

HYBRID INTEGRATION

Increasing agility for the Digital Enterprise



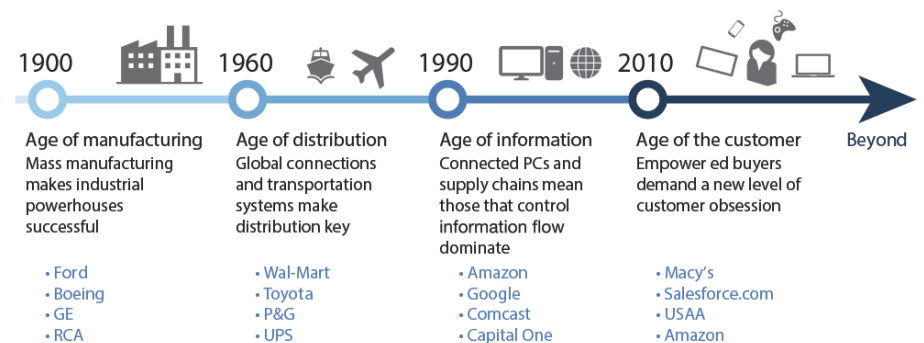
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Companies are striving to become Digital Enterprises to compete effectively and engage customers in new ways. Digital transformation is critical to the survival of companies in today's age of the customer.

Customer-centric Digital Enterprises need AGILITY

The age of the customer started in 2010, and it is now clear that the every industry segment is impacted. Companies are putting customers at the center of everything they do and building products around this focus to provide a seamless experience.



Source: "Competitive Strategy In The Age Of The Customer," Forrester Research Inc., report by David M. Cooperstein, Oct. 10, 2013

Customers have more options than ever before, and they are using multiple channels to buy products and services. As a result, traditional ways of interacting with customers are just not sufficient anymore. More importantly, customer expectations are changing at a fast pace; they want an increasingly superior experience.

If your company has not aligned your strategy to put your focus on the customer, here are four reasons to do that.

1. Today's customers have more options. Customers can now purchase any item at a local store, an e-commerce site or directly from the manufacturer in Asia. Each channel has to differentiate; a physical store may have a better return policy, the online store may have better information and reviews, and the manufacturer in Asia may offer the cheapest price. Another example is entertainment. For a movie, a consumer has the option to go to a movie theatre, use DVD or just stream it online from a wide range of providers.

2. Customer behavior has undergone a major shift in recent years. A decade ago, if you ordered from an e-commerce site and received a shipment by Friday that was acceptable. Not anymore. Companies are offering free second-day delivery and now several companies including Google® and Amazon® are experimenting with same-day delivery, which means a customer can order everything from groceries to evening wear and it will be delivered in a few hours by drone.

3. Cutting-edge technology is available to everyone and innovative startups are using it to deliver superior customer experience. One example is Uber®; not only you can get a cab using an app but at the same time you can see on the map where your cab is and you get a text when the cab arrives at your doorstep. Traditional businesses in this case had not innovated in decades and now face disruption and the risk of extinction.

4. Cloud, mobile and social have changed customer behavior and expectations forever. Customers want everything on-the-go preferably available via their mobile device and stored in cloud for easy access when needed. Customers can instantly connect with other users via social mechanisms to research the product in minutes and see if they want it or not.

In essence, the customer today is more connected, better informed and has more options than ever to choose from. Companies need to take advantage of this shift and digitize their business processes and applications while exploiting these new digital channels.

What is the single most important factor that will help companies meet the customer expectations? Companies need to respond to change faster, and assume continuous change to meet customer expectations. We refer to this as AGILITY.

The digital agility layer: how companies gain agility

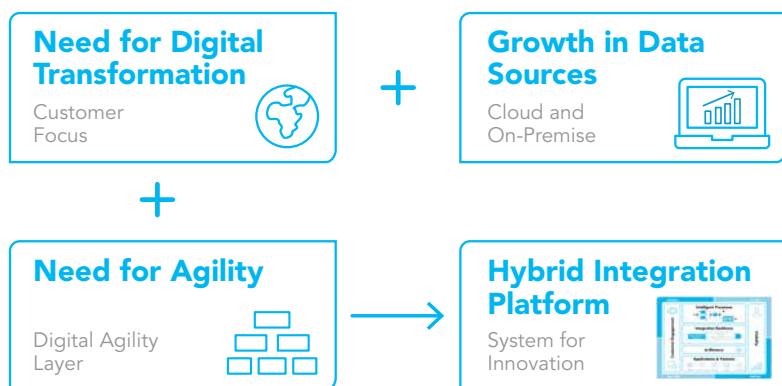
Companies need to have more agile decision-making processes and strategies but often it is their IT systems that prevent them from realizing this vision. Most IT systems were built to perform a specific business function during a 20- to 30-year expected life cycle. In today's world where every company wants to become a nimble Digital Enterprise, these systems of record just cannot keep pace with the amount of change required. During this life cycle, during any given year, they are expected to absorb only minor changes. Due to agile business requirements, companies need to completely overhaul applications continuously and that is simply not possible without creating a digital agility layer on top of these old "systems of record."

Traditional systems of records such as ERPs, CRMs and DBs are rigid, inflexible and unsuitable for big change. That is where systems of innovation come in: a separate layer that is flexible and more suited to change, making it the driver for business and IT agility. At Software AG, we call this the digital agility layer.

The digital agility layer provides a hybrid integration platform to connect on-premises and cloud systems in such a way that newer applications can be quickly developed using the logic and data from existing applications, removing the costly and risky rip and replace of legacy systems with newer applications. The digital agility layer becomes the innovation layer—a layer which enables the processes required for digital transformation. Re-thinking the integration strategy—why hybrid integration?



Companies have used integration to connect their IT systems for a while now. So how did hybrid integration come into play?



According to a recent report from the Aberdeen Group called [“On-Premise, Cloud, or Hybrid? Evaluating your Integration Options”](#) the biggest factor that is making companies rethink their integration strategies is the dramatic increase in the number of applications and other sources of data that need to be integrated. According to the report, 53 percent of companies surveyed who indicated they are currently working on integration projects cite the increasing number of data sources as the reason causing them to rethink their approach to integration.

Growth in data sources is pretty significant. Some of the companies surveyed are planning for a 63 percent year-over-year growth in the number of data sources as now they have cloud-based applications and newer data sources to integrate.

Hybrid integration is the future

More than just a deployment option

Traditionally companies have been using on-premises integration. More recently cloud-based integration platforms also have emerged. Some companies treat integrating cloud systems differently from integrating on-premises applications.

It is incorrect to assume that cloud integration is a separate problem from on-premises integration. This is where hybrid integration platforms come in. They support all styles of integration. Here are the differences:

- On-premises integration involves services and messaging protocols. These scenarios typically involve adapters for legacy ERPs, CRMs, DBs and other IT systems.
- Cloud integration integrates cloud-based applications using the APIs exposed by the vendors. These can either be deployed on-premises or purchased as a cloud service.
- Hybrid integration platforms combine the best of both worlds by providing complete integration coverage as they integrate both on-premises and cloud-based applications. Additionally, depending upon the vendor, hybrid integration suites may contain a wide range of additional capabilities to enable digital processes.

Forrester introduced the term “hybrid² integration,” defined as:¹

“The concept of federated on-premises and cloud-based integration combined with the improved interoperability of existing and new middleware silos of application, business-to-business (B2B), business process management (BPM), business events, business rules, and data integration. Key capabilities of hybrid² integration platforms include metadata life-cycle management and runtime interoperability, which help CIOs orchestrate a well-governed but also rapidly changing agile integration platform from multiple integration products.”

— **The Forrester Wave™:** Hybrid² Integration, Q1 2014 by Stefan Ried, Ph.D., Forrester Research, Inc., Feb. 14, 2014

“The challenge of cloud-computing related integration scenarios and the heterogeneous nature of on-premises integration tools are not two separate problems. They are closely related and connected to each other and the changing application landscape.”

— **The Forrester Wave™:** Hybrid² Integration, Q1 2014 by Stefan Ried, Ph.D., Forrester Research, Inc., Feb. 14, 2014

“ Companies must transform themselves to meet the rising expectations of modern customers. Innovative companies are connecting customers, partners, employees, and even products in new ways. I call them ‘customer companies.’ Becoming a customer company is not an option; it is mandatory for any business looking to grow in the coming years. ”

— **Marc Benioff** | Foreword in “The Digital Enterprise,” a book by Karl-Heinz Streibich, CEO of Software AG

Hybrid integration platforms support multiple deployment options but they are more than just about deployments. A single hybrid integration that meets all the integration-related needs helps companies achieve agility in several ways:

- Cloud applications offer quick adoption, rich functionality and various other benefits. But using a separate platform for cloud-based applications will result in a cloud silo that is not integrated with the rest of IT applications and hampers agility.
- The rate of adoption of cloud applications is rising. But the probability of companies continuing to use some on-premises applications for the long term remains high. A similar analogy is the mainframe that is still used by several large companies as migration and other costs associated with replacement are very high. That means companies will continue to require strong on-premises integration in addition to cloud integration.
- Integration is not just about connecting applications. It is the foundation for building the digital agility layer or the innovation layer. Hybrid platforms that contain process automation, API management and Master Data Management (MDM) capabilities are well suited to deliver that innovation rather than pure cloud-based platforms that focus on just connecting applications and data.

How webMethods delivers hybrid integration

Software AG’s webMethods provides a single platform with comprehensive integration capabilities to bridge existing systems and new technologies. With webMethods hybrid, a company can integrate and manage applications, mobile devices, services, big data and APIs—anywhere in the cloud or on-premises. Along with a coherent set of software, Software AG offers best-practice methodologies and consulting expertise based on thousands of real-world projects. This combination of technology and know-how helps a business develop—and deliver on—the right integration strategy faster.

Let’s take a closer look at the key attributes of the webMethods hybrid integration platform.

Elastic ESB - webMethods Elastic ESB allows enterprises to dynamically scale from on-premises to cloud and back again based on performance and load Service Level Agreements (SLAs). This allows companies to better manage peaks loads, without manual intervention or capacity downtime. The dynamic scaling is based on external triggers, which could be real-time metrics using a combination of demand side parameters (users, load and latency) and/or supply side parameters (utilization, capacity, performance). As an example, several consumer businesses using webMethods take advantage of the elastic ESB capability during the busy Thanksgiving and Christmas shopping season.

In-memory ESB – webMethods ESB is tightly integrated with Terracotta BigMemory, a leading in-memory technology for enterprise big data. Terracotta, with more than 1 million deployments and used by more than 2 million developers, brings unsurpassed scalability to webMethods customers. webMethods ESB enables local or distributed data caching, providing higher performance and fault tolerance. webMethods can also process very large XML documents directly in-memory, increasing performance and reducing programming complexity.

CloudStreams - webMethods CloudStreams is a cloud integration product that provides the ability to securely integrate with common Software-as-a-Service (SaaS) applications out of the box, rapidly build custom integrations with other cloud-based applications, and provide monitoring and management of these integrations and actionable analytics. webMethods CloudStreams creates and governs connections between any combination of SaaS and on-premises applications. That helps organizations integrate SaaS applications in days rather than months, gain insights into their usage and ensure compliance with SaaS vendor contracts as well as with other self-governing policies.

webMethods CloudStreams also offers features such as:

- Rich mapping and transformation of data structures
- Service orchestration and mediation
- Extensible cloud connector framework to connect with any SaaS application
- Enforcement of SLA policies
- Dashboard of usage analytics and metrics
- Support for WSDL and REST APIs
- Connectors for Salesforce.com®, NetSuite® and several other major cloud applications

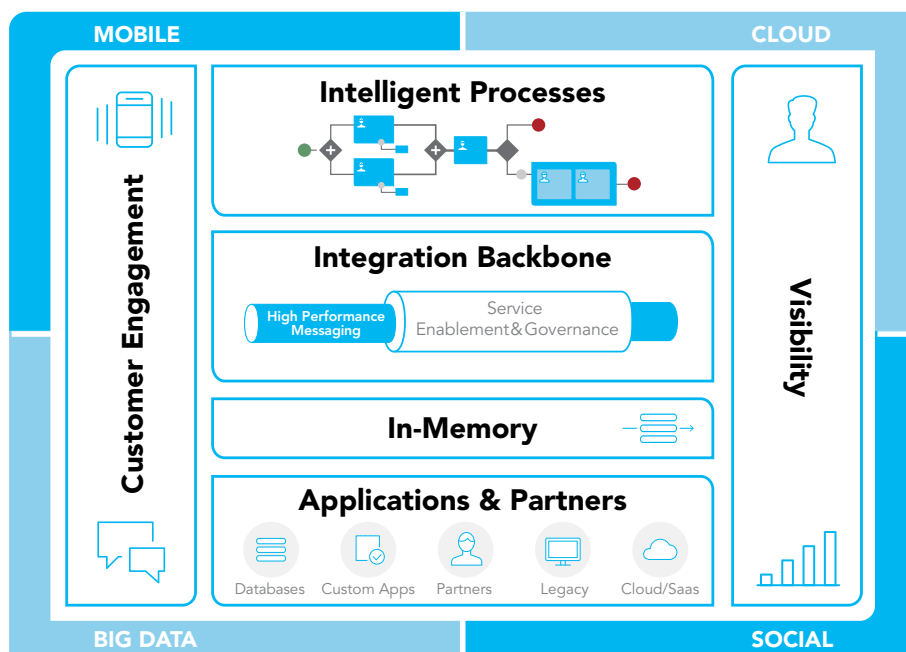
Integration Live - Integration Live is Software AG's integration Platform-as-a-Service (iPaaS) offering, providing integration capabilities that are delivered as a service and available by subscription. Integration Live will enable customers to integrate their cloud-based SaaS applications, such as Salesforce.com®, NetSuite® and Strikelron™, with other cloud-based applications. Integration Live will also enable customers to integrate their SaaS applications with traditional on-premises ERP, CRM and warehouse management, etc., applications such as SAP® solutions and Oracle® eBusiness Suite. This "hybrid" cloud integration model will complement our existing webMethods on-premises integration platform. Software AG's Integration Live will deliver SaaS application integration in an easy-to-use way, while complementing existing investments and methodologies in on-premises webMethods ESB technology, reducing integration silos.

The Software AG Suite is designed for making business and IT adaptive to change. In addition to advanced hybrid integration attributes, webMethods includes best-of-breed technology rated highly by independent analysts. Key capabilities that leverage a common IDE, installer, run-time environment, as well as admin and monitoring tools include:

- Service enablement of mainframe, packaged and custom applications, and databases. This plays a key role in developing new applications quickly on top of existing legacy applications
- Service orchestration with built-in mapping and transformation functions to bridge the gap between disparate data sets and to allow any-to-any mapping

" By 2018, more than 40 percent of large organizations will have established a hybrid integration platform."

— **Gartner** | Predicts 2014: Nexus of Forces Drives Evolution of Integration Strategy, published Nov. 26, 2013 by Analysts Benoit J. Lheureux, Massimo Pezzini, Paolo Malinverno, Jess Thompson, Deborah R. Wilson



- Asynchronous high-speed messaging to Web, mobile and enterprise clients, which is critical in providing a seamless customer experience across all channels
- End-to-end life-cycle management, from design to deployment, of all integration artifacts including services, related documents and policies
- Partner management and electronic exchange of documents in various formats, bridging the gap between cloud and on-premises applications
- MDM of product or customer, reference and hierarchical data to provide a consistent customer experience while reducing data errors at the same time
- Managed File Transfer (MFT) capabilities to manage file transfers between cloud and on-premises systems and between business partners

Conclusion

As you embark on the journey for transforming your organization into a customer-centric digital organization, it is critical to build digital processes on a stable and scalable foundation. During this transformation, a large number of your business processes will be impacted and you will need the ability to develop new applications and capabilities faster than ever before. Integration is more relevant than ever especially in light of the business and IT agility required for achieving this transformation.

A hybrid integration platform such as webMethods enables companies to establish a strong and flexible foundation to build innovative solutions for their customers to provide a consistent experience across cloud, mobile and Web channels. A digital agility layer provides a layer of innovation to the enterprise on which new applications and processes reside to provide a superior customer experience. Include hybrid integration platforms in your transformation initiatives to build a customer-centric Digital Enterprise to differentiate your business and win in the marketplace. Contact your Software AG representative for more details.

Take the next step

Could your business benefit from hybrid integration: a single platform to integrate and manage applications, mobile devices, services, big data and APIs—anywhere in the cloud or on-premises? Talk to your Software AG representative to see how the webMethods Integration Platform can help your organization transform into an agile Digital Enterprise. For more information, visit: www.SoftwareAG.com/integration

ABOUT SOFTWARE AG

Software AG offers the world's first Digital Business Platform. Recognized as a leader by the industry's top analyst firms, Software AG helps you combine existing systems on premises and in the cloud into a single platform to optimize your business and delight your customers. With Software AG, you can rapidly build and deploy digital business applications to exploit real-time market opportunities. Get maximum value from big data, make better decisions with streaming analytics, achieve more with the Internet of Things, and respond faster to shifting regulations and threats with intelligent governance, risk and compliance. The world's top brands trust Software AG to help them rapidly innovate, differentiate and win in the digital world. Learn more at www.SoftwareAG.com.

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