can also integrate legacy interfaces, industry protocols, and file-based systems.

TIBCO's iPaaS solution includes a suite of pre-built connectors, app templates, and solution accelerators, a visual no-code development environment with web-based connectivity, model-driven development, and visual event-driven design. This environment promotes the development of market entities such as accelerators, applications, and connectors. TIBCO Cloud Integration apps can be deployed on-premises, in the TIBCO Cloud, in IaaS or PaaS of choice, serverless, containers, and on edge devices. In addition, the TIBCO Cloud Integration marketplace enables partners and developers to share connectors and accelerators, which users can access, rate, and review.

Recent updates include:

- TIBCO Cloud introduced intelligent guidance and AI/ML-based smart mapping technology to streamline the integration process and expedite data integration initiatives by providing mapping recommendations based on developers' previous choices.

- TIBCO Cloud enhanced its platform by empowering business users to consolidate enforceable decisions across the organization, enabling them to delegate decision authority to a shared service within the platform and reducing inconsistent decision-making.

- TIBCO announced a new API Modeler for designing AsyncAPIs for Apache Kafka, seamless sharing and discovery of event-driven APIs through an embedded registry, and point-and-click functionality for publishing and subscribing to events during solution development, eliminating the need for custom code.

TRAY.IO

Tray.io recognized as a leader, in the 2023 edition of the iPaaS Technology Value Matrix. The company boasts a customer base of approximately 70,000 across North America, EMEA, and the Asia Pacific, and provides two distinct product lines: Tray Platform and Tray Embedded. The Tray Platform is an API-first integration and automation solution that equips

users with a user-friendly, web-based no- and low-code integration and automation builder. The platform's intuitive drag-and-drop interface enables users to design workflow processes, connectors, and business logic, regardless of their technical background. Citizen users have access to the Tray Platform's comprehensive connector library and can easily establish connections to REST, SOAP, and GraphQL endpoints as necessary. For skilled developers and IT teams, Tray.io offers advanced enterprise-level capabilities that facilitate automation and integration at scale, such as cooperative workspaces, log streaming, error management, rollback history, and on-premises connectivity options. Built on a serverless architecture, Tray.io allows for elastic scalability without the need to allocate workers or nodes. Its innovative pricing model delivers considerable value, supporting unlimited users and connectors. Additionally, Tray.io offers Tray Embedded, a specialized version of the Tray Platform developed for ISVs and service organizations. This enables the creation and deployment of custom in-product or tailor-made customer integrations with greater efficiency compared to manual coding.

Tray.io has continued to innovate in order to drive value for its current and prospective users.

- In June 2022, Tray.io unveiled features to accelerate enterprise hyperautomation and facilitate fusion team collaboration on complex projects, including an industry-first low-code experience for creating, testing, and publishing connectors to any REST API with built-in versioning capabilities, a Connectivity API to access Tray.io's 600+ connector library through a single API gateway, a projects feature for easy collaboration on sophisticated multi-workflow automations, secure development and testing of workflows with Sandbox Workspaces and test users, and enhanced data sovereignty with multi-region support and compliance in the U.S., E.U., and APAC.

- In December 2022, Tray.io released Insights Hub, providing modern instrumentation and observability, enabling business and IT teams to monitor adoption, track usage, troubleshoot, and maintain visibility and control for automation at scale.

- In February 2023, Tray.io introduced a solution for RevOps teams, offering packaged workflows and purpose-built connectors for lead lifecycle management, including 80 standardized templates for efficient lead capture from various sources and connectors for key marketing, sales, and revenue tools such as AdRoll, Gong, Showpad, Iterable, Amplitude, Salesforce, HubSpot, Shopify, and Netsuite.

WORKATO

Workato is recognized as a leader in the 2023 iPaaS Technology Value Matrix. Workato's iPaaS solution provides comprehensive business process and workflow automation capabilities by connecting applications and data via a variety of triggers, connectors, and

actions. Polling, API endpoints, real-time webhooks, scheduled events, and on-demand input-based interactions are among the use cases supported by the platform. Workato strives to provide advanced integration capabilities while also providing a user-friendly interface and low-code tools for non-technical users. API management, RPA, ETL, B2B, and IoT are among the integration scenarios supported by the platform. Workato, as a fully managed elastic platform, promotes scalability while lowering ongoing maintenance and administrative costs via automated resource provisioning and load balancing.

The platform uses machine learning to create a "Recipe IQ" feature that assists users in building integrations and automations. This feature allows for faster integration deployments with personalized recommendations throughout the development process. Workato also includes automatic version control, which facilitates iterative development and allows users to roll back to previous versions without losing work. Workato also provides a bot platform called Workbot, which allows customers to automate workflows within Slack. More advanced developers can deploy and customize process integrations that connect cloud applications, on-premises applications, and databases to automate business workflows.

Recent product updates and announcements include:

- SCIM Provisioning: Workato now offers SCIM support, providing full lifecycle management actions and user provisioning across multiple systems and platforms. This streamlines user identity management and access to resources, improving security and automation.

- Governance and Access Control: Workato has introduced granular permissions for Lookup Tables, API platform, and on-prem role-based access, enhancing access control across the platform. Additional access control enhancements and integration with SCIM support will provide improved security and control over sensitive functions within Workato.

- On-Prem Agent (OPA) management and security have been improved with the introduction of Cloud Profiles, allowing for easier connections and centralized management of OPAs.

- The OPA 2.15 release introduces Cloud Profiles along with other enhancements for a better user experience.

- The new On-Prem Agent IP Allow List feature provides increased security by allowing administrators to add additional IP restrictions at the group level.

- SAML SSO role sync enhancement simplifies role management by automatically syncing user roles from the identity provider directly to Workato.

- AWS Secrets Project Level Management now offers more granular control over IAM roles, allowing for refined permissions for specific systems.

- Environment Properties now have new granular permissions (View, Edit, Create, Delete) to provide better governance and security across the platform.

- The new Oracle Fusion Cloud connector enables users to automate processes across various Oracle Fusion Cloud modules, such as CRM, Financials, Procurement, HCM, and SCM.

- Excel connector enhancements include new actions (Add rows, Add Bulk rows, Update rows, Search rows) and triggers for improved automation and data management in Excel documents.

EXPERTS

Experts in this year's Value Matrix include IBM, Microsoft, MuleSoft, and Oracle.

IBM

IBM is placed as an expert in the 2023 iPaaS Technology Value Matrix. IBM App Connect, the vendor's iPaaS solution, gives users various tools to connect applications and data and automate workflows across diverse environments. The platform features a drag-and-drop user interface allowing users to develop integrations in a fraction of the time with intelligent AI-powered mapping recommendations between sources and destination apps. It also features hundreds of prebuilt connectors and customizable templates, enabling users to rapidly connect SaaS applications and build automated workflows. IBM App Connect also features various hybrid management tools, giving administrators the capabilities they need to manage integrations across cloud and on-premises environments, reducing operational costs and administrative overhead. The platform also provides visualization and dashboard tools to extend visibility into the performance and health of integration flows.

IBM has continued to innovate throughout the past year to enhance its value proposition.

- In October 2022, IBM integrated the storage technologies from Red Hat OpenShift Data Foundation (ODF) as the foundation for IBM Spectrum Fusion, combining IBM and Red Hat's container storage technologies.

- In November 2022, IBM announced the availability of IBM App Connect Enterprise delivered on a software-as-a-service basis through the AWS Marketplace. Now

organizations can buy IBM software products that are listed on the AWS Marketplace from IBM resellers and use AWS committed spend to finance those purchases.

- In March 2023, IBM announced a strategic partnership with Wasabi Technologies to provide customers with a cost-effective and scalable approach to leverage cloud technology.

MICROSOFT

In the 2023 edition of the iPaaS Technology Value Matrix, Microsoft is ranked as an expert with its Azure Integration Services (AIS). The AIS comprises four primary components: Azure API Management, Azure Logic Apps, Azure Service Bus, and Azure Event Grid. Users can use Azure API Management to manage traffic exposure, control public access, improve integration speed and efficiency, and monitor API patterns. AIS API Management, which is compatible with various frameworks such as.NET and Java, also enables customers to create facades or proxies of real APIs in backend applications, placing managed API on top of Service Bus, Logic Apps, and other services. Azure Logic Apps provides a simple no-code environment for automating business processes, such as system-to-system or user-to-system integration. Customers can use over 200 pre-built connectors to integrate applications across on-premise and cloud environments, reducing time-to-value. Azure Service Bus offers dependable cloud messaging for on-premises and cloud software, promoting the development of scalable solutions and ensuring consistent performance under fluctuating loads. The Azure Service Bus supplements API Management by addressing asynchronous or non-communicating integrations. Customers benefit from high availability, geo-replications, and built-in disaster recovery when using this asynchronous approach for applications in both cloud and on-premises environments. Azure Event Grid removes the need for the receiver to poll for new messages by eliminating the need to monitor new message arrivals. Instead, the receiver creates an event handler for the desired event source, which speeds up message retrieval.

MULESOFT

MuleSoft is a leader in the 2023 iPaaS Technology Value Matrix. MuleSoft's Anypoint Platform enables API-driven connectivity, allowing for the seamless integration of applications and data flows across on-premises and cloud environments. This comprehensive platform includes business automation, legacy system modernization, omnichannel support, B2B EDI, IoT, and DevOps capabilities. MuleSoft enables customers to deploy APIs and integrations in a variety of environments, including CloudHub infrastructure, private clouds, and private data centers via Runtime Fabric, as well as on-premises via frameworks such as Docker and Kubernetes. MuleSoft supports a wide range of

integration use cases, from citizen integrators to seasoned developers, including API management, IoT, CDC, and orchestration.

Users can shorten project development cycles by utilizing prebuilt Catalyst Accelerators, connectors, and templates. Anypoint Studio from MuleSoft provides extensive support for complex integrations, allowing developers to create APIs and integrations graphically or in XML. The SDK for the platform allows both non-technical users and experienced developers to connect applications, systems, and data using prebuilt connectors or customized templates for customized integrations. MuleSoft also supports integration testing, CI/CD pipelines, and a marketplace for discovering and reusing APIs, templates, and connectors, which speeds up development cycles even further.

Recent product updates in the last 12 months include:

- In July 2022, the vendor introduced no-code features for automating routine tasks using MuleSoft RPA and connecting data from various systems, such as Slack, Stripe, and Workday, through MuleSoft Composer. The solution is fully integrated with Salesforce Flow1, enhancing automation across Customer 360, leading to time savings, increased productivity, and improved customer experiences for sales and service teams.

- Salesforce announced the new "Automation Everywhere Bundle." The bundle aims to save time, boost productivity, and enhance customer experiences within budget constraints. It includes Composer for no-code process automation with pre-built connectors, RPA for reducing manual tasks across various systems, and Anypoint Platform for API management and governance, enabling end-to-end automation at scale across modern and legacy systems with security and governance features.

- MuleSoft successfully completed the Information Security Registered Assessors Program (IRAP) assessment, ensuring compliance with Australian government policies and guidelines for secure data processing up to PROTECTED classification level. The milestone highlights MuleSoft's commitment to adhering to local regulations and certifications, fostering trust, and enabling government departments to innovate rapidly and deliver enhanced customer experiences.

ORACLE

Oracle is positioned as an expert in the 2023 iPaaS Technology Value Matrix, recognized for Oracle Cloud Infrastructure (OCI) integration services. OCI integration is an integration platform offering unified capabilities for API management, application integration, data integration, event streaming, and process automation. The solution supports connecting ERP, HCM, and CS solutions through application adapters, drag-and-drop capabilities, B2B capabilities for electronic data interchange (EDI), business process management that

supports BPMN and DNN process models, and business insights for digital processes. To accelerate financial return, the platform features various prebuilt connectors for SaaS and on-premises applications, templates for process automation, and a low-code UI. Oracle also offers Oracle SOA Suite to deliver more developer-centric capabilities, including enterprise service bus, managed file transfer, B2B, and EDI.

Oracle has continued to innovate throughout the past year to enhance the value proposition of OCI integration services.

- In October 2022, Oracle released an update to its open-source virtualization platform, Oracle VM VirtualBox, to better enable customers to create, manage, and run virtual machines.

- In January 2023, Oracle announced support for the Red Hat Enterprise Linux (RHEL) operating system on OCI, providing additional OS options while enabling joint customers to migrate workloads to Oracle's Cloud.

- In April 2023, Oracle released a confidential computing capability for OCI integration services. This capability encrypts data while it's being processed using AMD Secure Encrypted Virtualization or AMD Secure Memory Encryption.

FACILITATORS

Facilitators in this year's Value Matrix include SnapLogic, Talend, and Zapier.

SNAPLOGIC

SnapLogic is placed as a facilitator in the 2023 edition of the iPaaS Technology Value Matrix. SnapLogic's iPaaS combines various solutions for application integration, data integration API management, and AutoSync, giving organizations a single solution to address multiple integration, automation, and management use cases. The platform offers capabilities to integrate, automate and orchestrate the flow of enterprise data and provides accessible tools to enable citizen integrators of various departments and roles. SnapLogic prides itself on cross-departmental support, offering capabilities to uplift citizen developers in HR, sales, marketing, IT, and finance departments. The vendor also offers over 700 pre-built intelligent connectors called "snaps" allowing users to easily connect popular applications, databases, big data platforms, machines, devices, and more.

SnapLogic has continued to innovate throughout the past year to enhance its value proposition.

- SnapLogic announced its availability on the Google Cloud Marketplace and successfully achieved a Google Cloud Ready – AlloyDB designation.

- SnapLogic released SnapGPT, a generative AI solution allowing users to quickly integrate and automate business processes using natural language.

- The vendor partnered with Snowflake, giving joint customers the flexibility and scalability needed to make data stored in the Snowflake Data Cloud highly available and actionable.

TALEND

Talend is placed as a facilitator in the 2023 iPaaS Technology Value Matrix. The vendor's flagship offering, Talend Data Fabric, offers a unified platform with capabilities supporting data integration, application integration, API management, data integrity, and data governance. Specific to application and API integration, users can implement point-to-point SaaS integrations, scalable modular APIs, pub/sub messaging, and ESB use cases as part of their event-driven architecture. Talend complements these functionalities with visualization tools and wizards that simplify the full development lifecycle from design, testing, and documentation to implementation and deployment.

Talend has continued to innovate throughout the past year to enhance its value proposition.

- Talend went live with the Winter '23 release of Talend Data Fabric, introducing advanced capabilities and enhancements to simplify and automate cloud data migrations, expand data connectivity, and improve data visibility, quality, control, and access.

- Qlik announced its intentions to acquire Talend, to strengthen its position in the data integration market. This proposed combination pairs Qlik's data analytics and integration expertise with Talend's cloud-native data integration, quality, and governance and provides an elevated value proposition for enterprise customers (Nucleus Research X75 – Qlik and Talend unite for data warehouse modernization – April 2023).

- Talend achieved Elite tier partner status with Snowflake and was approved by the vendor as a Snowflake Ready Technology Validation Partner. Earlier in the year, Talend also announced a partnership with Passerelle and Snowflake, providing new vertical solutions, beginning with financial services.

- Talend announced its support for Amazon Redshift Serverless. This announcement also includes complementary features such Talend Trust ScoreÔ, which automatically crawls and provides a health assessment of data in Redshift.

ZAPIER

Zapier is placed as a facilitator in the 2023 IPaaS Technology Value Matrix. Zapier is a integration platform capable of automating business processes by utilizing a range of "Zaps", triggers, and actions, which can connect user applications and automate various workflows and tasks. With low-code tools, Zapier simplifies the task of developing integrations and managing APIs allowing users to easily streamline data flows and connect applications. It also allows users to add actionability to their data processes by triggering actions such as sending emails, saving attachments, creating meetings, and more. Zapier combines automation and integration with user-friendly tools that do not require technical expertise. This approach allows businesses to work with existing resources and do more with less. While Zapier is primarily designed for the citizen developer, its technical users can also benefit from advanced features such as the Paths tool that enables more complex integrations with conditional logic. The platform also includes tools such as Filter, which facilitates conditional logic, and Delay, which allows users to control automation timing, are also available.

Updates throughout the past year include:

- In October 2022, Zapier launched Zapier Tables and Interfaces, a database service, and a UI builder to allow end users to interact with existing Zapier workflows.

- In January 2023, Zapier announced a Transfer service allowing users to schedule data transfers between applications on an hourly, daily, weekly, or monthly basis.

- In March 2023, the vendor announced a Zapier ChatGPT plugin powered by its new Natural Language Actions API. This allows users to connect over 5000 apps such as Google Sheets, Gmail, or Slack and execute over 50,000 actions, including search, update, and write, directly within ChatGPT's interface.

- In April 2023, Zapier announced new features, including Version Rollback, Audit Log, and Custom Error Notifications, making it easier for users to build and manage their workflows.

CORE PROVIDER

Core Providers in this year's Value Matrix include Cloud Elements, Jitterbit, and SAP.

CLOUD ELEMENTS

Cloud Elements is a core provider in the 2023 IPaaS Technology Value Matrix. Cloud Elements looks to set itself apart from other iPaaS solutions by focusing on organizations

that have already moved their business processes to the cloud-based environment. Cloud Elements concentrates on simplifying integration processes based in the cloud and does not support on-premises or hybrid environments. By leveraging Cloud Elements, customers can use a single platform to integrate multiple cloud-based solutions, reducing developer time and simplifying coding through centralization. Users can quickly develop integrations with multiple cloud platforms like Salesforce, Oracle, HubSpot, and Microsoft Dynamics 365, enabling real-time connectivity to customer systems. One advantage of using the Cloud Elements approach is that the API will not be affected by changes made to an endpoint API, which is particularly beneficial when applications and systems undergo changes. This means that users can still create connectors even as their customers expand to new platforms and solutions, thereby adding value to the integration process.

JITTERBIT

Jitterbit is placed as a core provider in the 2023 iPaaS Technology Value Matrix. The Jitterbit Harmony Platform is an iPaaS solution that includes pre-built templates, workflow automation tools, API management tools, low-code application development, and EDI capabilities, helping businesses automate and simplify their processes. Jitterbit provides various integration capabilities to support multiple integration use cases, including ETL, data cleansing, API management, and B2B integration. The Jitterbit API platform offers an intuitive graphical interface for developing new integrations and supporting existing ones, simplifying development processes for non-technical users. Jitterbit also offers prebuilt integrations to Oracle Netsuite, Coupa, Epicor, SAP, Workday, BMC Helix, Sage, ShipStation, Shopify, Salesforce, MS Dynamics, Adobe Commerce, Adobe Commerce, and more.

Product updates in the last 12 months include:

- In early 2022, Jitterbit announced our expansion into the Latin American region with the acquisition of Wevo.

- In April 2022, Jitterbit acquired PrimeApps and expanded its Harmony integration platform with App Builder, a low-code application development tool designed to help organizations build and maintain web and mobile-based applications. This enables organizations to connect systems and build business applications for workflow automation and data aggregation within a single platform.

- In January 2023, Jitterbit announced Message Queue, a cloud-based, multi-tenant message queuing service that is fully integrated into Harmony.

- The vendor more than doubled (2.5x) its native connectors and enhanced the quality of many existing connectors.

- Jitterbit added EDI capabilities to its Harmony platform as well as Managed Integration Services.

SAP

SAP is placed as a core provider in the 2023 IPaaS Technology Value Matrix. SAP Integration Suite aims to provide efficient integrations between both on-premises and cloud-based applications, ensuring secure and certified data flows for SAP clients while enhancing collaboration. With SAP Integration Suite, organizations get an API-centric integration platform capable of supporting various modern and legacy systems. The suite comes with pre-built APIs from SAP and third-party vendors that can be accessed through the SAP API Business Hub to accelerate time to value. It is a versatile platform that supports various integration patterns, including B2B, business-to-government (B2G), mobile app integration, application-to-application, and IoT. SAP Integration Suite provides intuitive tools and pre-defined integration flows to support a range of user personas, catering to non-technical users and experienced developers within an organization's workforce. The vendor pairs these capabilities with its solution advisory methodology, enterprise-grade governance, comprehensive security, and managed infrastructure scalability and reliability to ensure positive integration outcomes.

Product updates in the last 12 months include:

- In 2023, SAP released an updated hybrid deployment option, which includes a beta release of "Edge Integration Cell" as an on-premises version of the new integration runtime "Integration Cell." This supports three integration use cases: classic on-premises process orchestration, on-premises API-led integrations, and event-driven integrations.

- In Q1 of 2023, SAP enhanced the advanced event mesh capability, which serves as a real-time event streaming, management, and monitoring platform. This includes a distributed deployment of high-performance event brokers in a federated setup and an event portal for event design, cataloging, and insights, making it ideal for high-volume event-led integration use cases.

- SAP has introduced beta releases of "Graph" as part of API Management, which allows users to navigate through a huge graph to find business data, and an enhanced API Business Hub Enterprise as a central API catalog for SAP and non-SAP API gateways.