

An Introduction to iPaaS

iPaaS, or integration Platform as a Service, are platforms that standardize how applications are connected to an organization. This process is known as 'integration'. iPaaS makes it easier to automate business processes, and share data across applications.

With iPaaS technologies, growing companies can eliminate manual processes, and reduce depending on spreadsheets and email communication, all while increasing visibility, speed, and accuracy across their organization.

The Challenge of Integration Today

The variety of business applications available today address every challenge that a company could encounter. Most of these apps are simple to use, easy to set up, offer beautiful interfaces, and require no training.

Now that these applications have become easier to use, companies don't have to rely on IT teams to purchase and implement them. Individual departments can now choose the best app to suit their specific needs. This trend is a direct result of the "Consumerization of the Enterprise", leading to an explosion in the number of SaaS (Software as a Service) apps -- which shows no sign of slowing down.

Too Much of a Good Thing

As essential as many of these apps may be, is it possible to have too many of them?

Contributors isolated in different departments may not see how their individual data and processes fit into the overall framework of their organization, but the applications they use generate and need their own data. These isolated stores of data are called 'data silos'. With the Consumerization of the Enterprise, many of these critical business processes -- quote-to-cash, fulfillment, expense management, procure-to-pay, and many more -- span a variety of applications across multiple departments.

As the volume of data grows, so do these data silos. This leads to manual processing like data entry, and management via spreadsheets and email. Massive data silos also contribute to the lack of visibility across the organization, and increases the risk of costly manual errors. The fluid exchange of information is crucial to any organization, large or small. As the volume of data, and its complexity, expands, it is critical for businesses to establish a robust automation strategy.

A key part of this approach requires connecting together, integrating, the different applications that have been chosen by their respective departments. Most companies tend to use a hodgepodge of tactics to integrate their many business processes.

How Companies Tackle Integration

The concept of integrating applications has existed for years, but for most companies, it is an afterthought. From there, integration projects are tackled on an as-needed basis. When they ultimately do move forward, companies will often use a patchwork of application integration solutions.

Vendor-Built or Native Integrations

Most software include out-of-the-box native integrations, allowing users to quickly connect with specific applications. For example, most marketing automation tools connect directly to Salesforce. This is very convenient and often covers the most popular use-cases, and usually don't have additional subscription costs. The challenge is that these native integrations are typically static: not designed with enough flexibility or customization to address important edge-cases or complex situations.

Third-Party Point-to-Point (P2P) Connectors

Just like vendor-built integrations, point-to-point connectors may be very convenient and cost-effective upfront. However, they are typically domain-specific, and are not designed with the flexibility to accommodate larger business processes. And, with thousands of cloud apps available today, it's difficult to develop individual P2P connectors for every possible pair of business applications.

Build-it-Yourself Integrations

Anyone can build their own core integration. By leveraging code and APIs, custom integrations can be very powerful and are often the preferred path taken by many operational teams. However, they require trained technical resources and are very time consuming, so it is hard to build them in a scalable, robust way.

Integration requires the ability to handle errors and guarantee data-delivery. Both are not trivial to build from scratch for every integration. As processes change, these app integrations need to be maintained and updated, further stretching the technical resources of organizations and businesses.

One of the increasingly common integration strategies today involves the adoption of an integration Platform as a Service, or iPaaS.

Standardizing Integrations with iPaaS

The term "iPaaS" was coined by advisory firm Gartner in reference to a cloud-based integration platform that makes connecting applications and business processes much easier. Integration Platform as a Service solutions holistically standardize how applications are added to an organization. This makes it easier to move static or transactional data across applications while providing critical integration functionality out-of-the-box.

Leveraging an integration platform makes sense for growing companies since it standardizes how to monitor, maintain, and update processes across applications -- which are added to and changed every day. Companies can quickly integrate applications into business processes, and no longer need to reinvent the wheel with building integration functionality. The right iPaaS empowers both line-of-business users ("citizen integrators") and technical users ("integration professionals") to build, manage, and maintain integrations.

The term iPaaS is relatively unknown. However, according to Gartner, integration Platform as a Service is the fastest-growing segment in the enterprise marketplace.

The Next Generation of iPaaS

The concept of integration has been around for a while. In each new era of business applications -- Mainframe, Client/Server, ASP, SaaS, etc. -- a new set of integration technologies appeared to connect the applications that emerged.

Because of this, the design approach of the integration solutions themselves have been one generation behind the design of the applications they were built to connect to. The first generation of integration Platform as a Service solutions (or, iPaaS 1.0) was developed in response to the first generation of SaaS applications. This was during the time when IT departments mostly owned, managed, and maintained all of a company's systems and applications -- so these early iPaaS solutions were developed solely for technical professionals who were trained in the platforms.

However, as the number of business applications exploded, the responsibility of app procurement and management shifted towards individual departments. Independent of an IT team, these users are now empowered to decide on the tools they need to best tackle their business challenges. Many of these companies have no IT department at all, and are still able to grow faster than companies still reliant on older IT infrastructures.

In today's business climate, as the volume of these business applications and services expand, IT departments often struggle to consistently manage the changing needs of companies. As a result, using integration to automate business processes become critical.

This requires a new approach to iPaaS, to make it easier to build complex integrations across the board, while offloading the integration management away from IT to line-of-business users, and guiding these users through the integration process. In other words, iPaaS allows the tech department to focus on core projects, the business logic, and operational requirements, and not just managing the technical integration requirements.

The elements of iPaaS 2.0

So, what is different with the next generation of iPaaS solutions?

Today's users have developed certain expectations about how cloud applications should work, and an iPaaS 2.0 schema should reflect that sensibility.

Leveraging Pre-Built Best Practices

Many integration use-cases have already been performed and documented -- lead-to-cash, procure-to-pay, hire-to-retain, and more. It is important for the next generation of iPaaS solutions to make it easier to leverage that work into future integrations -- through connectors, templates, and integration apps -- so that workflows no longer have to be rebuilt from scratch.

iPaaS 2.0 as a Key Component of Any Automation Strategy

Automation is one of the most important tactics to ensure operational success in an age of soaring competition and high customer expectations. Integration is a key component to any automation strategy. Today, iPaaS 2.0 technology is quickly becoming a critical part of any company's tech stack and should be considered much earlier in a company's lifecycle than they normally are.

With iPaaS 2.0 solutions, IT teams can centralize integrations and automation onto a single platform, while significantly reducing the time and resources needed to build and maintain these integrations. iPaaS's ease of use allows integrations to be done by functional consultants, junior developers, and even non-technical users. Because anyone can manage an integration, they can be handed off to the other departments, allowing the IT team to focus time and resources to other, more valuable projects.

A well-considered integration strategy supported by a robust iPaaS 2.0 solution ensures applications are working together. It eliminates manual processing, lack of visibility, and costly errors, while enabling companies to be more adaptable in ever-shifting business environments.

Automation is the future of business, and the companies that don't adopt a powerful, holistic application integration strategy will lose out to those who do.