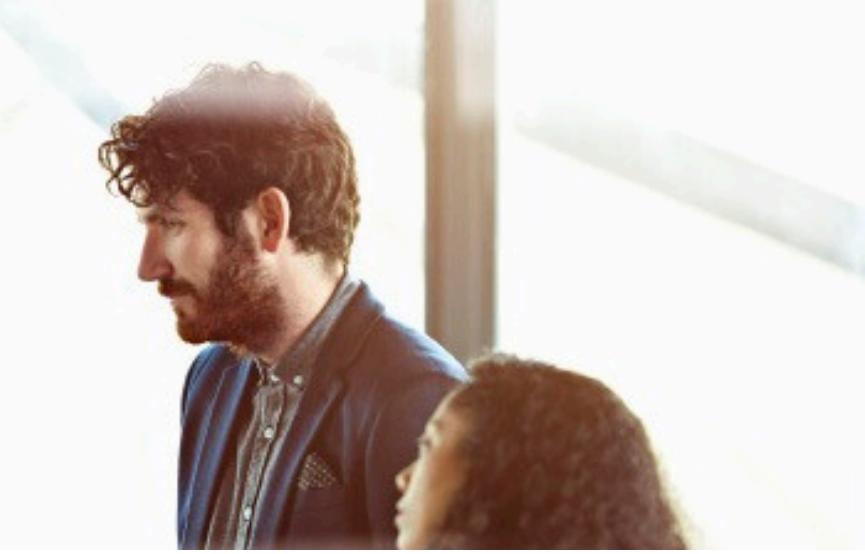
ADEPTIA

No Code Integration

WHITEPAPER





How A No-Code Integration Platform Drives IT Productivity

IT complexity, the challenges and intricacies involved in managing and integrating various technological systems and processes within an organization, has been increasing steadily over the past 15 to 20 years, reaching a point where it's become nearly unmanageable. In the recent past, enterprises typically averaged three to four core systems that needed to connect with five to ten external partners for data exchange. Few integrations were necessary because the number of key applications and major partners was limited. However, IT staff relied on developer tools to create point-to-point (P2P) interfaces, each of which took months to develop. The rising number of systems and partners, coupled with the need for seamless integration and real-time data exchange, has significantly amplified IT complexity.

This approach quickly becomes unmanageable, brittle, and expensive, and it limits the organization's ability to meet current and changing business demands.

However, recent innovations such as self-service integration platforms are not just changing how IT works, but also driving a shift in the way business operates. Cloud-based applications like Workday, Salesforce, and BOX fundamentally reshape business operations by providing unparalleled flexibility, efficiency, and collaboration capabilities. These platforms streamline and automate key processes, allowing organizations to manage human resources, customer relationships, and document storage with ease. For instance, Workday automates payroll and performance tracking, revolutionizing human capital management. Salesforce centralizes customer data, enhancing sales and marketing efforts through real-time insights and automation. BOX enables secure document sharing and real-time collaboration, breaking down silos and allowing teams to work seamlessly, regardless of their location.

By leveraging these cloud-based solutions, businesses improve operational efficiency, enhance decision-making with data-driven insights, and foster a more agile, responsive organizational culture, ultimately positioning themselves for sustained growth and a competitive advantage in a rapidly evolving marketplace.
It's not uncommon to see 20 or more strategic applications in each company extended to hundreds or thousands of B2B customers and partners, most requiring integration.

A lot of integrations are needed between applications and external partners. Enterprise IT remains in a state of volatility as new partners or applications are frequently added or removed. The traditional approach of experienced IT resources coding is no longer feasible, leading to a need for a simpler, no-code, self-service-powered self-service approach that is easy enough for resources outside of IT to use.

As enterprises deploy more technologies to support their business, they automatically create "islands of automation," adding an extra layer of complexity. These systems don't scale as per business needs and prevent organizations from driving revenue growth and productivity. It is risky to remove previously deployed legacy systems as many of them are still required to meet business functions. This dated approach is difficult to maintain and scale and since this process results in higher costs than necessary requiring IT developers to build integrations with a P2P connectivity approach.

They use P2P coding and other costly home-grown solutions to establish connectivity between applications, services, and processes. This dated approach does not scale and as a result, a lot of time and money is spent on IT developers building these integrations.All this can be simplified if IT integration is done using a no-code integration platform, since it becomes manageable by resources outside of IT. Businesses can take a no-code automation approach that uses AI and reusable mapping templates to empower non-technical business users to implement connections, freeing IT to focus on more strategic business projects. These no-code automation tools provide a plethora of smart connectors that can be used to quickly connect and perform data operations in minutes. They also facilitate faster data flow across disparate business applications, delivering value promised to customers and growing revenue.

Why is Point-to-Point Connectivity Bad?

Many enterprises find that integrating applications with external customers and partner organizations using P2P connectivity is a complex job. This is a fundamental challenge faced by medium to large organizations which amass a large number of applications to support their business. Moreover, there is a mix of on premise and cloud applications, adding to the complexity of moving data between these disparate applications.

More complexity results when additional databases are created to support all of these technologies and disconnects occur between you and your B2B customers and partners since invariably data is stored in a myriad of file formats and protocols. Functional silos restrain connectivity between financial systems that need Enterprise Resource Planning (ERP) data or a Client Relationship Management (CRM) system that needs ERP data.

Technically, it is not feasible anymore to create P2P direct connections to integrate these independent applications and projects. IT teams approach integrations in an ad-hoc manner as business needs arise and this leads to direct integrations between applications. These integrations lack consistency in terms of technology and data quality, resulting in an ecosystem that is difficult and expensive to maintain.

Pitfalls of P2P Connectivity

P2P Integration is Costly: The P2P connectivity approach might have a low upfront cost, but it costs more as you connect more applications across your ecosystem. For instance, P2P issues are hardly visible when 2 or 3 architectural components need to be integrated with each other. However, integration cost swells exponentially when many solutions are piled on top of each other.

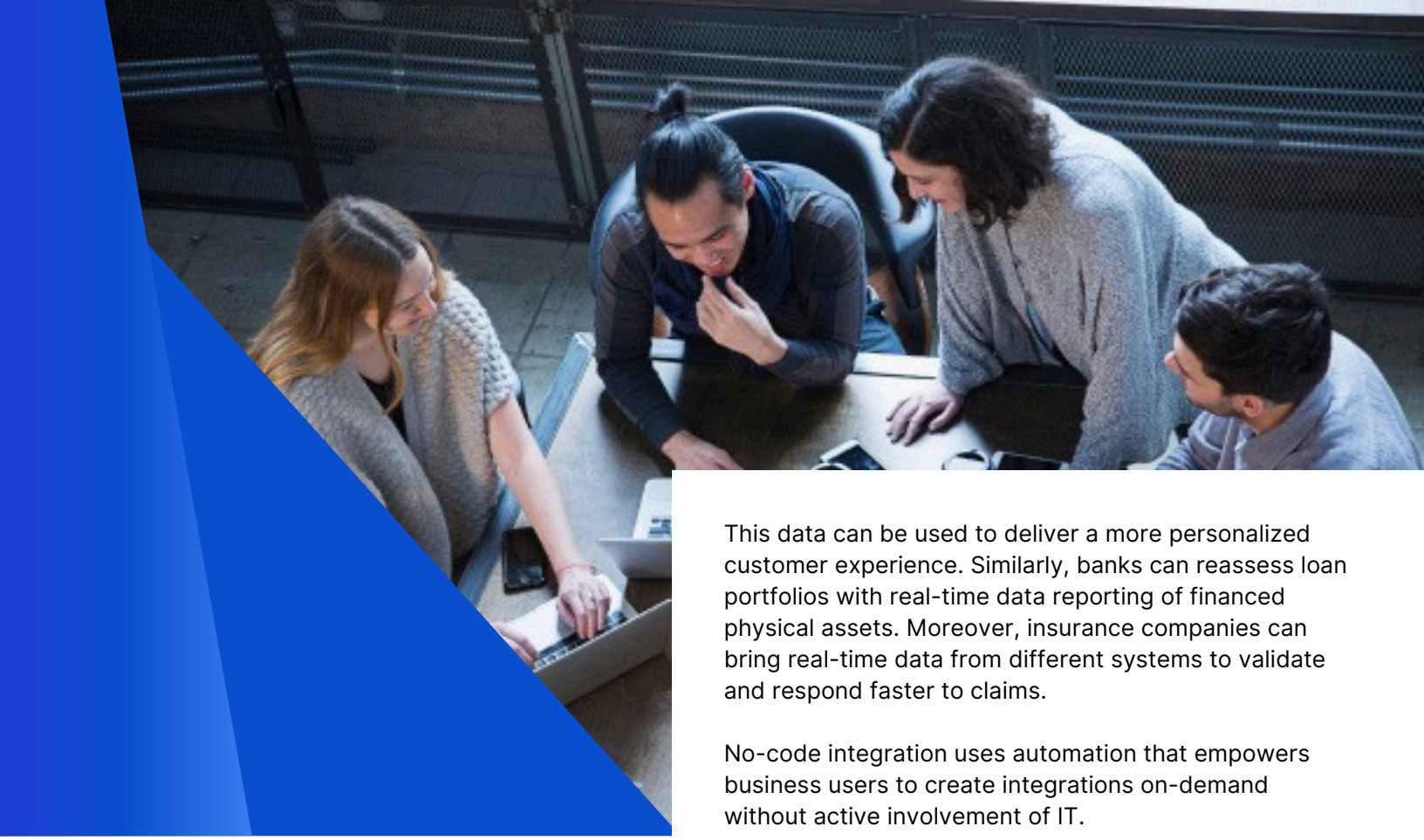
Maintenance Issues: Every new connection will result in a substantial loss of development hours. Fixing high-severity production bugs or refactoring the integration setup requires heavy maintenance. An undocumented tangle of code is generated to support mission-critical business systems. Every new P2P connection will have a compounding effect on the lifespan of the overall IT infrastructure. Here's an example:

In an IT architecture, two applications, A and B are integrated with each other using the P2P connectivity interface. The interface enables application A to converse with application B by executing a procedure. Custom application connectors handle complexities, data transformation, and other relevant feature to access application data. The interface needs to be updated whenever application A or application B is needs to be updated.

Several new interfaces need to be built when more applications are added to the IT architecture. Teams unknowingly add complexity while creating connections for these applications. Each interface needs to be separately maintained and developed. In many cases, a single change to one interface causes a series of downstream changes to other interfaces.

Network Breakdowns and Disruptions: P2P integration might look like a straightforward undertaking, but there are many underpinnings to it. It creates bottlenecks, drains productivity, and impedes visibility. Although modern applications provide APIs for integration, they are insufficient for heavy integrations. P2P connections need to be updated whenever a new version is released or when a partner changes his data format or protocol. In many cases, they change automatically whenever a new version is released. Downtime and data errors disrupt business, resulting in loss of revenue.

Heavy IT Intervention: Heavy IT intervention enterprises use a wide variety of business systems to execute business operations. Most of these systems are not deployed by IT teams but by other departments and business teams. These applications, whether on cloud or on-premise, have their own designer, data model, and silo. With the P2P approach, several dependencies need to be created to integrate these applications. In many cases, P2P integrations are deployed haphazardly without proper planning. Heavy IT intervention is required to monitor the full spectrum of integrations in an ecosystem and to troubleshoot errors. The spaghetti code of P2P interfaces between applications or B2B integrations creates constraints and limits agility for businesses to be responsive or pursue new opportunities.



What Is the Future of No-Code Integration?

Integration addresses an important need: Integrating discrete cloud & on-premise systems in simple and non-technical ways. It helps enterprises in integrating the ever expanding number of applications and developing new capabilities with a no-code, self-service integration approach. Business users can now develop technologically sophisticated integrations that are much stronger and easier to maintain than P2P integrations, enabling organizations to respond faster to business and technology changes.

In retail, for example, with a self-service data exchange model, enterprises can streamline exchange and workflows while bridging the gap between physical and digital worlds to deliver a seamless customer experience. As soon as a customer enters a store and tries on apparel, their preference data is recorded by the systems.

This data can be used to deliver a more personalized customer experience. Similarly, banks can reassess loan portfolios with real-time data reporting of financed physical assets. Moreover, insurance companies can bring real-time data from different systems to validate and respond faster to claims.

No-code integration uses automation that empowers business users to create integrations on-demand without active involvement of IT.

In a nutshell, it is a paradigm shift for integration software to have now evolved into business applications that move this self-service data integration capability to business users. IT staff's role now changes from active developers of integrations to that of IT administrators for monitoring, governance and regulatory compliance. While the business users' role changes from that of 'requesters of connections' to that of citizen integrators.



Core Aspects of No-Code Integration

No-code platforms help non-technical users on four fronts:

Integrate: Build integrations between applications, partners and enterprise systems 80 percent faster than traditional data integration methods. Faster integration helps organizations foster a stronger, well-connected, and transparent business ecosystem.

Design: Deploy integration design patterns and map data flows without much coding.

Monitor: Audit all integrations and deliver visibility for error management and compliance.

Govern: Update and govern integration flows internally or externally across multiple organizations. Constituents (or Integrators): Scale as per different user roles with the relevant user experience, i.e., CIOs, analysts, and application leaders to spur innovation and improve business outcomes including productivity and revenue.

Integration Scenarios: Allow seamless composition of integration workflows with the help of custom integration templates. These features help users define workflows for application-to-application (A2A), business-to-business integration, etc., between different cloud and on-premise environments as per industry best enterprise integration practices.

Endpoints: Refer to the entity residing at the end of the transport layer which provides entry to the service, process or destination. A no-code integration approach enables constituents to integrate different endpoints and compute enabled things from a single user interface.

Deployment Models Cloud hosting or on-premises deployment are options based on infrastructure policies and security requirements. A flexible self-service-powered, no-code integration approach supports this need by deploying applications, services, and data on public cloud or private cloud or on-premises or hybrid networks. It enables users to flexibly and swiftly move workloads between deployment environments.

Why Do You Need No-Code Integration?

No-code, self-service-powered integration has become relevant and necessary for every industry and it helps organizations to become more agile and responsive while minimizing disruptions. No-code integration transcends last-generation approaches and creates opportunities for enterprises to embrace new opportunities and increase their market sharegrab larger market share.

Gartner terms such solutions as high-productivity platforms that demonstrate tremendous potential. This approach simultaneously supports more formats, standards, and protocols, making technology integration problems disappear. With just a few simple clicks, business users can accelerate business transformation and eliminate 'Islands of Automation.'

Citizen Integration Capabilities: Traditionally business users relied heavily on IT for handling simple integration tasks, but this is no longer the case.

This contemporary approach ensures that operations staff can perform data preparation, CRM system updates, data onboarding, etc., without relying on IT. This removes the burden on IT teams and allows them to take up the governance role, thus improving their productivity and reducing IT costs.

This approach delivers dynamic business user capabilities to set up a strategic integration infrastructure. Business users can now confidently customize cloud streams, apply no-code data integration recipes, manage data flows, and automate repetitive tasks for streamlined interactions with partners for streamlined interactions with partners while still adhering to governance and security compliances.

Enterprise Application Integration (EAI) can be executed on one single platform. Centralized governance and security allow business users to manage all integrations in a hybrid IT environment.

A single dashboard maintains a lineage of historical data and provides a cohesive view of what data is being processed. This helps users to prevent network downtime and errors.

Data transactions can run from a single platform and business logic can be changed in simple rules. With better process orchestration, the services can be composed in unique software solutions to address business needs.

Faster Customer Data Onboarding: Customer onboarding is typically an extremely time-consuming process and invariably becomes a costly bottleneck. Since this is not a one-and-done matter, IT teams spend months building one-off data connections and making multiple calibrations to customize them. They fight endless battles to build connections with suppliers, third-party administrators, banks, brokerage houses, etc. A no-code, self-service integration approach makes onboarding up to 80 percent faster. Self-service onboarding capability empowers business users to set up connections in less than a day rather than taking weeks or months.

Makes Enterprises Easy to Work With: Traditional approaches to integration are cumbersome and don't scale as per evolving business needs. However, employing a no-code integration approach helps enterprises respond faster to customer needs, and improve product offerings & services. As a result, companies can build trust in their customers which helps in building a good NPS score. It helps enterprises to become more agile and responsive to go after new opportunities or offer new products and services because they are not constrained by old, slow integration connections.

Why Do You Need No-Code Integration?

All companies strive to be easy to do business with since it is now critical to expand and retain their customer base. Enterprises can deliver services faster and elevate their customer experience.
Operational Cost: One of the major benefits of no-code integration is enabling business users to do complex integrations while significantly lowering operational costs.

Manual and repetitive tasks can be automated, data can be moved back and forth without the need to install further systems and customer's needs can be met through self-service onboarding. Users can quickly configure solutions for projects that require real-time data access, validation, transformation, and human interaction with industry best practices all without high-cost IT intervention

IT complexity is rising along with the growth in IT consumerization. This complexity, in turn, prevents organizations from gaining a competitive edge. Many organizations are still trying to solve this problem with yesterday's P2P approach which requires heavy IT support and doesn't address everyday problems that enterprises confront. The success of "leveraging such next-generation technologies will be defined not only by the ease of connectivity but also by the efficiencies that can only be realized through the superior automation and control using a no-code self-service integration approach.



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