Ovum Decision Matrix: Selecting an Integration PaaS (iPaaS) Solution, 2015-2016

Tackling cloud and hybrid integration challenges

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Summary

Catalyst

The rise of software-as-a-service (SaaS) and the increasing heterogeneity of enterprise applications portfolios and data sources have necessitated a shift to suitable alternatives to traditional integration approaches. Integration platform-as-a-service (iPaaS), a sub-segment of PaaS, continues to evolve as an integration approach capable of meeting a wide range of integration needs, including on-premise, cloud, B2B, and mobile application integration.

Enterprises should consider iPaaS as a means to ease the complexity of hybrid integration as they continue to focus on managing the complex interplay of business needs and persistent budget constraints, and still achieve faster time to integration. This Ovum Decision Matrix (ODM) is a comprehensive evaluation to help enterprise/solution/integration architects, integration competency center (ICC)/integration center of excellence (COE) directors/managers, and line-of-business (LOB) leaders select an iPaaS solution best suited to their specific requirements.

Ovum view

IT is swamped with initiatives focused on enabling new business models, customer engagement channels, sales and marketing strategies, and service delivery capabilities. However, there is little respite from persistent time and budget constraints. The role of an ICC is undergoing a significant change, with LOBs more aggressive in moving ahead with the adoption of agile approaches to integration to cater for the requirements of business-critical initiatives. iPaaS has benefited from this change, which signifies a strategic shift in enterprises' integration strategy.

Integration is often messy and complex and beyond the core competencies of IT. In the case of small and midsize enterprises (SMEs), the proposition of maintaining dedicated and skilled resources to support integration requirements is not attractive, and is at times beyond the IT budgets. These issues and constraints have led to the emergence of iPaaS.

Ovum's analysis reveals that six out of the nine vendors included in the ODM have already supported enterprise-scale integration initiatives, which involve three or more use cases, including those extending beyond SaaS and on-premise integrations, such as, for example, B2B/mobile application/social application integration. This signifies the acceptance of iPaaS as a "many-to-one" integration approach, while also indicating the higher maturity of key iPaaS provisions.

The evolving iPaaS vendor landscape comprises both established and specialized integration vendors, and some of these vendors have evolved from a "data integration" lineage, while for others iPaaS was a natural extension to their middleware portfolio. Nevertheless, most iPaaS vendors have expanded the capabilities of their solutions beyond core competency to improve positioning as a cloud-based application and data integration platform. This includes delivery of API management and data quality and management services on top of iPaaS.

A growing number of iPaaS vendors have not made the transition into a fragmented market. In fact, the top four vendors in this ODM account for over 45% of the global iPaaS market size. While this figure might reduce in future, it is highly unlikely that this market will follow a normal distribution. Nevertheless, a lower barrier to entry will continue to motivate the incubation of smaller iPaaS

vendors, while major vendors strengthen their market position. Ovum forecasts rapid growth for global iPaaS market, which is expected to cross the \$900m mark in 2019.

Ovum envisages the future of iPaaS as a much broader "Enterprise Integration-as-a-Service" phenomenon. This implies an evolution toward delivery of cohesive and flexible integration capabilities via the cloud for meeting application, B2B, and data integration, mobile enablement, API management, Internet of Things (IoT) integration, and process orchestration requirements of large enterprises.

Vendor solution selection

Inclusion criteria

The criteria for inclusion of an iPaaS solution in this ODM are as follows:

- The iPaaS solution should be available as a "standalone" cloud-based integration platform
 providing necessary tools, integration components, and resources for faster development of
 integration flows connecting SaaS and on-premise/other SaaS applications (or cloud-based
 data stores).
- Prebuilt connectors and integration templates offered with the iPaaS solution should not be confined to a specific SaaS ecosystem or available for only a very limited number of SaaS applications.
- From the perspective of core platform services, the iPaaS solution should have essential cloud characteristics, such as multi-tenancy, resource sharing, and rapid scalability, as well as allowing usage tracking and metering and supporting enforcement of service-level agreements (SLAs).
- The iPaaS solution should provide a centralized console for scheduling, monitoring, and managing integrations.
- The iPaaS solution should provide enterprise-grade security and governance features and capabilities, such as transport layer and application and network-level security and support for implementation and administration of governance policies.
- The iPaaS solution should have been generally available as of September 30, 2014. The vendor must have at least 30 enterprise (paid) customers using its iPaaS solution as of December 31, 2014.

Exclusion criteria

An iPaaS solution is not included in the ODM if:

- Integration capabilities/services are limited to cloud services brokerage (CSB)/integration brokerage arrangements.
- Integration capabilities/services are limited to B2B integration delivered via the cloud under self-managed or managed services models.
- Its usage is limited to the delivery of packaged integration for vendor's own SaaS applications
 or those provided by a specific set of independent software vendors (ISVs).

- The customer base is confined to only a few specific vertical industries.
- The vendor has no direct contact with end users (enterprise customers), and customer support and interaction is taken care of by ISV/SaaS/platform/channel partners. While some vendors may have a channel-sales-only approach or predominantly focus on a "packaged integration" business model, there should be some process for direct customer interaction.
- Its usage is limited to loading and replication of data to, from, and between cloud environments.
- It caters mainly for the requirements of citizen integrators.

Ovum ratings

Market leader

This category represents a leading iPaaS solution that Ovum believes is worthy of a place on most technology selection shortlists. The vendor has established a commanding market position with its iPaaS solution demonstrating relatively high maturity, good innovation and enterprise fit, and the capability of effectively meeting the requirements of a wider range of integration use cases, as well as executing an aggressive product roadmap and commercial strategy to drive enterprise adoption and business growth.

Market challenger

An iPaaS solution in this category has a good market position and offers competitive functionality and good price-performance proposition, and should be considered as part of the technology selection. The vendor has established a significant customer base with its iPaaS solution demonstrating substantial maturity and catering for the requirements of a range of integration use cases, as well as continuing to execute a progressive product and commercial strategy.

Market follower

An iPaaS solution in this category is typically aimed at specific integration use cases and/or customer segment(s), and can be explored as part of the technology selection. It can deliver the requisite integration capabilities at reasonable subscription charges for specific integration requirements.

Market and solution analysis

What exactly is an iPaaS solution?

Multi-tenancy, rapid scalability, a user-friendly development interface, and a rich set of prebuilt connectors and integration templates are the basic features of any iPaaS solution. Only multi-tenant, scalable cloud-based integration platforms providing the necessary tools and dedicated resources for faster development of integration flows connecting different applications and data sources, as well as offering enterprise-grade data security and governance for such interactions, can be termed as iPaaS solutions.

Merely delivering application and/or data integration capabilities via the cloud on subscription basis does not amount to iPaaS provision. In addition, Ovum does not consider an integration service confined to B2B integration delivered via the cloud to be an iPaaS solution.

Emerging iPaaS use cases

Ovum has closely tracked the emergence of iPaaS in the enterprise integration landscape and it is clear that both midsize and large enterprises realize the value iPaaS solutions deliver in terms of faster time to value and TCO savings. The first generation of iPaaS, which could be termed as a more robust and comprehensive version of integration-as-a-service solutions, was mainly used for on-premise-to-SaaS and SaaS-to-SaaS integration. However, over the last 12 to 18 months, there have been several implementations extending the use of iPaaS to on-premise-to-premise, B2B, and mobile application integration.

There are two facets to this trend. First, iPaaS adoption in several enterprises was driven by LOBs and once IT became conversant with the features and functionality of the solution, the use of iPaaS was extended to other integration scenarios. Second, several iPaaS vendors have expanded the features and capabilities of their solutions to cater for the needs of less-complex on-premise and B2B integration, and API management.

For example, while key iPaaS vendors such as IBM, Dell Boomi, and MuleSoft are already offering API management capabilities along with their iPaaS solutions, other iPaaS vendors such as SnapLogic, Cloud Elements, and Flowgear have introduced an initial version of API management capabilities. In addition, SAP has partnered with Apigee to offer API management capabilities (using Apigee Edge) with SAP HANA Cloud Integration.

In the context of mobile application integration, iPaaS solutions enable users to expose data associated with on-premise and SaaS applications as representational state transfer (REST) APIs for consumption by mobile applications. iPaaS vendors are also working on supporting "near realtime" integration for data-intensive integration scenarios. In addition, some iPaaS solutions allow on-premise deployment of runtime engines enabling on-premise-to-on-premise integration. This is particularly important for mitigating data security and privacy concerns regarding the use of iPaaS for enterprise application integration (EAI)-type scenarios

Ovum Decision Matrix: iPaaS, 2015-2016

The ODM bubble charts in Figures 2 and 3 represent the results of a comprehensive evaluation of nine iPaaS solutions meeting the inclusion criteria. Table 1 includes "Leaders", "Challengers", and a "Follower" as per the results and specifications of ODM evaluation and ratings framework.

As shown in Figure 2, there are a couple of distinct clusters, representing vendors having a relatively small difference in overall scrores across technology and execution dimensions. Market impact scores determining the bubble size were calculated based on the revenues and revenue growth achieved by various iPaaS vendors in 2014.

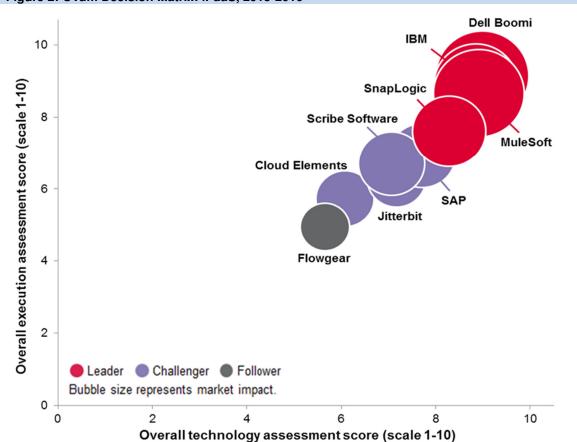


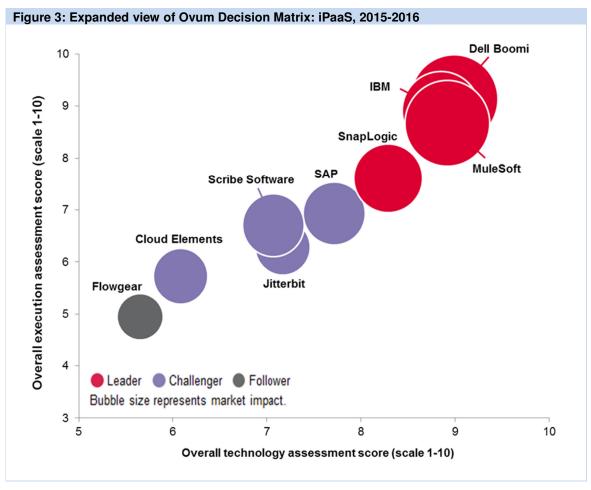
Figure 2: Ovum Decision Matrix: iPaaS, 2015-2016

Source: Ovum

Table 1: Ovum Decision	Matrix: iPaaS 2015-16
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Market leaders	Market challengers	Market follower
Dell Boomi	SAP	Flowgear
IBM	Scribe Software	
MuleSoft	Jitterbit	
SnapLogic	Cloud Elements	

Source: Ovum



Source: Ovum

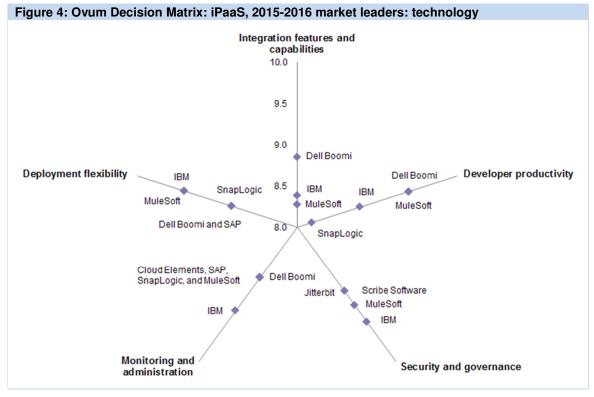
Market leaders: Dell Boomi, IBM, MuleSoft, and SnapLogic

The four Leaders: Dell Boomi, IBM, MuleSoft, and SnapLogic achieved high scores across evaluation criteria under technology and market impact dimensions. As shown in Figure 3, there is stiff competition between the three leaders constituting this cluster. Meanwhile, SnapLogic has executed an aggressive product roadmap and strategy to evolve into a leading iPaaS vendor.

SnapLogic has developed momentum by achieving rapid growth in terms of revenue and customer base. SnapLogic has demonstrated good product innovation, both in terms of core architectural attributes and integration capabilities, and continues to execute an aggressive product strategy. Despite not having an early-mover advantage, it has emerged as a key competitor to Dell Boomi, IBM, and MuleSoft.Its REST-based modular architecture provides support for the scalability required to meet complex integration requirements. Other key features include support for low-latency processing, big data integration capabilities, and integration flow monitoring and management via the SnapLogic mobile app.

Market leaders

Market leaders: technology



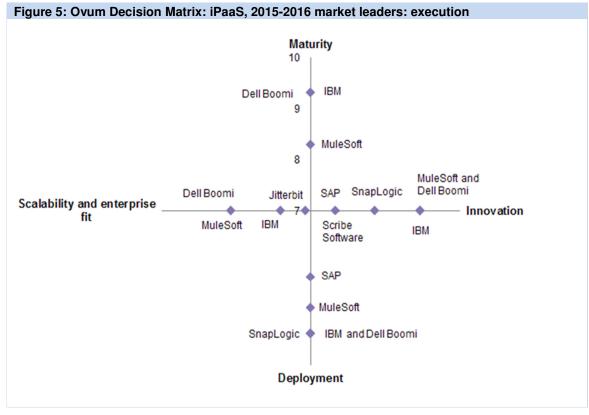
Source: Ovum

Figure 4 shows vendors with top-three scores within the range of 8-10 (on a scale of 1-10, including those having the same scores) for each category of the ODM technology dimension. Integration features and capabilities and developer productivity are two critical criteria for technical evaluation of iPaaS solutions. Dell Boomi, IBM, and MuleSoft are top three vendors in terms of integration features and capabilities, while all four leaders, including SnapLogic, have high scores against the parameters covered under the "developer productivity" criteria.

In the context of data security and governance, IBM, MuleSoft, Scribe Software, and Jitterbit have topthree scores, followed by Dell Boomi and SnapLogic. IBM, MuleSoft, SAP, SnapLogic, and Cloud Elements scored well in terms of monitoring and administration capabilities. IBM, MuleSoft, Dell Boomi, and SAP offer greater deployment flexibility.

The "methodology" section of this ODM provides details on specific features and capabilities assessed across various categories of technology, execution, and market impact dimensions.

Market leaders: execution



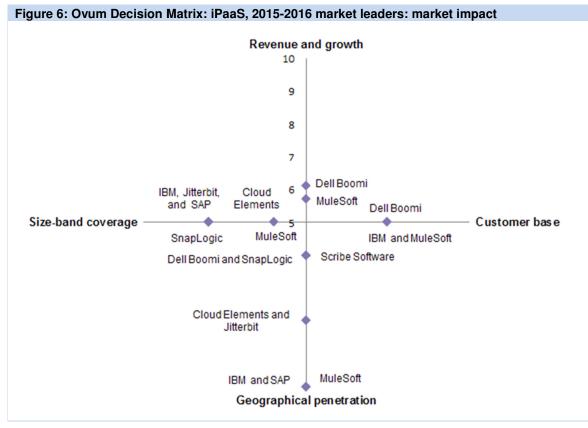
Source: Ovum

Figure 5 shows vendors with top-three scores within the range of 7-10 (on a scale of 1-10, including those having same scores) for each category of the ODM execution dimension. "Maturity" and "scalability and enterprise fit" have higher weightings than the two other criteria groups under execution dimension. In the context of maturity: Dell Boomi, IBM, and MuleSoft have top-three scores, while IBM, Dell Boomi, MuleSoft, and Jitterbit have higher scores against the parameters covered under "scalability and enterprise fit" criteria group.

The innovation offered by an iPaaS solution in terms of product strategy, architecture, and commercial model can be a differentiating feature and an indicator of long-term product roadmap and execution commitment. IBM, Dell Boomi, and MuleSoft, SnapLogic, SAP, and Scribe Software scored well in this category. Dell Boomi, IBM, SnapLogic, MuleSoft, and SAP have high scores for the "deployment" criteria group.

Vendors having high scores across both technology and execution dimensions demonstrate a good balance between product and commercial strategies, and have established a good footprint across midsize-to-large-sized enterprises.

Market leaders: market impact



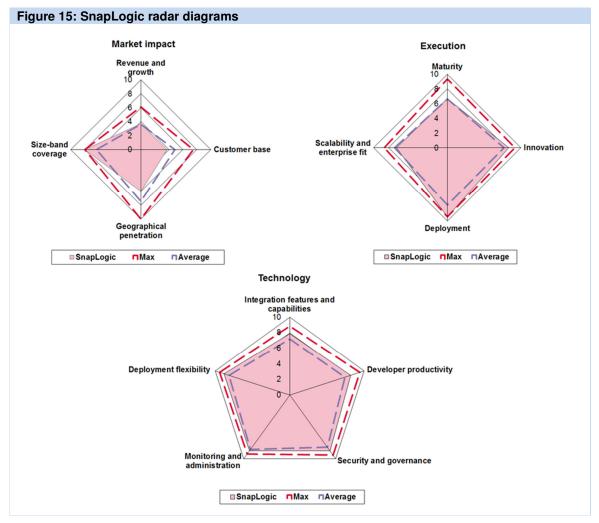
Source: Ovum

Figure 6 shows vendors having the top three scores within the range of 5-10 (on a scale of 1-10, including those having same scores) for each category of the ODM market impact dimension. The overall market impact score is predominantly based on corresponding vendor score for "revenue and growth" criteria group. The corresponding evaluation criteria were quite stringent and therefore, only Dell Boomi and MuleSoft achieved a score above 5. Dell Boomi, IBM, and MuleSoft have top-three scores for "customer base" criteria group.

IBM, Jitterbit, SAP, SnapLogic, MuleSoft, and Cloud Elements score well against the evaluation criteria covered under "size-band coverage", which also indicates the diversity of the existing customer base. All vendors, except for Flowgear, have a score above 5 for the "geographical penetration" criteria group.

Vendor analysis

SnapLogic (Ovum recommendation: Leader)



Source: Ovum

Ovum SWOT assessment

Strengths

Scalability and comprehensive integration capabilities

The core platform architecture is a key differentiator for SnapLogic iPaaS. The elasticity of Snaplex provides the scalability/infrastructure resources required for supporting low-latency and data-intensive integrations. Only a few other vendors can support these integration requirements with a unified platform. In addition, SnapLogic iPaaS supports different styles (batch and streaming modes) and types of integration (application, data, and API-led integration). The recent release of SnapLogic iPaaS introduced ultra pipelines, an enhancement to its JSON-centric data pipeline technology, which allows real-time execution of mission-critical tasks and processes. This is a significant enhancement to better support low-latency application and data integration requirements.

Big data integration capabilities

SnapLogic is the one of the few vendors that provides support for various big data integration use cases via the same platform used for cloud application and data integration. This is a key differentiator for SnapLogic iPaaS.

Solid average subscription size

Most of the subscriptions secured by SnapLogic are over the \$12,000 per month mark, which is impressive because it was not an early entrant into the iPaaS vendor landscape and has limited direct sales operations. This also indicates SnapLogic's ability to secure deeper customer engagements extending well beyond basic cloud service integration.

Weaknesses

Limited API management capabilities

SnapLogic iPaaS offers limited API management capabilities in comparison to some of its competitors, including IBM Cast Iron Cloud Integration, Dell Boomi AtomSphere, and MuleSoft CloudHub. Its product roadmap includes expansion of API management capabilities over the next 12 to 18 months, which would strengthen SnapLogic's competitive position among the leading iPaaS vendors. This is important, because mobile application integration and support for enterprise API initiatives (via API management on top of iPaaS) are emerging iPaaS use cases.

Opportunities

iPaaS adoption for a mix of application and data integration scenarios

While SaaS application integration remains the predominant use case, iPaaS is increasingly being used for data integration. Given the core integration capabilities of SnapLogic iPaaS, it is a good fit for a mix of cloud application and data integration scenarios.

Coexistence with traditional on-premise middleware platforms

Large enterprises have shown an inclination to use iPaaS in combination with existing on-premise middleware (for example, an "ESB plus iPaaS" combination) to meet pressing hybrid integration needs. This represents a significant market opportunity for SnapLogic. However, to exploit this opportunity, SnapLogic needs to improve its marketing message and demonstrate that its iPaaS solution can effectively support federation with traditional on-premise middleware platforms.

Threats

Stiffer competition driven by the resurgence of major integration vendors

The competition for cloud integration market opportunity has increased significantly over the last 12 to 18 months, with several major integration vendors, including Software AG, Oracle, and Red Hat introducing/announcing iPaaS solutions. In addition, IBM has revealed plans to drive adoption of its iPaaS solution in the midsize-to-large enterprise segment. Specialized iPaaS vendors (including SnapLogic) will now face greater competition from major integration vendors, and more so because these vendors have extensive customer bases using their on-premise middleware platforms.

Weaker positioning outside Americas

SnapLogic has limited presence and reach in European and Asia-Pacific markets, and customers based outside of the Americas account for a very small share of its revenues. With some of its key

competitors expanding their reach to new markets, it is important for SnapLogic to focus on strengthening its market positioning outside Americas, even if only via a partner network. SnapLogic initiated a significant expansion of sales team in Q1, 2015 as part of the plans to expand its presence and reach beyond the Americas.

Methodology

An invitation and ODM spreadsheet including questions across three evaluation dimensions were sent to all vendors meeting the inclusion criteria, with all except for Informatica and Microsoft opting to participate. Ovum had thorough briefings with the final nine vendors to discuss and validate their responses to the ODM questionnaire.

Appendix

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Ovum Consulting

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Ovum's consulting team may be able to help you. For more information about Ovum's consulting capabilities, please contact us directly at <u>consulting@ovum.com</u>.

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