

## **EXECUTIVE BRIEF**

## Infor Modern Data Architecture

Data and Analytics

## Innovating with data

Infor® delivers modern, industry-focused business applications by infusing analytics into business workflows while making analytics extensible enough to match an organization's requirements. Our vision is to provide business applications built on a modern data and analytics architecture that integrates with heterogeneous on-premises and cloud systems. But what sets Infor apart from other major ERP vendors? As the application functionality gap narrows across vendors, what organizational leaders are truly seeking are applications that drive better business value. This is the strategy behind Infor's modern data architecture.

Infor takes a unique approach to data and analytics by providing customers with a simplified ownership experience. Customers don't have to wait for enterprise resource planning (ERP) implementations to go live before leveraging Infor's Modern Data Architecture. Cloud automation and open architecture enable clients to connect to any type of data, tool, and scripting language to begin driving business value from day one.

Infor provides various functionality from ERP, iPaaS, BI, AI, and data lake solutions to drive operational efficiencies while remaining a tool for both non-technical business-level users and advanced developers. After implementing Infor solutions, companies realized significant time and cost savings from eliminating manual processes and the addition of extensive dashboards, analytics, reporting, and integration functionalities to create a cohesive technology ecosystem."

Nucleus Research, Infor Customer Reactions, Nick Grizell, September 2020

## From manual processes to industryspecific automation

While many organizations are taking advantage of modern cloud applications to support their business strategies, those with hybrid systems can incur high costs from both integration efforts and manual processes. For example, spreadsheet-driven processes have become the lowest common denominator for managing cross-functional data, analytics, performance management, and compliance requirements. This manual approach is time-consuming and error-prone, with a high risk of exposing confidential information.

Infor's Modern Data Architecture offers the flexibility to both replace or integrate with common manual business processes, with out-of-the-box industry-specific functionality and content to accelerate time to value. Extension or customization of these capabilities can be completed in weeks instead of months through a complete cloud toolkit designed for self-service, without the need to procure additional resources or integrate additional software.

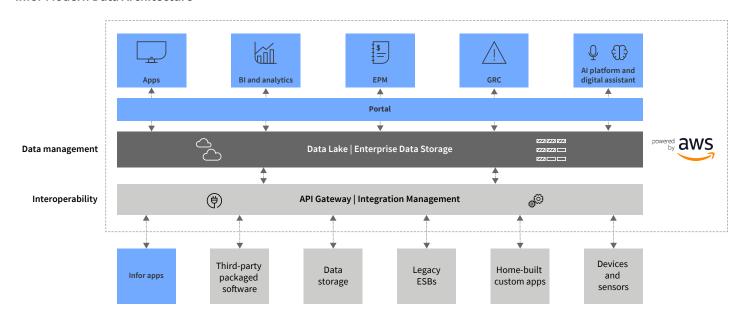
Every business process is captured and monitored, with business data centralized and governed in Infor's Modern Data Architecture. Organizations not only gain efficiencies and a deeper trust in their data, but they also discover additional value with integrated artificial intelligence and other innovative services.

## Simplified ownership experience creates continuous business value

Infor's Modern Data Architecture provides the connectivity to allow customers to layer on services and expand business value as an organization grows and innovates. As soon as one application is provisioned, such as an Infor CloudSuite®, data is centralized with continuous synchronization across all application services to ensure information is governed and trusted. This simplified experience is possible through the following interconnected services available to use with Infor's Modern Data Architecture:

- Infor OS®—Foundational cloud platform with process integration and data management
- Infor Birst®—Business intelligence and analytics
- Infor Coleman®—Artificial intelligence
- Infor Enterprise Performance Management®
   (Infor EPM®)—Intelligent business tools and financial planning capabilities
- Infor Governance, Risk, and Compliance (Infor GRC)— Enterprise risk management

#### Infor Modern Data Architecture



Infor's Modern Data Architecture connects disparate technologies, capabilities, and services to create a common innovation platform for customers. Over time, the more you use the architecture, the more value you gain from pre-integrated services.

The journey begins by answering the simplest question: How do I get my two applications to talk with one another and share the same data across systems? Business value can be expanded by asking additional questions: How do we start automating notifications, workflows, and decision-making capabilities? How do we perform analytics on this data? How do we continuously monitor business processes with the right controls in place? Where can we innovate and automate by integrating AI solutions?

All this is possible by building on the foundational connectivity and then rapid innovations—on top of existing capabilities that customers create—with Infor's Modern Data Architecture.

#### Infor OS

Infor OS is a technology platform that seamlessly connects services to provide a robust technology framework that serves as the foundation for business innovation. Services are re-usable across the ecosystem for faster time to value with less IT overhead. For example, the same data service that drives BI and analytic reporting also feeds into AI platforms to predict outcomes. Similarly, Infor OS's conversational Digital Assistant interface can service both Infor and non-Infor applications without any additional development or custom coding.

Infor OS centralizes data in a single storage platform called Infor Data Lake. Different spoke applications such as Infor Birst, EPM, Coleman, GRC, and more connect to the data lake and contextualize that data for their specific domain. Infor OS's data integration and management services range from essential, business-critical functionality to more advanced technology capable of providing competitive advantages to the enterprise:

- Business process integration and hybrid connectivity (Infor ION® and API Gateway)
- Security (Federation Services)
- Data management (Infor Data Lake)
- Enterprise user experience
- Cloud extensibility (Infor Mongoose)\*

# Characteristics of Infor's Modern Data Architecture

- Ease of use—Modern UI that is easy to learn, navigate, and collaborate
- **Self-service**—Limited IT involvement needed, designed for the business user
- Flexible and open—Customizable and extensible to match requirements of the business
- Lower costs—Automated data integration processes save time and resources
- Less risk—Centralized and trusted data with controls
- **Simple to deploy**—Single multi-tenant provisioning for all services

The services Infor OS provides are highly interconnected, which allows customers to reap the benefits of innovation quickly and easily without the need to custom-stitch multiple services. For example, the Infor OS portal service integrates relevant applications into a central place, with in-context processing in the form of application widgets. The information in the widgets updates as the user navigates and works within the system.

In another example, a finance leader may use both Birst and EPM widgets on a single screen to monitor finance KPIs, drill into transaction details, make decisions, and change budgets to ensure targets are met without having to log in and navigate through multiple applications. All components are directly tied back to the core components of Federation Services, ION, and API Gateway interaction so that organizations can be assured that employees are using and seeing precisely what they should when they should, and in a manner that's fit for the individual's role, personality, demographic, and more.

#### Learn more >

<sup>\*</sup>Add-on to core Infor OS.

#### Infor Birst

Infor Birst provides the end-to-end BI, data warehousing, and analytic services to quickly derive insights from Infor Data Lake and other data sources. Infor CloudSuite users enjoy pre-packaged Birst services such as in-context analytic widgets and role-based dashboards and reports. In the context of Infor's Modern Data Architecture, these interconnected services allow business application users to gain insights directly from their business applications, with the ability to drill into the transactional details to address issues immediately.

The components or services of the Modern Data Architecture are open, enabling customers to select which Infor services they want to use. For example, customers can utilize third-party front-end reporting and analytic tools by connecting to the semantic layer of trusted data. Customers can use third-party data stores depending on the unique architecture in place or performance requirements.

Birst offers a unique approach to analytics in the form of Networked BI, which enables centralized and decentralized teams to work collaboratively by unifying IT-managed enterprise data with user-owned edge data to maintain a shared version of the truth across the organization. Birst offers the right balance of IT control and end-user self-service, allowing independent teams to analyze user-generated data blended with governed enterprise data. Centralized teams better serve their end users by providing true self-service for not only the analyst, but also for non-data-savvy business users—fostering the confidence and trust in data that senior executives demand.

With patented machine learning technology, Birst automates the process of unifying disparate data sources into analytic-ready data. A consistent set of business rules and definitions is accessible across technical and non-technical teams through an adaptive user experience that includes reporting, dashboards, visual discovery, mobile, and smart analytics.

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#### Infor Coleman

Infor Coleman represents Infor's artificial intelligence suite of services, and comprises natural language processing (NLP) and machine learning solutions. Infor Coleman can help find new ways to streamline task execution, recommend next-best actions, and even predict potential issues and adjust systems accordingly.

The Infor Coleman Digital Assistant is the first in a series of products under the Infor Coleman umbrella, and provides a conversational interface to Infor OS and Infor CloudSuite. It offers custom skill building against the API Gateway and a voice-based user experience (UX) for Q&A, task execution, and any other NLP-based extensibility use case.

The Infor Coleman AI Platform includes a complete ensemble of tools for creating, managing, securing, and deploying machine learning models and use cases for the organization. It is built on the premise of repeatability, meaning customers invest in a solution capable of producing multiple projects quickly with a significant return on investment (ROI). Data sets are directly derived from objects in the Infor Data Lake documents, and Infor delivers standard templates for industry issues and opportunities around machine learning. Machine learning models are deployed automatically as a secure REST API in the API Gateway and are easily accessible, making it quick and easy to embed recommendations and results within applications.

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# Infor Enterprise Performance Management (Infor EPM)

Infor EPM offers intelligent business and financial performance management capabilities to help automate the processes of budgeting, planning, forecasting, and consolidation to improve overall business performance. Infor EPM collects real-time data from Infor Data Lake or directly from source applications, and translates it into business insights delivered through a fully integrated solution suite with a modern user interface. Each time a change is made, from modifying an order to changing an inventory status, information is updated automatically.

Infor's EPM solution is a fully integrated financial process application for the office of finance. With the ability to build and distribute meaningful reports in multiple renderings (scorecards, dashboards, cockpits, list style reports, and queries), your user community can run an immediate analysis of financial and operational data.

Infor EPM's budgeting and planning module connects to an organization's core ERP system to bring financial budgets and actuals together. The budgeting and planning module delivers planning of profit and loss, balance sheets, and cash flow functionality combined with a powerful and user-friendly modeling application and support for what-if scenario planning with unlimited iterations. For larger enterprises, workflow management, multiple currencies, conversion rates, and basic or complex allocations are all supported.

Infor EPM's financial consolidation module allows organizations to consolidate multiple sets of books quickly and seamlessly from each of its legal entities, while processing elimination entries and generating a single set of financial statements. Financial consolidation is fully integrated with Infor ERP systems and can simplify and automate the tasks associated with consolidation, allowing organizations to spend more time on financial reporting and analysis.

Infor's Modern Data Architecture services are interconnected, allowing a seamless connection between performance management, business intelligence, and transaction systems. For example, users may want to better understand variance when monitoring budget versus actual in EPM. The user can perform more complex analysis in Birst to understand what is driving the variance number. If you are a global organization, you may want to analyze variance across product groups, departments, periods, and other dimensions.

Both Birst and EPM leverage Infor Data Lake services, ensuring the data is consistent and trusted. Once the issue is identified, the user links directly to the ERP system to take the necessary action to improve the variance.

Because EPM combines budgeting, planning, and forecasting in a single system, you get better business modeling and an agile platform for your operational planning, workforce budgeting, and sales estimates. You can monitor your actual performance against your strategic plans. Lastly, you can consolidate your holdings for complete financial reporting.

#### Learn more >

### Infor Governance, Risk, and Compliance (GRC)

Infor Governance, Risk, and Compliance (GRC) helps businesses monitor and protect themselves by continuously identifying critical operational risks, adhering to compliance requirements, and objectively prioritizing which concerns require increased attention and allocation of resources. The software analyzes user roles to proactively detect segregation of duties violations, as well as potential issues in posted transactions and master data. Organizations can uniformly and actively manage multiple types of risk across the business to improve operational effectiveness and efficiency and reduce risk.

As a Modern Data Architecture service, GRC connects directly to the Infor Data Lake, which provides the central repository for capturing all business data. The open architecture of the Data Lake allows for both Infor application data and third-party application data to be collected and managed. Therefore, GRC monitors activity across heterogeneous systems that include third-party products from other vendors. On top of that, you can build controls that can monitor users across heterogeneous applications. For example, a user who has access to payroll data in a third-party application and HR data in an Infor application needs the proper controls to prevent a violation or segregation of duty issue across these ERP systems.

As soon as a user is provisioned, the data collection process starts, and every activity or transaction being performed by the user is continuously monitored. This data collection across applications benefits GRC and other services such as advanced analytics with Birst and Coleman. These services use the same data to create value-added services that can be leveraged by the ecosystem to monitor fraud or any kind of unusual activity.

#### Learn more >

## Global customers leveraging the Modern Data Architecture to deliver innovations

Infor customers across the world like Miller Industries, Pilot Flying J, Watami, and Watercare have turned to Infor to ensure their digital transformation initiatives are supported by a Modern Data Architecture that adapts and unifies data to deliver a common, real-time view of information. Trusted information is analyzed and consumed through modern application interfaces or embedded widgets, driving increased productivity, better decision-making, and ROI.

#### Miller Industries

Infor's Modern Data Architecture has also reduced various executive-level and senior accounting staff inquiries by approximately 80%. Information that was previously available only with advanced knowledge of the data structure can now be accessed directly by management. Past-due accounts receivable balances have been reduced by approximately 40% due to increased visibility and the reduced time required to make this information available.

## Pilot Flying J

Pilot Flying J's employee portal, built using Infor OS portal services, gives all team members access to analytics that provide an at-a-glance view of how the company is performing. By drilling into the embedded analytics, employees can see more detailed sales information, such as like-for-like reports for various timescales—as well as how sales are tracking against targets for fuel, deli, and restaurant.

Since adopting Birst for its financial reporting, Pilot Flying J has estimated \$500,000 annual savings in report development and maintenance, and seen a dramatic improvement in the time taken to run monthly close reports. A report is run for all 750 stores in the company. Before Birst, that process took over twelve hours, making it hard to re-run when in the aftermath of changes. With Birst, the same workload takes five minutes. This has resulted in a huge leap in productivity, and allows the business to be more agile when making changes and updates.

#### Watami

Watami moved to Infor CloudSuite Food & Beverage to build a modern platform for data analysis. By adopting Infor Birst, the organization can visualize production management data—standardized with the Infor multi-tenant cloud ERP solution. Birst links ERP and external data across the whole organization and builds dashboards that automatically collect the required data for the business.

Watami now has the data to cultivate important customers and promote sales to acquire new ones, leading to increased customer lifetime value (LTV). Consumer-grade dashboards give teams immediate viewing access to the number of products made for each center compared to the budget, while allowing them to easily view productivity by center and by product. Users can see the manufacturing cost and analyze the theory against the actual results.

#### Watercare

Deeply committed to the 1.4 million people of Auckland who depend on its services, Watercare, New Zealand's largest water utility company, needed to modernize its business applications to better serve its communities. The company chose Infor applications to help better manage assets, enrich interactions with customers, and motivate and manage its workforce.

Watercare tackled a full digital transformation with Infor, affecting roughly 60% of its business processes. The company achieved a fully redesigned, integrated, analytics-enabled solution for customer management, billing, and asset management that has produced savings in virtually every corner of the business. Watercare is realizing substantial savings by driving customer interactions through digital channels, reducing manual processes across customer operations, improving asset planning and optimizing construction, reducing reactive maintenance, and improving employee engagement.

## Top 10 reasons customers partner with Infor for a Modern Data Architecture

- 1. Simple to deploy with true multi-tenant (MT) architecture—Single provisioning for all cloud MT application services
- 2. More value—Based on common industry-driven processes, Infor offers templates, reporting, analytics, performance management, fraud, and security content delivered out-of-the-box to link back to transactional details for better decision-making
- 3. Faster implementation cycles—Pre-built content with data across all Infor ERPs is automatically centralized and catalogued for easier customization and extension
- 4. **Lower costs**—Automated data integration processes across Infor and non-Infor data sources save time and resources—delivering trusted data and end-to-end visibility into business processes
- 5. **Designed for agility**—Facilitates the right balance of centralized control of governed data and analytics while enabling decentralized teams the freedom of extending data and analytics to maintain a single view of the business

- 6. Flexible—A complete cloud toolkit designed for self-service customization and extension to adapt to changing business requirements without the need to purchase or integrate additional services and is also available on-premises when required
- 7. **Reusability**—Application services are interconnected, enabling each service to benefit from one another for shared value across the ecosystem
- 8. **Open**—Integrates with non-Infor applications such as third-party ERP systems, databases, and tools to extend solutions
- 9. Integration—Web Services APIs allow for services to extend to non-Infor applications
- 10. **Continuous innovation**—True SaaS multi-tenant applications deliver a constant stream of new industryspecific innovations without disruption or lengthy and expensive upgrade cycles.

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Infor is a global leader in business cloud software specialized by industry. Over 65,000 organizations in more than 175 countries rely on Infor's 17,000 employees to help achieve their business goals. Visit www.infor.com.

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