



# Evolve Your ERP:

**Enable Corporate Agility with Dynamics 365**



More than half of companies utilizing an ERP are relying on an out-of-date solution—and it's impacting their profitability.

## A transformative partner

You're responsible for making sure your company runs effectively. At Microsoft, we're responsible for the tools to help you do it.

That's why we've established ourselves as a leader in cloud ERP technology—to keep your business operating at peak efficiency.<sup>2</sup> Our Dynamics 365 solution, a top product in its class, provides the kind of agility, functionality, and cost effectiveness that you can only find in a cloud-based platform.

Most importantly, Microsoft offers the quality of partnership you need to make migration to the cloud possible. ERPs have fundamentally changed—and we're here to help you change with it. Start evolving your business with Microsoft today.

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# 1. Cloud ERPs aren't just emerging. They're already the standard.

If you're wondering whether your company's ERP solution has fallen behind the competitive curve, here's your answer: More than likely, yes.

**Current market research shows that over half of companies' primary ERPs are at least 5 years old**, a precariously long time for fast-moving markets. As a result, more than 60% of businesses with at least one ERP solution still mostly rely on legacy on-premises systems.<sup>3</sup>

But inevitably, many of these companies are recognizing the need to change. As of 2017, 59% of businesses said they would consider a cloud-based ERP model in their next implementation—a 14% year-over-year increase, surpassing interest in on-premises solutions for the first time.<sup>4</sup> Conversely, interest in on-premises models is in free-fall, dropping nearly 30% from 2009 to modern day.

This surge of interest in cloud ERP solutions is hugely significant as companies respond to competitive pressure and other market forces.

Faced with an aging on-premises infrastructure, most companies with legacy ERP systems are turning to the cloud as the only viable option. Ready or not, cloud ERPs are the new normal.

It's a tipping point brought on by years of incremental innovations that have dramatically altered the business landscape. For more than a decade, Microsoft has been an agent for that change. Our developments in regulatory compliance, data security, and platform flexibility have earned the Dynamics 365 solution recognition as an industry leader—and given it a place at the forefront of the way businesses view and use their ERPs.<sup>5</sup>

<sup>3</sup> Aberdeen, *Consider All Options When Moving to the Cloud to Keep our Organization Current on Technology*, 2018  
<sup>4</sup> Aberdeen, *Top Performers Know It's Time to Migrate to Cloud ERP: Here's Why and How*, 2016  
<sup>5</sup> Nucleus Research, *ERP Value Matrix*, 2017

Cloud ERPs have become the new normal. Microsoft can keep you ahead of the curve.

60%

60% of businesses with at least one ERP solution still mostly rely on legacy on-premises systems<sup>2</sup>

59% of businesses said they would consider a cloud-based ERP model in their next implementation

59%

14%



In 2017, for the first time, interest in cloud structure surpassed that of on-premise structure, by 14%

Interest in on-premise models is in free-fall, dropping nearly 30% from 2009 to modern day

30%



# The evolution of ERP

## 1964–1983

American manufacturer Black & Decker shakes up the market by digitizing a new approach to product scheduling known as MRP, or **materials requirement planning**. Designed to manage the relationship between a company's inventory and production, computerized MRP is boosted by Joseph Orlicky's 1975 book *Materials Requirement Planning* and takes hold at thousands of manufacturers across the United States.

## 1990–2000

With more and more capabilities being rolled into the MRP II umbrella, Gartner sees something altogether new coming to life—and coins it ERP (**enterprise resource planning**). Further broadening the scope of what an MRP II approach was built to oversee, ERP systems are designed to touch nearly every corner of a company's operation. Meant to both collect and analyze data from across a business, ERPs find their way into sectors besides production, like government, and become a baseline expectation at most major companies across the country.

## 1983–1990

After decades of relying on traditional inventory management systems, the manufacturing industry undergoes a seismic change with the development of **manufacturing resource planning**, or MRP II. Whereas earlier methodologies were designed to manage a company's inventory and production, MRP II tapped computing power to incorporate other aspects of the business, like finance and materials. These new computing platforms are expensive and at times inefficient, but their development soon ushers in a new era: Production management systems that reach beyond just production.

## 2000–PRESENT

Assessing the latest market changes, Gartner uses "ERP II" to describe another key shift in the industry: Real-time, web-based access to company data. A precursor to modern cloud-based solutions, ERP II helped transform what planning platforms could do for the world's largest companies and industries. The end goal: data-driven insights into a company's overall health, processes, and business performance.

This is also where Microsoft's story begins — through nearly 20 years of industry-leading innovations, Microsoft delivers an integrated set of ERP solutions that unlocks the kind of unified data that leads companies through a true digital transformation.

## 2. The evolution of ERP

It's taken businesses more than 100 years of development to get to the present-day ERP. Older production management models like EOQ (economic order quantity) and MRP (materials requirement planning) served as precursors to MRP II (manufacturing resource planning) methodologies, which in turn were the foundation to the modern ERP—a suite of solutions meant to manage every aspect of the business.

But Microsoft had an even more evolved vision. Building from what Gartner would eventually call "ERP II" (an ERP solution with real-time, web-based data access abilities), we've worked to build the most functional, encompassing cloud-based solution on the market, all founded on a specific point of view. Simply put, ERPs need to integrate innovative technology—like AI and the Internet of Things—into a powerful, cloud-based suite of familiar tools and apps to provide a truly transformative experience.

That mission is based on market data. The reality is that companies still operating on-premises ERP solutions are starting to feel the effects—they are less likely to meet internal deadlines or find the data they need to make timely decisions, and, ultimately, are less profitable. Such outcomes are not acceptable in today's fast-moving market.

Companies simply have to be faster, smarter, and more streamlined—and cloud-based ERP solutions, especially when integrated with other potent productivity tools, are built for that outcome.

This is something Microsoft, with its vast array of capabilities, is uniquely prepared to provide. Built on and for the Microsoft Azure cloud, Dynamics 365 unifies business operations across finance, manufacturing, inventory, and transportation management with an intuitive user interface for running game-changing, modern global enterprises.

That's why there is a new paradigm in the ERP industry. It's no longer about just moving to the cloud. **It's about harnessing the power of a fully cloud-based set of business solutions to turn today's most advanced tools into practical applications that drive the performance companies need.**

## 3. The realities of living in the cloud

ERPs are some of the most crucial systems in a company's solutions arsenal. Business leaders frequently cite data security as one of their chief concerns when considering a new ERP vendor.<sup>6</sup>

*Cloud-based ERP systems provide the following distinct advantages over legacy on-premises solutions:*

### 1. Ease of Updating

Like most modern software categories, ERPs frequently require updates for best practice information or security purposes. Cloud-based solutions provide a dramatically simpler solution to this foundational need.

### 2. Reduced IT Dependence and Cost of Ownership:

Moving to the cloud means a closer partnership with the software vendor itself, shifting many recurring maintenance responsibilities away from internal resources and onto dedicated external specialists.

### 3. Functionality and Corporate Agility:

On-premises systems are designed for the needs of on-premises users. But cloud-based structures link global offices, users, and devices in a way that dramatically enhances a company's ability to communicate within itself.

As an ERP industry-leader, Microsoft understands the benefits of moving to the cloud—but more importantly, it sees the common obstacles that prevent companies from doing so. The roadmap to clearing those obstacles is laid out for you here.

<sup>6</sup> Keystone, *Business SaaS Decision Making*, 2018



## 4. Ease of updating

Software versioning is like fashion—change is frequent, and those who don't make a conscious effort to stay current are frequently stuck with a wardrobe that's well behind the times.

An outdated ERP is far riskier than a fashion faux pas, but many businesses are still rolling the dice. **More than half of companies using at least one ERP aren't up-to-date on their primary software's latest version.**<sup>7</sup> More than 25% are at least two versions behind. These are costly inactions that risk compromising critical business processes. Data shows such companies are:

- 5% less likely to achieve complete and on-time deliveries
- 6% less likely to meet internal schedules
- 4% less likely to maintain accurate inventory
- 8% less likely to receive timely data for decisions
- 3% less likely to see improvements in profitability

Conversely, companies utilizing their ERP's latest version are almost twice as likely to have integrated e-commerce and mobile device capabilities—and nearly 50% more likely to have business analytics

and intelligence. Despite such advantages, many businesses are still lagging the market and the time and effort involved in updating on-premises solutions are primary reasons why.

SaaS models like Dynamics 365 drastically reduce the legwork needed for platform upgrades. Once they are set for deployment, updates can simply be pushed out digitally by the vendor to all licenses. These are almost immediately ready for use, as opposed to being installed one machine at a time by IT specialists. The problems of time and effort are almost completely neutralized.

The aggregate savings are significant, especially in an age where software updating is such a frequent requirement. The business world moves faster now than it ever has before, and per-industry best practices, available technologies, and even compliance regulations are in an almost constant state of flux. Operating on a cloud model provides an efficient and reliable relationship between company and provider, where the latter primarily carries the burden of keeping systems up-to-date.

But since ERPs maintain so many critical business functions, a common worry for on-premises users is that a single platform update could jeopardize key data, processes, or customizations. Microsoft built Dynamics 365 to eliminate that

Companies using their ERP's latest version are almost

2X

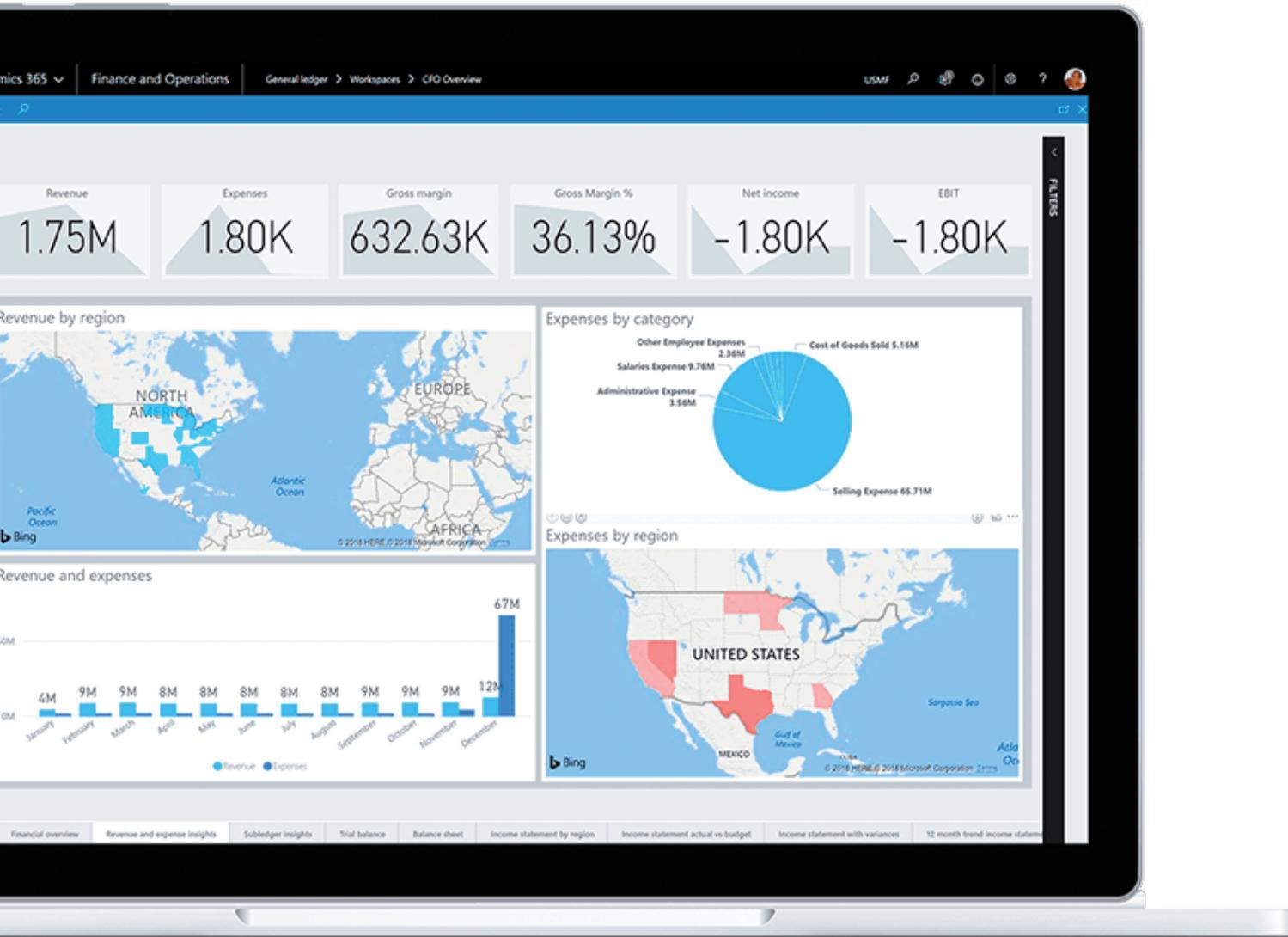
as likely to have integrated e-commerce and mobile device capabilities

Those same businesses are nearly

50%

more likely to have business analytics and intelligence.

ERP platform upgrades are an inevitability; a cloud solution just gives companies more flexibility in how they account for them.



problem—a business simply has to be able to customize the functionality of an off-the-shelf product to meet its needs.

**Microsoft supports this agility through what we call “sealing the application.”** When a client customizes their platform, their new code is an extension to the core code, as opposed to overlaying the core code. In this new approach, customizations are preserved after updates to the core, with end API connections ensuring the unique elements still work automatically. Combine that capability with considerable no-code customization options in Microsoft PowerApps like Power BI, and you’ve made platform updates a problem of the past.

In addition, Dynamics 365, as well as other complimentary Microsoft systems, allow for approved updates—meaning many upgrades can still be tested by a company before they are pushed out to the core. Now, internal stakeholders can work in a controlled upgraded environment to evaluate foundational updates and protect against any damaging ripple effects. **Control over updates still lies with the customer—it’s just the effort that rolls to the vendor.**

Even if upgrades can be more complicated for companies leaning heavily into platform customizations, this is not an issue isolated to

cloud-based systems—an on-premises solution would be equally susceptible to such problems. A SaaS tool’s client-managed update testing, however, can provide an earlier warning of potential misalignments. On-premises or otherwise, ERP platform upgrades are an inevitability, but a cloud solution gives companies more flexibility in how they account for them.

Remember that complication-causing updates are not without purpose. If an upgrade conflicts with existing internal processes, it’s possible that those processes no longer align to industry best practices and should be assessed. Foundational updates should be viewed as opportunities to evaluate your company’s methodology against the competition. After all, Dynamics 365 is more than just an ERP—it’s a continually optimized set of per-industry benchmarks that gives companies the tools to make smarter decisions.

That directly translates to a safer and smoother client-side system, especially when accounting for significant changes in global regulation like GDPR. Avoiding platform updates keeps those benefits at arm’s length. **But migrating to a cloud-based solution makes solving the update problem a whole lot easier.**

<sup>7</sup> Aberdeen, *Top Performers Know It’s Time To Migrate to Cloud ERP: Here’s Why and How*, 2016

## 5. Reduced IT dependence and total cost of ownership

An obvious benefit to the cloud model is the boost in business performance gained through more efficient platform updates. The cloud brings improved best-practice data, innovative technological capabilities, and a more secure system. But using a SaaS tool can have a major impact on a company's bottom line, as well—and those savings usually come through IT.

**Simply put, running an ERP out of the cloud usually takes less time.** With so many technical responsibilities now resting with the vendor, as opposed to the customer, internal IT teams have far fewer tasks to worry about when it comes to maintaining the system. Managing the platform update process is just one piece of the pie; tasks like hardware upkeep and product support represent critical time drains on even well-performing IT structures.

What's interesting is how divided companies are over the thought of minimizing the IT presence needed on their ERP solution. Recent Keystone research shows that nearly a third of companies considering a switch to a SaaS model are doing so to reduce their dependence on internal IT resources—and that was the top concern among all respondents.<sup>8</sup> But that research also shows that among companies only considering another

on-premises solution, 33% are doing so specifically *because* of a strong pre-existing IT department—also the most common response.

In other words, the very thing some on-premises ERP users are actively trying to leave behind—an IT-dependent internal structure—is exactly what's keeping other companies rooted in place.

At many companies, the resistance is caused by the relationship between cost and capital. For businesses that have invested heavily in on-premises servers and the teams to manage them, for example, a sudden pivot to a cloud-based structure can be daunting, deflating, and financially complicated.<sup>9</sup> This may explain why small businesses see an uptick in cloud migration rates as opposed to staying on-premise—they're still agile enough to navigate key structural changes.

But the divestment of certain on-premise resources doesn't necessarily have to happen immediately. **A phased approach can provide a smoother transition and ease cost burdens;** it just requires smart planning and a clear set of end objectives. While expenses may spike during a phased analysis, the end savings and ROI of choosing a cloud ERP implementation should be crucial long-term considerations.

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Just 35% of companies using an on-premise solution have access to online training or a support portal.

Cloud solutions don't have to be an all or nothing proposition. Microsoft's broad offering divides into three camps—software as a service (SaaS), platform as a service (PaaS), and infrastructure as a service (IaaS). **Dynamics 365 is a true SaaS solution, operating as a browser-based ERP.** Our power platform—filled with apps like Power BI and Flow—functions as a PaaS tool. And our cloud solution, Azure, is the IaaS. In tandem, these three categories provide a full-stack cloud ERP model for companies ready to embrace digital transformation. They just don't have to be tackled all at once, giving businesses the opportunity to implement phased solutions when they're ready.

This is critical, because for most companies, an impending ERP implementation isn't just a possibility—it's a certainty. More than half of surveyed businesses are running an ERP that's at least 5 years old, and clients and vendors alike are moving in lockstep toward cloud-based systems as the more attractive solution. The reality is that on-premises models are facing an increasingly uncertain future, and forward-thinking companies are behaving accordingly; businesses moving to cloud solutions cite their ERP's likelihood for ongoing support as one of the most important deciding factors.<sup>10</sup>

That support extends beyond just patches and bug fixes. In SaaS tools like Dynamics 365, online support is frequently built into the platform itself, providing the kind of vendor proximity businesses need to run at peak efficiency. Such functionality is less common in on-premises platforms; just 35% of companies utilizing them have access to online training or a support portal.<sup>11</sup> That number jumps to nearly 60% for companies on cloud-based models.

**The reduced dependence on internal IT teams, then, is more of a transition to a relationship-based model between vendor and customer—freeing up multiple internal departments to focus on business results.**

And with so many technological tools available in our cloud ERP, those business results have never been closer at hand.

8, 9, 10 Keystone, *Business SaaS Decision Making*, 2018  
11 Aberdeen, *Top Performers Know It's Time to Migrate to Cloud ERP: Here's Why and How*, 2016

## 6. Functionality & corporate agility

Decision factors like cost, upkeep, and internal IT demands are rightfully crucial when selecting an ERP. But at the end of the day, one of the most crucial elements of any SaaS solution is how well the platform works, both broadly and for your company's specific needs. In today's business environment, that usually means universal data accessibility.

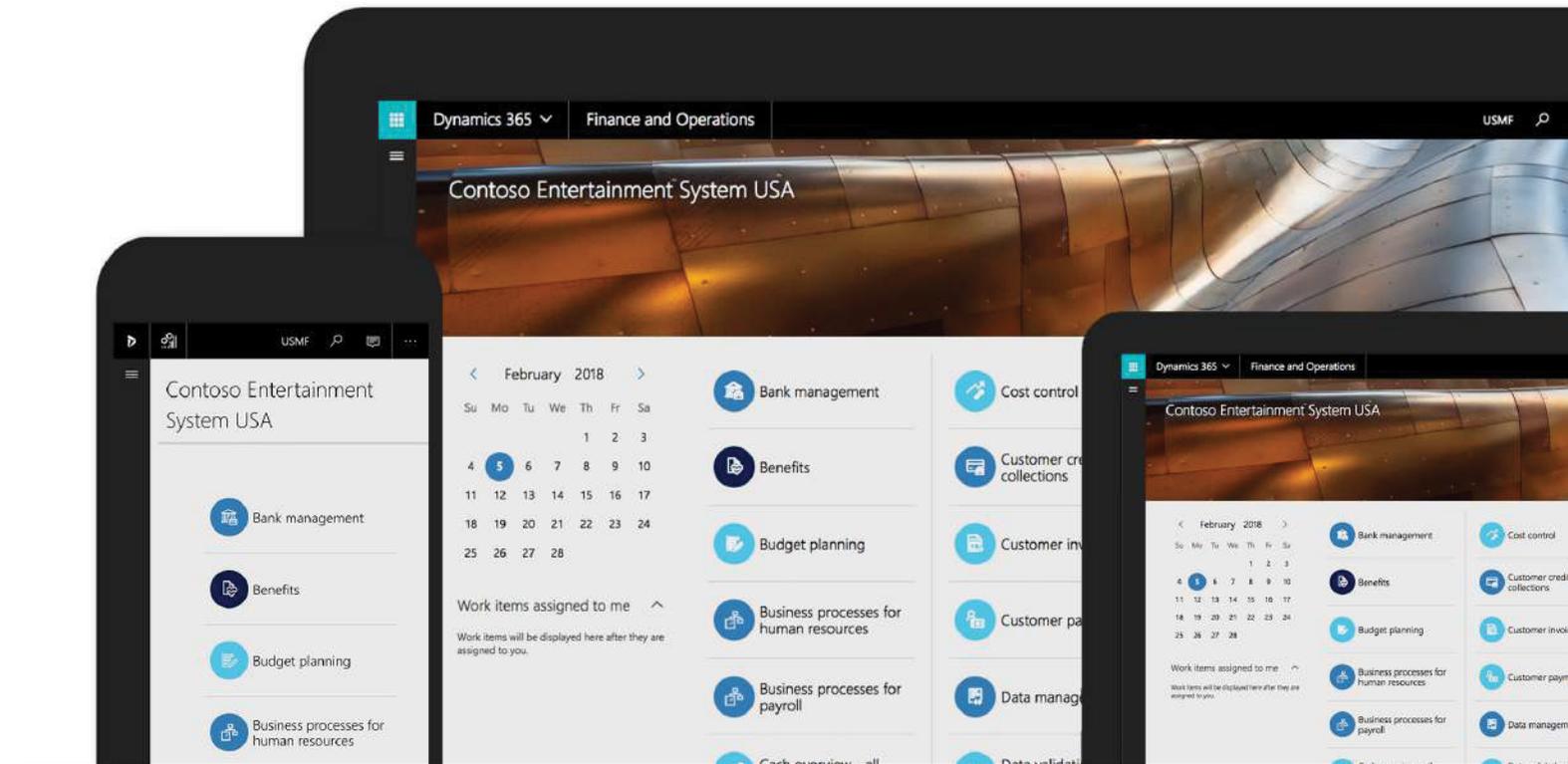
Companies are becoming increasingly decentralized every day. Remote employees, global offices, and device diversification are stretching the limits of what many businesses can keep connected. According to The New York Times, as of 2017, **approximately 43% of American employees said they spend at least some time working remotely**, a significant shift from just a few years before. At the same time, this current era of hyperconnectivity demands increasing seamlessness across teams and departments, regardless of how scattered physical resources may be.

Such requirements are becoming increasingly fundamental to companies of all sizes. More than 25% of businesses looking to move to a cloud ERP cite functionality and agility as their main reason; another 10% are looking for easier access to data for remote employees or global offices.

That need is something best resolved with a combination of SaaS tools and the cloud. Aberdeen research shows that **50% of companies using a cloud ERP model have real-time visibility into the status of all processes and data**—just 25% of companies using an on-premises solution can say the same.<sup>12</sup> SaaS users also report higher rates of real-time, cross-departmental collaboration, as well as the ability to share and integrate data across the enterprise.

Such flexibility and scalability are at the core of Microsoft's cloud ERP solution set. The browser-based interface in Dynamics 365 allows for real-time connectivity from anywhere in the world—and from almost any device. And compounding that capability with the full power of the Microsoft application family provides even more value. Incorporating business intelligence tools from Power BI, for example, can help turn data-heavy financial ledgers into easily shared dashboards. Integration with Office 365 seamlessly ties the ERP to your primary business applications.

And this is all accomplished with a standardized user interface that's both powerful and usable—an increasingly important objective as companies evolve from cloud novices to cloud experts.



More than a quarter of businesses looking to move to a cloud ERP cite functionality and agility as their main reason why; another 10% are looking for easier access to data for remote employees or global offices.

1.

Always have the option to manage truly mission-critical data on-premise.

2.

A vendor's data center network should easily meet your company's specific data residency requirements.

3.

Providers should be able to provide expert guidance and technical compliance to new regulations.

4.

Are you evaluating a vendor that no one else seems to trust, or will you be in good company?

Company leaders say that a cloud-based ERP's ability to safeguard a company's internal information is one of its **most crucial features**, according to 2018 Keystone research.

Keystone research shows that 50% of companies switching cloud providers do so because the incumbent solution was too limited in functionality.<sup>13</sup>

**For any company, what's critical is that such adaptability and accessibility doesn't come at the expense of data security.** Cloud-based systems, and the misconceptions that surround them, remain a persistent worry for many business leaders. Company executives say that a cloud-based ERP's ability to safeguard a company's internal information is one of its most crucial features, according to 2018 Keystone research.<sup>14</sup>

Consider the following checkpoints when evaluating whether a cloud-based ERP provider has the right safety network in place:

1. Using a cloud-based ERP doesn't mean every data point has to live in the cloud. You should always have the option to leave mission-critical data on-premise if the consequences of not being able to access that data would be catastrophic.
2. Data residency regulations should be easily met through the vendor's vast network of data centers—even in unique markets. That's why Microsoft has more data centers than any other provider in the world.

3. Privacy laws are changing rapidly. Your provider should be able to provide expert guidance and technical compliance to regulations like GDPR in both your platform and cloud infrastructure.

4. What other companies are using this cloud solution? Will you be among the world's most respected and secure companies as clients? Or are you evaluating an option that no one else seems to trust?

A company's security and its customers security should always be paramount when considering any major platform change. The right vendor should specifically detail how its ERP solution accounts for key issues and updates, as well as exactly how data is accessed and encrypted.

Part of the data puzzle, however, is how that ERP is implemented from the get-go. Outlining and then implementing a clear set of business objectives is the first step to migrating to a cloud-based model. **Here's how you can get started.**

<sup>12</sup> Aberdeen, *Top Performers Know It's Time to Migrate to Cloud ERP: Here's Why and How*, 2016  
<sup>13, 14</sup> Keystone, *Business SaaS Decision Making*, 2018

## 7. A smarter path to implementation

Once you've selected a new platform for your company, ERP implementations shouldn't be taken lightly—platforms that touch every corner of a business demand a requisite smart amount of planning. Regardless of whether you're choosing your company's first cloud ERP or just switching to a new primary solution, both processes should start with the same step: **Clearly defining what you want your ERP to accomplish.**

For many CTOs and IT leaders, this can be the most difficult stage. For starters, reaching consensus across departments on an ERP's desired functionality takes the kind of communication and planning that takes immense and sometimes tense communication and planning. Mapping out exactly how that functionality comes to life is critical. This may require a specialist, in conjunction with your IT team, to properly connect all the various pieces of your ERP to the secondary platforms, or other pieces of technology that you currently use.

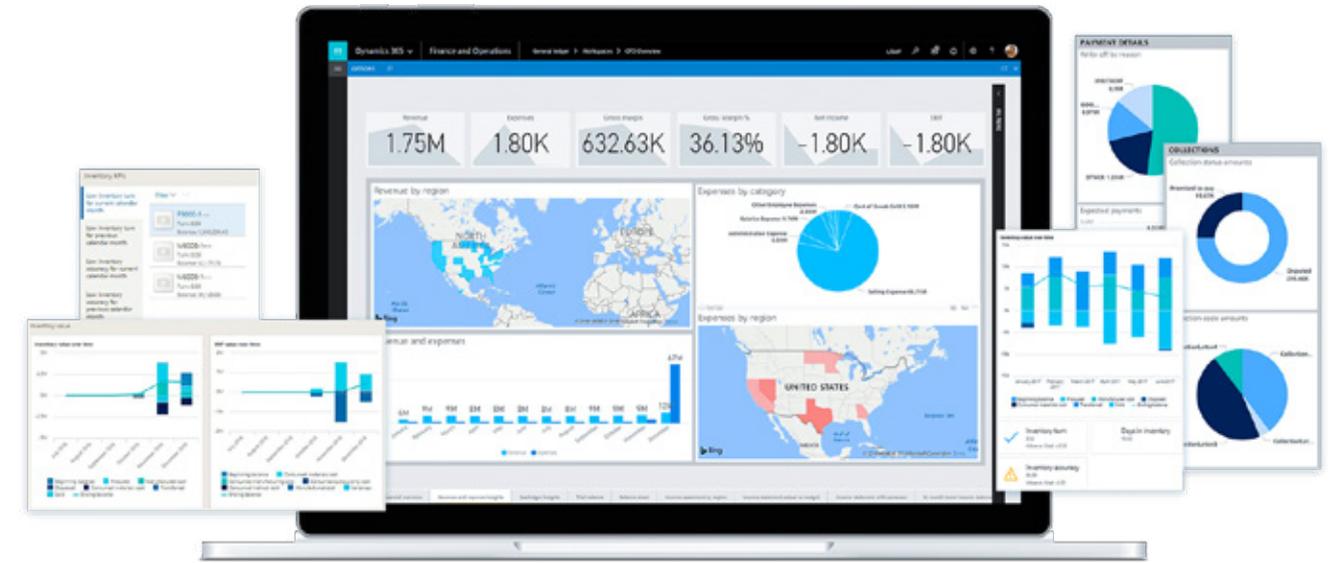
To help solve these problems, focus on the largest gaps between the functionality of your new system and the surrounding technologies you currently use. Then decide whether they need to be addressed with platform customizations, internal process changes, or additional technology. This is crucial. Selecting platform customizations for specific teams—

and weighing them against the advantages of aligning to industry best practices—can have long-term functionality implications.

It can be tempting to solve every issue with customization. But doing so can make your platform more difficult to routinely update and maintain. While they may be necessary in the end, customizations should only be adopted after determining that your ERP's per-industry best practices simply can't apply to your business—and only after a firm understanding of their potential consequences.

But knowing your end goals and achieving them are two different things. Aberdeen research shows that **75% of high-performing companies rely on a centralized implementation project map and timeline** that's available to all parties.<sup>15</sup> Implementations take time, and maintaining a consistent north star across the process can keep teams on the same page. It's also essential to include the right project managers to keep sprints on deadline.

If you have the resources, **build a dedicated team.** More than half of all companies do so when going through an implementation, but that number jumps to nearly 75% for top-performing companies.<sup>16</sup> With today's ERPs



[Learn more](#) about Dynamics 365 for finance and operations

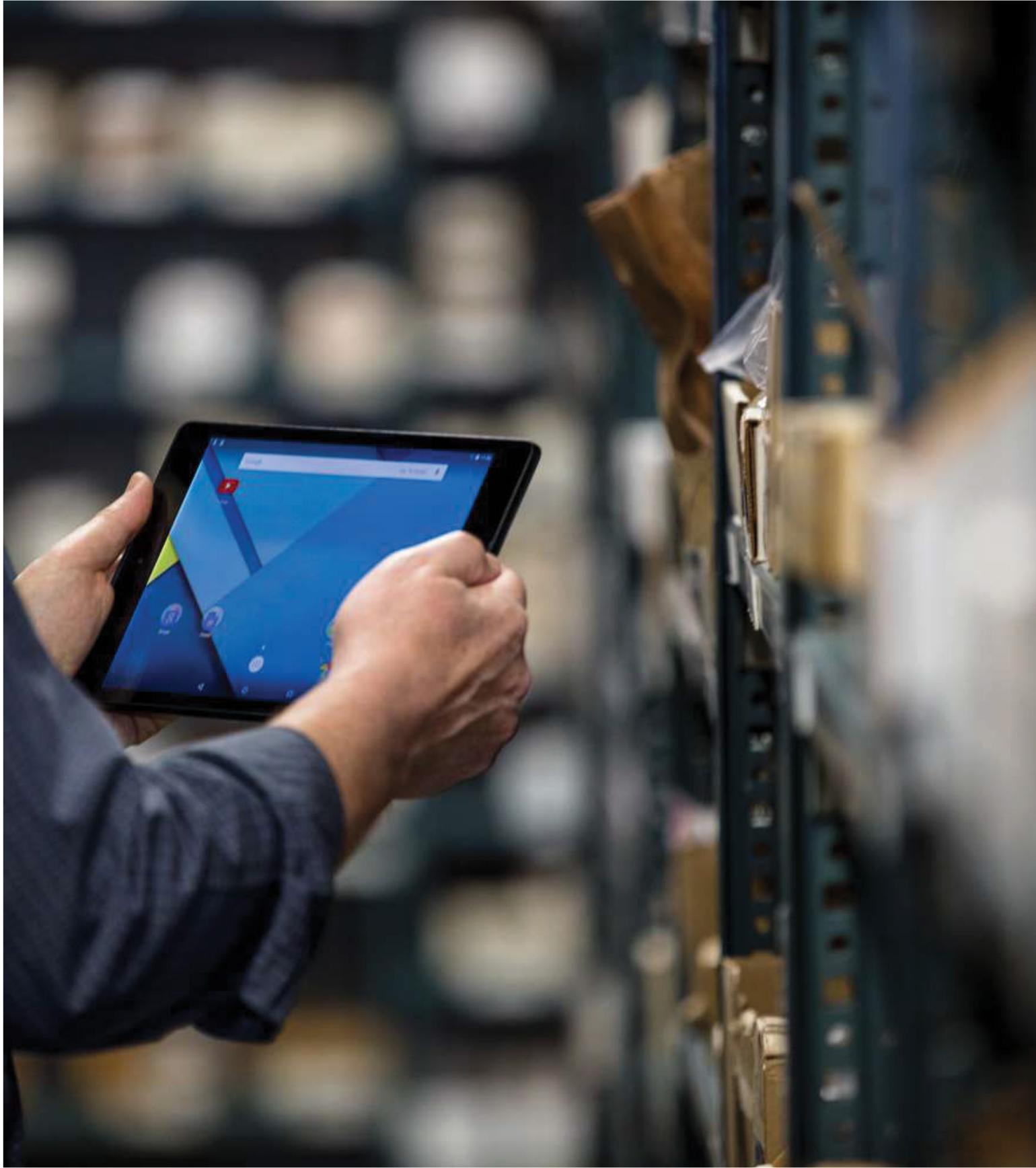
built for nearly every aspect of modern business, implementation teams should span all key disciplines and departments including finance, IT, and human resources.

Having a dedicated group of stakeholders offers not just a mixture of knowledge, but also a sense of ownership over the project itself. And bringing in external specialists can provide critical expertise in implementing your new ERP platform.

With the right project map and collection of talents in place, it's time to kick off. But such a business-critical decision begs for a commitment to **continual testing and optimization.**

A cloud migration is an opportunity to move away from a monolithic, on-premise approach and toward a constantly evolving system. **Exercising a SaaS model's inherent flexibility and refining its immense capabilities to your unique business needs is critical to recognizing the platform's full impact on your business.**

<sup>15, 16</sup> Aberdeen, *Top Performers Know It's Time To Migrate to Cloud ERP: Here's Why and How*, 2016



## 8. It's time to make a change

ERPs are the lifeblood of most major businesses. Good platforms track everything from inventory to monthly close, which is why replacing or upgrading them should be approached with the appropriate amount of respect. When the stakes are high, being cautious is the smart approach.

But the data is clear—cloud-based ERPs are already the new normal, and with so many businesses running outdated systems, the next five years are likely to bring dramatic market change. Not only are SaaS solutions more capable and efficient than on-premises ones, but their level of built-in vendor support and security protections provide a safer, more scalable environment for your company to grow into.

Regardless of whether you're one of the 90% of companies operating an ERP that's at least 2 years old, now's the time to consider what the cloud can offer to your bottom line.<sup>17</sup> At Microsoft, our Dynamics 365 for Finance and Operations platform provides the integrated tools and support essential to helping secure overall business viability into the future. **And regardless of where you are in your journey to the cloud, our experts can help build a migration strategy that aligns to your specific business challenges.**

<sup>17</sup> Aberdeen, *Consider All Options When Moving to the Cloud to Keep our Organization Current on Technology*, 2018

## See what Dynamics 365 can do for your business

Whether you're responsible for the finances and operations of a global enterprise or a regional midsize business, Microsoft Dynamics 365 has the right solution for your ERP needs. And as an industry leader in cloud-based ERP platform technology, we provide the peace of mind that only long-term support and viability can offer.<sup>18</sup>

**Don't let the market—and the competition—pass you by. Find your new home in the cloud with Dynamics 365.**

18 Nucleus Research, *ERP Value Matrix*, 2017

“If we didn't go to the cloud-based, mobile-based (platform), it would become a huge limiting factor to our growth and maybe even our existence in the future.”



**CARL SPACKMAN**  
VP, Finance, Copper State Bolt & Nut Co.



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