**Connecting Disparate Data: Achieving Business Goals by Breaking Data Silos**

In today's hyper-connected world, businesses of all sizes recognize the value of using data-driven, cloud-based solutions to drive new opportunities. However, successfully implementing those solutions presents practitioners with multiple new challenges.

Whether working in the IT team that struggles to manage the flood of requests or working in a business unit team that's looking for a way to self-serve, businesses need a data integration solution that fits today's needs and scales for tomorrow's.

This SlashGuide looks at the challenges that impact businesses of every size relating to integration of siloed data in disparate applications and highlights some pitfalls for overworked IT teams to avoid.
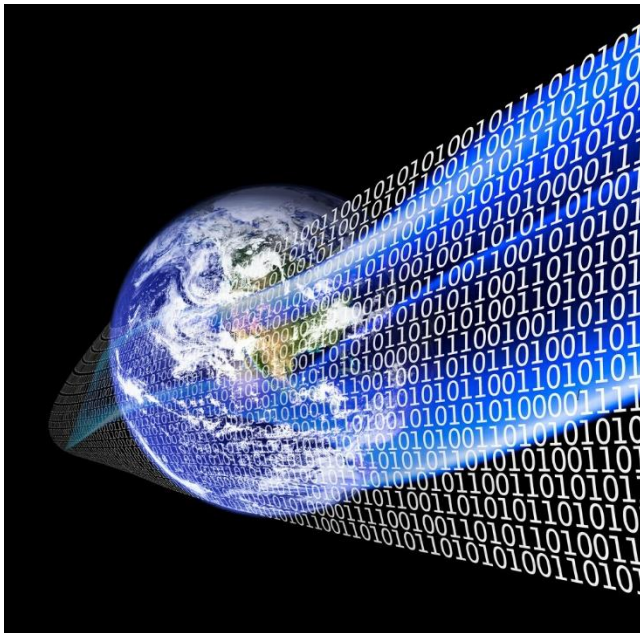
The Data Deluge and the App-pocalypse

Every business wants to get the most out of its data and related applications. But organizations of all sizes face the challenge of managing the accelerated proliferation of new applications and an avalanche of data throughout the business. As the number and variety of applications increases, IT is challenged to keep up with user requests to integrate data from multiple applications, leading the demand for user-centric tools that can deliver self-service data integration rather than waiting at the end of IT's queued-up projects to achieve their business goals.

This problem is magnified by a few factors. First, most organizations today have a combination of applications running across a multi-cloud ecosystem, from managed SaaS apps to on-premise systems. And when it comes to integration of databases, a large number of businesses still rely on legacy infrastructure that presents its own integration challenges, such as unstructured data by the exabyte that requires different processing. As business plans to integrate new data collected from the internet of things (IoT) and the billions of endpoints expected to soon be deployed, they often find themselves in a place where the unprecedented growth in data and insatiable demand for new apps has left IT with applications and data that are mostly siloed, disjointed, and often unnecessarily duplicated.

Digital Transformation: Sea change or buzzword?

The first executive who brought a smartphone into the workplace and asked IT to grant email access began what's now known as the consumerization of IT, where every user – whether

internal employee or customer – demands a more engaging, satisfying experience when interacting with the business. When applications work together, IT can achieve more, sales can reach new untapped markets, customer service can be more responsive, and new insights can help marketers better forecast trends and offer the products and services that customers want.

What does the business gain from this transformation? In a word, time. What if a help desk call that generated a trouble ticket automatically made a notation in the CRM system? Not only is time saved, but now everyone with access to that CRM record will know there's a pending support issue and a potentially unhappy customer to deal with.

Businesses simply want to react swiftly to events, to be proactive, and to automate those repetitive, mind-numbing processes. Doing so frees up employees and empowers them to make better, faster decisions.

To achieve this, business applications need to communicate flawlessly. If one application needs data from another, it should be readily available. If an event in one application always causes the need for some action to be taken in another, unrelated application, that too should happen automatically rather than swiveling from one screen to another performing repetitive functions over and again. That kind of integration truly turns data into action.

The Integration Imperative

Integrating applications and their data – regardless of where they run – is critical in many ways. First, there's the risk management perspective. IT can barely meet the demand for new apps and functions as it is, adding more and more applications that aren't connected presents business risks. If the same information needs to be maintained in multiple applications manually, there is no 'single version of the truth', and the opportunity for data corruption increases – as does the risk of relying on stale data to make important decisions.
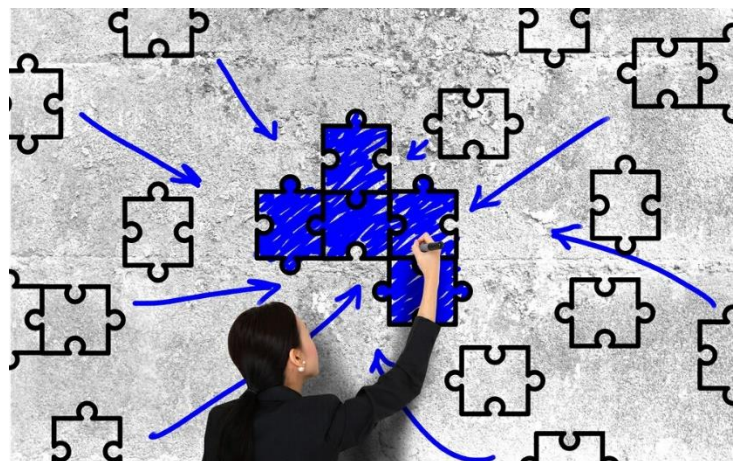
Customer satisfaction can suffer easily. Suppose a customer calls in to record a name change, but the new name never makes it from the accounting system to the CRM system. The result the next time that customer calls in? A bad customer service experience.

Traditionally, integration has been difficult, requiring skilled professionals who understand the code, data formats, infrastructure and networking idiosyncrasies, and the business – and those people are hard to find and expensive to keep. What's more, when there are a mix of cloud and on-premises applications that reach behind a firewall, there are additional challenges of regulatory and compliance issues to deal with including HIPAA, PCI, and GDPR.

Enter the Cloud

The cloud plays an increasingly important role for IT in almost every business. Many of today's start-ups are 'born in the cloud' with little or no on-premises IT. Virtually every organization relies on one or more software-as-a-service (SaaS) application like Salesforce or ServiceNow in the course of their day-to-day business operations, and they increasingly utilize cloud providers to host virtual machines (VMs) running business workloads. However, the cloud brings its own set of challenges, including connecting cloud workloads and data security to each other, to SaaS applications, and to on-premises applications and data.

Increasingly, businesses are becoming multi-cloud, utilizing a combination of SaaS, private cloud, and public cloud offerings, further complicating the efficient utilization of application data and resources.

The cloud certainly is alleviating many IT infrastructure burdens, but at what cost to data integration?

Integration Acceleration

Since users in business units have the best understanding of how integrating applications and data can be more effective, what is needed is a simple, unifying platform. It should be able to support a wide range of integration styles, offer point-and-click simplicity, connect popular SaaS applications (along with homegrown apps), and support a wide range of integration styles - event-driven, microservices-based, API, or SOA. What should go into this ideal integration platform?

- A platform agnostic approach, with the ability to be hosted on-premises or in the cloud and the flexibility to run integrations close to the application for the best possible performance
- Heterogenous connections and integrations, connecting SaaS, cloud-borne and on-premises applications while solving for mismatched data sources, data formats and standards
- Simplified creation of APIs enabling business to access and combine data across all enterprise applications, databases, and systems
- Recognition of key events and the ability to automatically trigger the right business action in one or more other applications when the events occur in source applications

Introducing IBM App Connect – the surprising choice

Fortunately, businesses can harness 'all of the above' and more, available today in IBM App Connect. IBM customers won't be surprised to learn that Big Blue offers this level of integration. What's surprising is the broad range of pricing, accessibility, and flexibility options that make IBM App Connect a more than viable choice for businesses of every size.

App Connect offers simplicity from the start – designed from the ground up to be multi-cloud aware, easy to use, and scalable to meet new needs and support growth whether on-premises on in the clouds.

App Connect offers over one hundred pre-built data connectors from Asana to Zoho, including databases, cloud storage platforms, CRMs, marketing technologies, and more.

App Connect delivers a 'Your integration, your way' approach that offers:

- Broad deployment options including cloud-based, on-premises, or both
- Broad licensing and payment options that let you create a plan that meets your needs and fits in your budget
- Multiple integration styles including event-driven, SOA, micro-services, and API - even batch processing is supported
- Flexible tooling and self-service convenience for all types of roles: end-users, developers, IT management
- The ultimate flexibility to integrate the way that best suits the business in a cloud integration platform that brings it all together, with a host of market-leading features.

Whether you're in IT struggling to manage the flood of requests, or you're a business user looking for self-service data integration, App Connect offers you the capabilities you need – and more – in a package that is easy to use, deploy, license, and manage.

All of this comes with the less surprising things you'd expect from IBM: Legendary 24/7/365 support, hardened security, and accountability to give the business the peace of mind to know it's never left on its own. IBM isn't just for the big guys anymore. It's the brand you trust, with a price you'll like.

 [Sidebar]
Case Study: Meritage Homes

Arizona-based Meritage Homes Corp. is one of the largest public homebuilders in the country, having built over 90,000 homes. Charged with 'doing more with less', VP of Applications and Development Chris Sinkwitz needed to integrate several existing systems, including JD Edwards EnterpriseOne ERP and Salesforce, while also creating security-rich APIs to external sites including its ADP payroll system and SAP Concur travel & expense application.

"We chose App Connect because it had native connectors for both of those applications, and once we started with that piece, we found it easy to plug in to all of our other integration needs", says Sinkwitz. "We ended up replacing multiple different integration point-to-point protocols and now we're on a single platform."

The big payoff is in simplifying customer interactions. "We've integrated all of our customer points into a single buyer ports,", says Sinkwitz. "Our customer can log in and communicate with their sales or construction team, and they also have the ability to see the progress of their house and have a place to store all their documents."

[End Sidebar]

What can you achieve?

What will a single integration platform mean to your business?

- Reach new markets and customers by exposing data from every critical application
- Give users and employees a more compelling, responsive experience tailored to their needs
- Improve business agility with process automation that helps employees be more productive
- Leverage IBM to augment in-house skills to accelerate integration programs
- Make vendor and platform lock-in a thing of the past and code for the future
- Use IBM Watson's cognitive integration to gain more insights from data
- Get a leg up on your competition

Get started with App Connect

App Connect offers you the range of capability you need (and more), packaged in a way that's easy to license, deploy, use, and manage.

Want to learn more? There's a wealth of information on our website including tutorials, documentation, videos, and lists of all the pre-built templates and connectors you can use, created by IBM and contributed to the library by other users.