The Definitive Guide
to Value Creation with Intelligent Cloud ERP
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Introduction

New market forces are creating unprecedented pressure for companies to move faster, with greater agility, and change in response to new threats and opportunities. Achieving and maintaining a competitive edge requires you to understand the key trends that will shape your future.

But having this insight is not enough. To be truly successful, business leaders need to recognize how to exploit these trends. This means embracing a new approach built on Intelligent Cloud ERP. Companies that build a foundation on intelligent cloud technology will gain valuable advantages — such as boosting profits, growing faster, entering new markets, and disrupting their industries. Ultimately, they adapt to their customers’ expectations at the speed of the cloud.

This guide is designed to give you a practical, actionable overview of how Intelligent Cloud ERP empowers you to leverage the opportunities presented by coming changes to how we work, collaborate and achieve success.
Predicting the next big thing in technology can be an unforgiving task. Hype can exaggerate a trend’s true value. To make predictions you can trust, an organization must have direct exposure to today’s market and a deep understanding of the latest technological innovations.

Working with tens of thousands of the world’s leading businesses, advising them on how to optimize their operations and maximize their potential gives the insight needed to make predictions worth listening to. We have selected eight trends and technologies which particularly resonate with SAP’s experience in the market.

Each describes capabilities and opportunities that can be harnessed by an Intelligent Cloud ERP, and is explained in context later.
New market forces are creating pressure for greater speed, effectiveness, and ability to change. Customers expect greater levels of service, customization and insight. Business needs to see trends as they emerge, and execute solutions before the competition.

Every business can realize benefits and capitalize on opportunities for transformation. Your response to the new landscape will be based on both a reaction to threats and the opportunity to boost profits, grow faster, enter new markets, etc. Intelligent systems are already here to augment and enhance the capabilities of your people.

**Why Intelligent Cloud ERP, Why Now**

**Big opportunities**

**Higher profits**

*Companies with best-in-class customer experience management* achieve year-over-year customer profit margins 527% higher than their peers, and 359% greater company revenue growth.

*Source: Aberdeen Group, CEM Executive’s Agenda 2016: Aligning the Business Around the Customer*

**Reduced costs**

*Digital supply chains can reduce supply chain process costs by 50%, reduce procurement costs by 20%, and increase revenue by 10%.*

*Source: The Center for Global Enterprise, Digital Supply Chains: A Frontside Flip*

**Better reputations**

*Innovative brands experience brand value appreciation 9 times more than brands that are perceived to be less innovative.*

*Source: Kantar MillwardBrown, BrandZ™ Top 100 Most Valuable Global Brands*

**New revenue streams**

*86% of consumers are willing to pay more for an upgraded experience, and 55% are willing to pay for a guaranteed good experience.*

*Source: The Huffington Post, 50 Important Customer Experience Stats for Business Leaders*

**Faster growth**

*Companies with 50% or more of their revenues from digital ecosystems* achieve 32% higher revenue growth and 27% higher profit margins.

*Source: MIT Sloan Management Review, Thriving in an Increasingly Digital Ecosystem*
The challenge now is to tie everything together, end-to-end. Intelligent Cloud ERP drives value creation by delivering intelligent automation end-to-end.

Cloud is at the heart of the new competitive strategy for its speed, scalability, ubiquity, and superior user experience.

Combine intelligent systems with cloud deployment and you have the fastest and most sustainable way to inject insight and smarter practices into your enterprise. Turn flexible deployment and relentless improvement of your systems into an unfair business advantage.

Who is Intelligent Cloud ERP For?

- Intelligent, next-generation ERP provides new capabilities for everyone in the organization including executive leadership, IT, finance, and lines of business. By integrating business processes and applying the latest advances in digital technologies, you can help every user cut through complexity to boost productivity and leverage real-time data for smarter decisions.
Inevitable Architecture
Complexity Gives Way to Simplicity and Flexibility

“Organizations are leveraging automation aggressively, coupling existing and new platforms more loosely, and embracing a “cloud first” mind-set. The standardization of a flexible architecture model to drive efficiency, cut hardware and labor costs, and foundationally support speed, flexibility, and rapid outcomes... is seen as inevitable by many.”

A Short History of Business Disruption

In many ways, today’s business landscape of accelerated innovation and business disruption is uncharted territory. But this is not the first time businesses have faced an environment in which organizations that embrace new technology will gain a business advantage, and incumbency is no defense against disruption by fast-moving market entrants.

Intelligent Cloud ERP is the latest in a series of technologies that powered a break from the status quo. Business-enabling technology has come in waves, progressing from mainframes, to a client-server model, then monolithic ERP systems, then the Internet, and more recently the rise of mobile.

Each new wave of business technology represents a step up the digital value chain by enhancing insight, productivity, collaboration, and speed. But, each step has also introduced greater complexity, demanding more of workers and creating new challenges. At each stage of technology maturity, the growing complexity has worked at cross purposes to improving business agility and productivity.
With the rise of Intelligent Cloud ERP, businesses can expect a step-change in technology no less revolutionary than the ones before it. As with the introduction of prior innovation, technology will be the enabler for business change and provide a platform for outperforming the competition.

The main difference this time: a core characteristic of Intelligent Cloud ERP is the reduction of complexity. Companies with a pervasive digital ERP backbone deployed in the cloud, with intelligence that provides capabilities such as in-memory analytics, will enhance the performance of every person in the organization. Systems that learn, improve, and predict using machine learning, and have the framework to bring those capabilities across the enterprise, will enable businesses to outperform both their status quo and their competition.

A Short History of **Disruptive Business Technology**

- **Mainframe**
  - Effective for processing critical applications,
  - mainframe computers are large-scale systems that enable reliable transaction processing quickly and at high volume.

- **Client-Server**
  - Client-server deployment is built on distributed application structure that shares workloads between computing resources (servers) and clients that use this computing power.

- **Monolithic ERP**
  - Companies that use monolithic ERP gain a suite of applications from a single vendor that are configured to run core business processes and policies across the enterprise.

- **Internet**
  - Internet-based systems enable communication on a global computer network using standardized communication protocols.

- **Mobile**
  - Mobile devices, including portable computing platforms such as smartphones and tablets, bring connectivity and custom applications anywhere users travel.

- **Intelligent ERP Cloud**
  - Cloud-based ERP that provides contextual analytics, digital assistant capabilities and machine learning to help every user work more efficiently and effectively.

### Complexity

- **The Catch: Capital Investment**
  - Mainframes require major investment in capital and maintenance costs, special expertise with their operating systems, and are inflexible for rapid reconfiguration.

- **The Catch: Maintenance**
  - Reliance on a limited number of servers introduces single-point failures, and specialized IT staff are required to maintain the system.

- **The Catch: Inflexibility**
  - The system ends up being a complex, high cost, customized solution that is hard to update and cannot keep up with business change.

- **The Catch: Security**
  - Openness to global networks introduced new challenges for security, as well as interoperability across browsers and operating systems.

- **The Catch: Data Overload**
  - Developing effective enterprise business applications for fast-evolving devices is challenging, and mobile devices introduce the potential for data and workflow fragmentation.

- **The Solution: Intelligent ERP Cloud**
  - Intelligent ERP Cloud is a flexible, secure, no-maintenance platform that provides core IT operations and extensibility built to make sense of today and tomorrow’s surge in data.
Intelligent Cloud ERP at the Forefront of Value Creation

The Characteristics of an Intelligent Enterprise

In an age when incumbent status is no defense against the competition, maintaining a sustained advantage requires you to meet customers where they are and provide services that will delight them. A strategy built on Intelligent Cloud ERP serves this purpose by enhancing your efficiency, effectiveness, and agility. Intelligent Cloud ERP provides business capabilities that will help you surpass current capabilities and maintain an advantage in:

**Efficiency:** navigate a course of action, deploy resources and execute strategy to achieve objectives in the most cost- and time-effective manner

**Effectiveness:** plan and execute the most effective strategy and tactics for success

**Agility:** innovate and evolve rapidly to respond to new opportunities or threats

Reaching these objectives requires an intelligent core that is pervasive to the business, spans processes end-to-end, and reaches everyone in the organization. As you will see below, cloud provides the fastest and most sustainable way to inject these intelligent capabilities into your business.

Nine Ways to Unlock Value with an Intelligent ERP Cloud Core

1. **Accelerated processing** of information across the business
2. **Increase automation** to reduce process bottlenecks
3. **Digital out-tasking** that cut down on manual input and approvals
4. **Improve prioritization** to focus on highest-value tasks first
5. **Reduced complexity** through presentation of the right information in context
6. **Intelligent cooperation** that promotes smarter, faster collaboration
7. **Real-time optimization** to base decisions on the latest accurate information
8. **Smarter organization** to create and execute the right strategy
9. **Process innovation** that adapts to how your people work

Machine Learning for the Enterprise

Machine learning is an application of artificial intelligence that enables systems to learn and improve from information and experience, without relying on explicit rules or prescribed behaviors. Though it is a fast-changing technology, machine learning has clear applications for business improvement. When fed sufficient data, input on business goals, and experience interacting with users, business systems that implement machine learning can provide benefits such as automating processes based on historic operations and interaction between users, displaying more relevant contextualized information to users when they need it, and suggesting decisions that will lead to the best outcomes. All these applications reduce complexity for the user while boosting their productivity and business impact.

The Intelligent Core

To deliver continuous benefits and enable your business to run ahead, the digital core must be built along three dimensions: Intelligent technology, Instant Value, and Business Impact. These capabilities are already powering intelligent business. Make sure your strategy can deliver them in a fast, integrated, and sustained manner.

**Intelligent:** Machine learning & AI, digital assistant, predictive analytics, digital user experience

**Instant:** Go live in weeks, fit-to-standard, Quarterly update cycle, deploy where you want when you want

**Impact:** Create continuous business transformation and differentiate your business, tools that are simple to use/configure/extend, full integration
Business is becoming increasingly complex by the day, and the pace of change continues to accelerate. While you may have more data to analyze than ever, the challenge is to find better ways to turn it into value. The four steps to digital value creation show how you can build new organizational capabilities that enable you to outperform the competition.

**Analyze**: Turn transactional data into live business insights that enable you to take action

**The challenge**: When your systems aren’t built for the volume and complexity of data you now receive, you may not have a single view of the truth — and your financial teams spend too much time collecting data rather than analyzing it.

**The solutions**: Create a culture where evidence matters and everyone has self-service access to in-memory analysis of live data

- Leverage cloud computing power to crunch data and identify process efficiencies
- Instead of working with a system of record, base decisions on live data collected automatically from around the business
- Simplify routine tasks, cut out human error & remove extra manual processes
Optimize: Turn ongoing change into a competitive edge with flexible, scalable processes.

The challenge: Processes are complex and systems are challenging to use effectively, leading to rigid processes and limited business agility at your core location and smaller business units alike.

The solutions:
- Utilize machine learning to self-correct processes that improve efficiency and profitability
- Double the productivity of your knowledge workers by using and presenting data more effectively
- Optimize resources across people, processes, and technology to remove complexity
- Implement personalized, assistive user interfaces that guide staff through core business processes

Strategize: Leverage planning into business impact with unified data and predictive analysis

The challenge: If the information you are analyzing is outdated and limited to a select few roles in the organization, it’s impossible to get an accurate picture of the present, let alone accurately plan the future.

The solutions:
- Predict where your business needs to go by getting closer to your customers and the market dynamics
- Use live data to identify the best choices for competitive differentiation, including information covering resource optimization, detailed revenue, cash flow and profitability
- Automatically identify patterns that predict fraud, lost revenue and other anomalies

Everything as a Service
Modernizing the Core Through a Service Lens

Organizations are reorienting business capabilities and approaching products, offerings, and processes as a collection of services that can be used both inside and outside of organizational boundaries. IT may need to revitalize legacy core assets by upgrading to the latest ERP platforms or refactoring aging custom code.

Disrupt: Turn business transformation into a blueprint for success with an agile business platform.

The challenge: When your existing system is not set up for learning and only allows for prescriptive automation, it’s difficult to embrace new business models and scale operations fast for growth.

The solutions:
- Continuously innovate and transform your business with agile solutions and frequent system updates
- Run the business with intelligence at the speed of thought and collaboration
- Create agile teams to discover, respond to, and adapt quickly to advances in technologies and changes in the market

Deloitte Consulting LLP
Run Ahead of the Competition with Differentiating Technologies

AI Foundation
Focus on Business Capabilities Not Sci-Fi

The ability to use AI to enhance decision making, reinvent business models and ecosystems, and remake the customer experience will drive the payoff for digital initiatives through 2025.

Gartner, Smarter with Gartner
Gartner Top 10 Strategic Technology Trends for 2018 October 3, 2017

Faster deployment cycles with intelligent cloud mean your business gains the latest technologies as they are developed, not years after your competitors. Technologies such as:
• Machine learning and AI
• Digital assistant
• In-memory analytics providing real-time access to information about the business
• Complete end-to-end data integration

The SaaS approach means regular and manageable updates, and the immediate adoption of value-adding functionality. Cloud is also the most sustainable way to gain and maintain these capabilities because you can focus on driving business rather than implementing software.
Making the Business Case for Intelligent Cloud

Digital business scenarios require the performance characteristics that only systems deployed in the cloud can offer. The ability to scale fast to meet changing or surging demand. The reliability of an enterprise-grade solution built with redundancy by dedicated professionals. Real-time responsiveness so everyone can access the same live version of business data. Efficiency in deployment and training through intuitive user interfaces that cut down on complexity. Support for rapid innovation and deployment of advanced capabilities based on streaming analytics and machine learning. And confidence in data integrity and backups to prevent lost productivity from system outages.

It’s likely that the core business drivers for adoption of Intelligent Cloud ERP apply to your business, and almost a certainty that the majority are important to your company’s future performance.

The Value of Cloud in Digital Transformation

The cloud itself brings benefits to innovate amid a period of revolutionary disruption:

**Fast deployment.** With streamlined implementation, it is possible to deploy solutions across the business in weeks instead of years. Intuitive interfaces and user-friendly accelerate adoption with minimal formal user training.

**Access to innovation.** Intelligent Cloud ERP delivers innovation multiple innovation cycles every year, providing access to cutting-edge technologies without disrupting core business functions.

**Agile deployment.** SAP’s Intelligent Cloud ERP offers flexibility on where and when you deploy your solution, with the capability to implement a two-tier ERP strategy. The simplified configuration and implementation packages make it easy to deploy and integrate with existing systems.

**Value.** With greater usability, fit-to-standard processes and continuous innovation, Intelligent Cloud ERP deployment provides far faster time to value. Redirect resources going to manual processes and managing complexity to instead plan strategy and embrace future capabilities.
1. The business benefits of the “fit-to-standard” process model
Intelligent Cloud ERP brings your core processes in line with industry best practices through a fit-to-standard model. Rather than creating your own rules and building on an increasingly customized foundation, fit-to-standard brings processes into alignment with the most effective and efficient core business processes. It’s a major break from the complex, customized ERP implementations of years past. With a standardized core, you can better understand what you need to do and how to accomplish processes more efficiently, leaving you free to focus on moving faster and deploying technologies that truly differentiate you from the competition.

2. Speed to value through accelerated deployment and ease of use
When business is moving faster than ever, it’s essential that you have an intelligent core ERP that’s fast.

Fast to deploy: quickly implement your new system across the organization and bring your core processes on board, with implementation measured in weeks instead of months or years.

Fast to upgrade: regular upgrades and releases per year pushed through the cloud, enabling the deployment of new capabilities more rapidly than with an on-premises deployment.

Fast to adopt: simplicity of the user experience through the easy-to-use interface that takes lessons from the best of consumer-friendly applications, and full mobile capabilities to reach traveling staff and distributed workforces.

3. Agile environments that power rapid innovation
Unlike developing custom extensions and programs for legacy ERP — where reliance on outdated languages and frameworks can lead to excess complexity and a shortage of talent — Intelligent Cloud ERP enables an agile test-and-learn culture. With the cloud framework, you can work in an environment that powers rapid innovation and low-cost, low-risk experimentation, while accelerating time-to-value in technology investments. This is helped by cloud SDKs that enable you to build and implement your own extensions without touching the underlying code.
4. Never falling behind on update cycles or missing new capabilities
When your system is a customized on-premise deployment, it’s standard to go years between upgrades. Updating your ERP can be held back by all the intricate and fragile integrations you run with other enterprise software. By contrast, Intelligent Cloud ERP can update multiple times per year and push out new capabilities based on the latest technologies, bringing your business benefits based on streaming analytics and machine learning that let you outpace the competition.

5. Scalability on demand for companies with fast growth or fluctuating needs
An ERP system based on your own provisioned servers brings a great deal of labor and risk when you need to expand. Further, businesses that have short but intense peaks of demand end up investing in hardware and software to meet the “high water mark” that leaves costly resources idle the rest of the time. And there is another type of scalability, one that powers future growth by supporting multiple languages, currencies, and internal business entities. In all these respects, Intelligent Cloud ERP provides scalability far beyond traditional ERP.

6. Process improvements that improve real-time decision making
Many companies find it challenging to balance material, capital and labor costs against the need to produce and deliver fast enough to meet market demand. One source of problems is the inability to maintain all relevant information in the system, which leads to reliance on disparate and non-synchronized data to make decisions. With a logical general ledger landscape, business can integrate and embed intelligence in processes with one single source of live information, enabling coordination of planning and execution processes. This enables an immediate view of the bottom line impact of business decisions in real time.
7. **Greater operational predictability for performance, stability, and security**

Intelligent Cloud ERP significantly reduces the amount of redundancy and on-site security a business needs to bake into technology strategy. It also boosts performance by providing scalable, high-uptime services. These factors enable organizations to gain more confidence in their systems and run with greater internal consistency and predictability, with fewer system outages, and reduced operational complexity.

8. **Investing in true business differentiation rather than “keeping the lights on”**

Upkeep and innovation are mutually exclusive goals. The resources that go into keeping the lights on with reliable performance of existing systems are those your business is not investing in developing core business differentiation capabilities. Further, once built, those differentiators can add major upkeep overhead on customized ERP systems. With an Intelligent Cloud ERP, business differentiating-capabilities are free to live as lightweight extensions without customizing the core code. The upshot to trusting an Intelligent Cloud ERP to run your standardized processes is that your business can focus on services that add real value instead of daily maintenance of existing code.

9. **Future-proof your business by adopting the latest in machine learning and process automation improvements**

Though machine learning and AI are relatively new to the enterprise, they hold tremendous potential. Software that learns from the people who use it and can predict what information they need in a given context is a force multiplier for every business function. In this way, Intelligent Cloud ERP is less a reactive platform that users direct and instead a living system that interacts and anticipates the needs of each user. It is challenging for on-premises ERP deployments to take full advantage of machine learning and AI because they are changing so fast — 2-3-year upgrade cycles are too slow to benefit from the latest advances. But when Intelligent Cloud ERP systems are updated multiple times per year, customers can be confident they will have access to the latest business-transforming technology.
Intelligent Cloud ERP are maximized when everyone has access to information and collaboration tools, wherever they are and whatever their role.

Technology already augments our ability in the physical world: we travel at speeds unimaginable to past generations, gain real-time translation to foreign languages through smartphones, and can navigate unfamiliar cities with ease. In a similar fashion, digital technology in the enterprise enhances every person’s ability to work smarter, faster, and more productively in ways that were out of reach only years ago.

Most importantly, Intelligent Cloud ERP reverses the trend of technology increasing the complexity workers have to deal with. Instead it simplifies processes and presents in-context information so each user is prompted to take the actions and decisions that will provide the greatest business value.

Intelligent Cloud ERP acts as a force multiplier at your organization, improving employee productivity with:

**Self-service KPIs for real-time insight**

What if every user knew how your business was performing in real time, and could see all the relevant information in a convenient dashboard? Gone are the days of hunting for data from disparate sources — now every user has access to up-to-date metrics and can answer what-if scenarios, freeing them to focus on higher-value problem solving.

**Genuinely data-driven decisions**

By providing the real-time data most relevant to every user, you can eliminate the time and energy spent on gathering information of questionable accuracy. Now, every user can combine accurate information with their understanding of the business and the larger strategy to make the best decisions for the organization.

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**Intelligent Analytics**

Insights Find the User Not Vice Versa

"Augmented analytics is a particularly strategic growing area that uses machine learning for automating data preparation, insight discovery and insight sharing for a broad range of business users, operational workers and citizen data scientists."

**Gartner, Smarter with Gartner**

Gartner Top 10 Strategic Technology Trends for 2018 October 3, 2017

Real-time collaboration

How much productivity is lost each year due to miscommunication and users piecing together fragmented discussions across multiple channels? Intelligent Cloud ERP enables seamless real-time collaboration around specific topics and campaigns, plus the ability to view past conversations and decisions, to improve collaboration no matter where your teams are located.

Contextualized insight

Business complexity has been rising steadily, with new technologies enhancing workers’ capabilities at the expense of greater complexity that introduces new challenges to efficient, effective processes. Intelligent Cloud ERP cuts through complexity with intelligence that can enhance performance. Provide your teams with systems that apply machine learning to understand their preferences, improve performance, and predict what information will be most valuable to enhance the performance of every person at your business.

The Coming Revolution in Automation

“Up to 70% of tasks are potentially automate-able with next generation technologies” McKinsey, 2016

Intelligent systems using contextual awareness will learn from your patterns, automate workflows, suggest the best actions, and complete tasks autonomously, all so your people can focus on higher-value activities. Businesses that embrace process automation enabled by machine learning will outperform the competition because staff will be free to focus on creative value-added activities such as strategy and planning.

The Event-Driven Business

Sense and Exploit Digital Moments

“IT leaders, planners and architects must embrace “event thinking.” By 2020, eventsourced, real-time situational awareness will be a required characteristic for 80% of digital business solutions. And 80% of new business ecosystems will require support for event processing.”

Gartner, Smarter with Gartner

Gartner Top 10 Strategic Technology Trends for 2018 October 3, 2017
Delivering a Next-Generation User Experience

It is hard to overstate the impact of an intuitive, enjoyable user experience on the impact of Intelligent Cloud ERP when it comes to business capabilities and worker empowerment. A seamless connection between the user and system provides benefits in both directions. Users who enjoy their software will use its capabilities fully, gaining the full benefit of its tools, data, and analytics capabilities. At the same time, these use patterns teach the Intelligent Cloud ERP system what information, analysis, and team connections are most valuable to the user, powering the system to learn and grow specific to that worker’s needs. This virtuous cycle results in the Intelligent Cloud ERP providing faster and direct access to relevant information and applications, thus driving productivity and effectiveness.

Intelligent Cloud ERP can deliver a superior user experience by integrating straightforward design principles: simplification of business processes based on the user’s role; a move away from monolithic solutions in favor of activity-based apps; and an approach that empowers users with a clearer structure and easier orientation than standard ERP approaches.

To create simplicity in the user experience from even the most complex business environments, Intelligent Cloud ERP implements three approaches:

1. **Machine learning** applied to creating “digital assistants” and contextualized information, which gets better at predicting the needs of each individual user the more they interact with the system.

2. **End-to-end process automation** with flexibility so that users can reduce the amount of manual data input and reconciliation, and instead configure the system to help them execute processes faster and more reliably.

3. **An intuitive, continuously improving interface** that matches the way people work, so information is presented in context, without excessive or irrelevant data, and with collaboration tools embedded in each process to enable faster team problem-solving.

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**UX**

**Employee Experience Redefines Apps**

“A personalized set of interactions, processes, and content that enables employees to succeed while enjoying their work experience. In the digital age, the workforce expects a technology-driven employee experience that reflects the level of innovation found in their consumer experiences.”

**FORRESTER**

The Top 10 Technology Trends To Watch: 2018 To 2020, October 2017, Forrester
The Power of Two-Tier ERP

Two-tier ERP is a fast, effective way to inject intelligence into your enterprise with Intelligent Cloud ERP. It enables entities of different sizes — whether business units, subsidiaries, or acquired companies — to move at different speeds while remaining fully integrated with information and core processes on a common ERP architecture. This approach enables specific parts of a larger business to maintain the agility to support new business models alongside the company’s traditional operations.

The benefits of a two-tier model are significant. The smaller entity gains fast deployment, with speed and agility needed to capitalize on emerging opportunities, while maintaining a seamless connection with the larger business. Because the systems are integrated, the subsidiary maintains flexibility while the organization as a whole benefits from reduced complexity and total cost of ownership. This is also a valuable way for large businesses to understand the value of Intelligent Cloud ERP, when they may be considering alternatives to a functioning on-premises system.

There are multiple scenarios for two-tier ERP, ranging from the incremental to the truly transformational. In the most conservative scenario, headquarters can run an on-premises deployment of traditional ERP while subsidiary implements an Intelligent Cloud ERP solution to reap all the benefits of innovation at the edge without disrupting the core. At the other extreme, headquarters can run a flexible, extensible real-time ERP on-premises while the subsidiary runs a parallel system in cloud deployment, enabling the center and edges of the business gain access to new capabilities and faster innovation in tandem.

In all cases, the two-tier environment provides the innovative subsidiary with the benefits of Intelligent Cloud ERP — namely faster speed and access to innovative technologies — while maintaining total integration with headquarters.
What about Hybrid Cloud?

A hybrid cloud approach lets you mix and match the best elements of both private and public clouds. For example, some companies choose to run development and test environments in a public cloud configuration (where no live data is needed), while their production environment runs on a private cloud. This lets an organization pay for public environments only when needed them, while guaranteeing compliance and privacy with their valuable data.

Public Cloud

Accelerates Innovation

Innovation just an API call away

“We’ve reached the tipping point for public cloud: Most companies won’t be able to build out a data center to match cloud’s public capabilities or efficiency. Even 30-year IT veterans are increasingly willing to shutter their data centers. CIOs will be forced to move to the public cloud for most applications.”

FORRESTER

The Top 10 Technology Trends To Watch: 2018 To 2020, October 2017, Forrester

Public Cloud

- Pay-as-you-go scalability enables you to respond to heavy or unpredictable traffic, or to power rapid growth
- Gain the ability to implement a single set of operational and administrative processes globally
- Outsource management of IT equipment to reduce staff responsibilities
- Maintain security from a dedicated external team of IT experts with an enterprise-class firewall
- Fast implementation based on existing commercial facilities and services
- Data protection aided by physical security of facilities and undisclosed location of data storage

Private Cloud

- Deploy services on a private network protected by a firewall
- Maintain total control with more data visibility, which can be important to meet data management regulations
- Customize details of architecture and deployment specific to your organization’s needs
- Oversee security and provisioning with internal IT teams
- Keep physical control over location of assets and data flows to balance security, privacy, and performance demands
- Isolated from risk if cloud provider changes terms or shuts down
- Data can remain off the Internet and solely on your private network

The Value of Public and Private Cloud

Cloud computing utilizes remote servers to store, manage, and process data. The benefits are clear — rather than living on a local server or a PC, data is available to anyone who has a connection and is granted access. But which is the better deployment option for your organization’s ERP and core data, a public cloud accessed by the Internet or a private network you manage?

The growth of cloud computing at a glance

1. At the end of 2017, the worldwide public cloud services market will be a nearly $250 billion industry
2. The value of Software-as-a-Service will grow 20% in 2017
3. Enterprise cloud spending will grow 19% every year between 2016 and 2026
4. Cloud computing spending will grow more than 6x faster than overall IT spending between 2015-2020
5. 3 out of 4 CFOs of tech companies say cloud computing will have the most measurable impact on their business in 2017
The capabilities of Intelligent Cloud ERP to accelerate digital transformation extend across four key groups of stakeholders important to your business’s success:

### Executive Decision-Makers

- **Develop strategic plans**
  Define and deliver competitive advantage by growing revenue, boosting operating margins, making your assets work more efficiently, and expanding your business capabilities to generate stakeholder value

- **Gain insight into performance**
  Get metrics that tell the full story of your current state and improves decisions based on accurate, real-time information

- **Analyze and strategize for the future**
  Pursue new opportunities while mitigating risk with scenario planning capabilities that help you chart the best path forward

- **Collaborate across the enterprise**
  Communicate with, listen to, and direct colleagues within your business units and across the organization without missing a step

### Finance

- **Maximize the value of your investment**
  However you measure financial efficiency — NPV, ROI, or TCO — gain faster time to value and sustained benefits with rapid implementation of enterprise systems, quick uptake among users, and frequent releases of business-differentiating capabilities

- **Move from Capex to Opex**
  Free financial resources by creating a lean balance sheet that helps to preserve cash flow

- **Maintain total financial capabilities**
  Keep the strengths of your financial core, including financial planning, consolidation, order to cash and procure to pay processes, and profitability analysis that works across subsidiaries
• **Accelerate performance**
  Gain real-time processes and analytics that provide granular detail on personalized, self-service KPIs

• **Improve procurement efficiency**
  Reduce manual tasks with intelligent automation, and use predictive analytics for contract consumption to improve renegotiation and compliance

• **Stay up to date on compliance**
  With frequent updates, you can be confident your processes and documentation conform to ever-changing financial reporting standards and regulatory frameworks

• **Assess and manage financial risk**
  Better manage your assets and capital investments, as well as your liabilities, using robust analytics and what-if scenario planning to inform decision-making

• **Embed financial innovation by default**
  Enable real-time analytics and embrace emerging technologies such as blockchain-based inter-company transfers on a

**IT**

• **Invest in innovation, not upkeep**
  Get more value for your budget by investing in new technologies, not maintenance and servicing of legacy systems

• **Gain total scalability**
  Switch your focus from keeping the lights on to innovation and service at the speed of business

• **Implement bimodal IT**
  Combine rock solid core systems with innovative digital business initiatives for more agile capabilities without compromising critical processes

• **Enable new business processes**
  Deploy market-differentiating technologies that can augment processes and enhance impact across lines of business

• **Extend the digital core**
  Define an API strategy to extend your core Intelligent Cloud ERP capabilities into larger ecosystems, marketplaces and communities

• **Avoid technology dead-ends**
  Build the right mix of new capabilities, new architectures, and new delivery models to avoid redundancy of spending on siloed or, even worse, conflicting technology solutions

**Business Leads**

• **Find new ways to monetize**
  Extend the core business and business model into related sectors, enter new markets, and monetize assets with greater insight

• **Engage with customers**
  Integrate business capabilities to deliver omnichannel engagement with personalized, predictive, and dynamic experiences that demonstrate value at every customer touch point

• **Make smarter decisions faster**
  Use in-memory capabilities to analyze, report, simulate and predict in real time, so you can make smarter business decisions while action has the greatest value

• **Automate for efficiency**
  Integrate and automate business processes so your teams have the complete information they need to move faster

• **Focus on value**
  Use machine learning, personalized KPI dashboards and process automation to liberate people’s time for the highest-value tasks

• **Gain new insights**
  Implement the latest in fast-changing technologies such as machine learning, real-time analytics and IoT for insights into supply chains, business performance, and product improvement

• **Deliver a superior user experience**
  Improve employee satisfaction and engagement with business-differentiating IT systems by delivering an intuitive, engaging and effective user experience
Intelligent Value Creation

Delivering transformative services and customer experiences on the front end requires significant changes to back-end systems, technologies, and processes.

Leading professional services companies are utilizing intelligent SAP solutions to increase market opportunity, achieve profit goals, and grow market share – SAP Benchmarking

- **55%**
  - Less time to create new reports where historical data can be easily accessed to facilitate year-to-year comparisons

- **32%**
  - Lower employee turnover by using analysis of workforce data to design, implement, and monitor workforce-optimization strategies

- **56%**
  - More billable time spent by project management resources by the top 25% of services companies as compared to average services companies

- **Accenture** 25% to 50% improvement in performance across transactions, batch programs, distribution of data, and report performance on an already highly optimized system

- **Infosys** 98% faster access approval cycles – from 48 hours to 30 minutes

- **Innovabee** - reduced days sales outstanding by 12%

- **Convergent IS** - 48% reduction in days sales outstanding and a 20% improvement in productivity for sales order processing
Inteligent ERP provides professional services firms a proven framework to adopt industry best practices while attaining operational excellence across financial and engagement management processes.*

- Improve offer-win-rate by 10%
- Increase bid reliability and accuracy
- Increase user productivity and reduce time to propose
- Increase user project manager productivity and end-to-end process efficiency by 10%
- Increase profitability by 0.5%
- Increase utilization by 2%
- 10% increase in project manager productivity
- 5%-10% reduction in business and operations analysis and reporting costs
- 40%-50% reduction in days to close annual books
- 20%-40% reduction in G/L and financial closing costs
- 20%-40% reduction in audit costs

*Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional ERP to enhanced SAP S/4HANA + LoB/cloud capabilities.

As each enterprise is at a different level of maturity, we recommend working with you to determine the value proposition for your enterprise.
Leading industrial machinery and component companies are utilizing SAP technology and software to increase market opportunity, achieve profit goals, and grow market share – SAP Benchmarking

27%

Shorter time to market for new products where formal communication procedures are in place to inform all appropriate parties of prototype and ramp-up prerequisites, progress, and results

38%

Lower product lifecycle management costs when new development projects are managed via a portfolio process

45%

Lower manufacturing cycle time where equipment/machinery and tools are allocated to operations correctly and their status and usage is tracked in real time

• Vectus Industries – achieved a real-time year-end financial close (down from a few months), 15% reduction in operation costs, 50% faster access to and visibility of real-time data, 60% increase in operational efficiency

• Airbus DS Optronics – 75% reduction in data volume
Intelligent ERP provides manufacturing firms a proven framework to adopt industry best practices while attaining operational excellence across financial and engagement management processes.*

- Reduction in total manufacturing costs up to 10%
- Reduction in manufacturing cycle time up to 10%
- Reduction in scrap value up to 25%
- Reduction in order fulfillment lead time (10%–15%)
- Increased material posting throughput from 5–25x
- Improved labor utilization with “live” production monitoring (up to 10%)
- Distinct systems consolidation, reduced by 30%
- Improved profitability
- Increase in productivity through tailored UX
- Higher throughput

*Benefits are based on early adopters of SAP S/4HANA or conservative outside-in benefits due to moving from a traditional ERP to enhanced SAP S/4HANA + LoB/cloud capabilities.

As each enterprise is at a different level of maturity, we recommend working with you to determine the value proposition for your enterprise.

Learn more about Intelligent Cloud ERP at sap.com/cloud-erp