



When innovative companies plan and perform digital business transformation initiatives, they rely on technology to realize breakthrough results that businesses have sought to accomplish for years: Deliver the highest possible value and create close, collaborative relationships with customers. Become an industry leader that competes powerfully and enjoys long-term viability. Grow globally. Translate innovation initiatives and people's creativity into products and services that meet current and emerging customer needs. Run the most productive and efficient operations possible. Change course rapidly to profit from market trends and changing customer preferences.

Reaching these objectives and making the right decisions in pursuing them requires high-performance computing resources, including extensive data collection and storage management tools as well as powerful business intelligence solutions. Not all companies have the budgets and expertise to create and run the data centers that can drive digital business transformation. Also, these investments may not even be necessary.

Modern cloud technology enables companies of all sizes to take advantage of software, hardware, and network infrastructures on an as-needed, economical basis. When they move their data and applications into the cloud, they can also use cloud-based analytics and insight tools to gain the insight they need to thrive, grow, and transform themselves.



Three cloud basics to remember

- For companies looking to realize digital transformation to become more competitive and relevant, the cloud is the most important enabling element.
- Technology mega trends such as mobility, social, big data, the internet of things (IoT), and virtual reality would be impossible or useless without the cloud.
- In a globalized world, the cloud fulfills the promise of the internet to bring people, organizations, and goods together across geographical, organizational, and social boundaries.

8 ways the cloud benefits businesses

Moving to the cloud can greatly reduce your total cost of ownership (TCO) of computing and networking resources, but you run the risk of needlessly limiting the potential cloud benefits you can achieve by focusing on financials alone. We recommend considering all the following aspects of cloud computing in your planning.

1

Economical

You no longer need to purchase servers, software, or networking equipment as a capital expenditure to meet your computing requirements. Instead, you contract with a cloud provider for the capacity and resources you need, when you need them. A predictable operating expense is all you pay for. Competitive cloud providers offer a choice of payment scales, service levels, and contracts to fit your business.

2

Immediate

Since you don't need to set up a network or a data center, you can test and launch your high-priority workloads in the cloud quickly - even within minutes.





Scalable

Your growth may take many directions – more customers, additions to the product portfolio, hiring employees, making acquisitions, processing larger numbers of transactions, or other events. Your computing resources in the cloud can scale up to support the increases in your business, often requiring minimal notice. That includes applications, such as ERP and CRM systems, as well as servers, networking hardware, and storage. When your needs change, cloud computing can scale back down.



Smart

Today's leading cloud services provide sophisticated analytical tools that you can use to direct and control planning and forecasting, supply chain management, your approach to customers and market segments, production, logistics, asset management, product development, and much more. Your goals and strategy determine how you use analytics in the cloud to meet customer needs, respond to competitive threats, and drive growth.



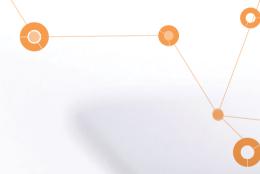
Flexible

When it's time to change accountabilities, processes, corporate entities, and other business conditions, forget about organizational gravity. In the cloud, you can make such adjustments immediately.



Fast growth of the cloud

By 2020, the market size of the global public cloud is expected to grow near \$160 billion, doubling its value over 2014. Compared to a 5 percent annual increase in overall enterprise IT spending, investments in cloud computing infrastructures are on track to grow 30 percent per year between 2013 and 2018.





Encompasses the IoT

The cloud is the most effective, economical, low-risk, and scalable way to harvest and analyze the data from sensors connected to the internet of things (IoT) on your machinery and equipment, vehicles, logistical and environmental systems, and products used by customers.

7

Empowers mobility

Without the cloud, mobility is unthinkable. If you want to give mobile employees in sales, services, or anywhere in the operation access to information and the capabilities of your ERP, CRM, and other business systems, the cloud makes this possible, no matter how many users are involved or which devices they prefer.

8

Reliable and secure

To keep their customers' intellectual property, applications, and data safe and available without interruption, cloud providers make large investments and develop cutting-edge technologies that directly benefit you. That includes redundant data centers that can take over from each other if one of them fails, secure buildings and facilities, dedicated connections, and world-class data protection technologies.



Businesses overcome limitations and address challenges in the cloud

While every company is a unique constellation of people, offerings, values, and processes, there are many commonalities in what businesses accomplish in the cloud. Here are some usage scenarios we encounter frequently.



Predictive maintenance ensures the uptime, productivity, and performance of industrial assets

Companies make strategic investments in business-critical machinery, production lines, energy and fuels, facilities, warehouses, logistical systems, and different types of vehicles and fleets. Keeping these assets in best working order and maintaining the best environment for them as well as for your supplies, materials, and products can make a big difference in how well you control costs, manage resources, and meet customer commitments. For those reasons, many companies rely on data insight from the IoT to enable better use of their assets and resources, maintain desirable environmental qualities in storage and production facilities, and evolve maintenance from condition-based to predictive. These are important, frequent use cases where cloud technologies can excel.

If you need to keep tabs on the exact composition of farming soils, the performance of a complex machine, the real-life usage scenarios for your products in customers' hands, or the location and fuel consumption of your delivery vehicles – cloud technology and analytics can provide real-time visibility and enable you to create the outcomes you want to see.





Your interests and priorities drive the direction and extend of cloud intelligence

When you take advantage of cloud-based analytics and business intelligence capabilities, your most urgent concerns determine which questions you answer first. The right context for that initial finding helps you decide what actions are best, given their likely consequences and results. In the cloud, you can set up data stores and insight tools with great flexibility to get to meaningful, beneficial decisions.

Imagine you already rely on cloud-enabled IoT intelligence to control and maintain machinery and equipment. You can do much more than that. You can layer that data with contextual information about materials planning, operator training, or the supply chain. Your results might then include less costly and more timely procurement of crucial components and materials, streamlined transportation route planning, or more effective scheduling and training for field maintenance technicians, drivers, and machine operators.

You can increase this intelligence by connecting it to the people, systems, and processes involved in the development of new product designs and services, or add data-driven assessments of customer behaviors, market trends, and competitive threats. At that point, cloud-powered insight can range all the way from keeping a vehicle or machine running to developing products with the features customers want the most.



Effective collaborations no longer require people to meet in the same physical location

Businesses function much better when the right people work together, no matter where they are placed organizationally – they could be colleagues, customers, consultants, or vendors. Through the cloud, they can all connect, without the expenses and inconveniences of travel. You can ensure that effective collaboration is the standard way of doing business, not an exception that happens on special occasions or whenever budgets can be stretched. Individually or within groups of users, you can securely provision all contributors with access to the applications and data they need. In the cloud, high-end usage scenarios such as product-development or architectural-design collaborations that involve virtual reality (VR) or augmented reality (AR) become more practical and affordable, and you never need to exclude certain people because they escalate your software licensing costs or can't be scheduled into onsite meetings.





Actionable intelligence generated through cloud resources positions you for a stronger competitive advantage and brings greater precision to your forecasting and planning.



B2B and B2C eCommerce increases your bottom line and customer loyalty

You may have opportunities to generate additional revenue through sales. For example, if customers like your company and its products or services, they might rather come to you to purchase spare parts or supplies. Or, if your business is partly seasonal or cyclical, during a limited time you might be able to dramatically increase your sales volume and profitability.

You want to provide an excellent customer experience and keep your sales costs low while creating new revenue streams. With modern eCommerce tools, you can quickly and cost-effectively create, test, and launch an online shop where customers can do business on their own as they order parts and supplies, connect with your service department, schedule appointments, check on fulfillment and shipping status, and update their accounts. Some companies also use eCommerce ventures to take to market more commoditized and lower-margin offerings, even if they continue engaging with resellers and distributors to take their high-end products to customers.

If you want to offer new services – think warranty maintenance, installation, upgrades, or training – launching them online and evaluating the outcomes with cloud-based analytics is a low-risk, inexpensive way to reach potential customers and optimize the results.



Mobility becomes worthwhile through the cloud

The cloud and mobility belong together. Without the cloud, true mobility is not possible, because people would have to access computers in offices or other locations to get to information and system functionality. Without mobility, the value of the cloud would be limited to a dwindling subset of possible users. Giving your employees, contractors, customers, and trading partners cloud-enabled, mobile access to ERP, CRM, and other business systems, portals, and data sources means it does not matter where in the world they are. They can use their preferred devices to take care of business – move projects forward, approve invoices and financial statements, submit hours worked, purchase materials, process orders, deliver services, and almost any conceivable other task.





The cloud realizes the potential of mobility to enable productive work with access to information and applications, anywhere and anytime.



Service provider expertise lets you make more strategic use of your own IT department

If your IT department is fully occupied with the day-to-day activities of keeping applications, networks, and infrastructures running and secure, you can move most of these routines to the cloud and let your service provider handle them. You can then use in-house IT resources to perform custom development and other high-value tasks. Working with a strong cloud service provider, your IT team can efficiently learn the skills of development, provisioning, resource management, and security in the cloud, or become proficient in managing a cloud and on-premise hybrid environment and its integrations. You can draw on your service provider's specializations, for instance, to enable advanced intelligence, collect and process large masses of data, or take the complexity out of working with the loT. Your cloud service experts will also be able to help you decide when to move which workloads to the cloud and which you might want to keep on-premise. Modern ERP and CRM systems no longer need to be deployed in their entirety, which might give you functionality you don't need. Instead, you can implement in the





The global cloud lets you grow at your own pace

In the cloud, you can grow as you like, without being hampered by artificial limitations. If that entails other countries and regions, there is no need to slow your momentum. Leading cloud providers maintain advanced cloud infrastructures in global networks of data centers. One of those facilities will be close to your headquarters, and, when your company reaches beyond your region or into other countries, they can support you wherever you go.

Modern cloud infrastructures and the with multi-language and multi-currency features of cloud-based ERP and CRM solutions easily accommodate international business and communications. If you're operating production plants, distribution facilities, sales offices, or branches in several countries and regions, the cloud offers an efficient way to make corporate systems and information available to them and connect their processes to the entire organization.



If you depend on any kind of business-critical assets – for example equipment, machinery, production lines, buildings, environmental systems, logistical systems, and vehicles – cloud-enabled intelligence and KPI tracking based on real-time information can help you keep them operating reliably and at best performance.



You can extend your reach and control in supply-chain management

In a globalized world, the cloud makes it easier to run the company on your terms. Within the cloud's limitless reach, you can conduct business with suppliers and trading partners anywhere, and manage communications, contracts, deliveries, quality control, and vendor evaluations in the cloud. Many times, that may mean you can source materials at a better price and a more convenient delivery schedule than you could with more limited means. In consequence, you can offer your customers better terms, maintain healthier margins, schedule production and deliveries to make better use of your facilities, and reduce inventory.





redefines new product development with more effective collaboration internally and throughout the supply chain.

Transform your business in the cloud

You can now act on the cloud opportunities that offer the highest benefits. Together, Columbus technology and expertise, Microsoft Dynamics 365, and the analytics resources available on the Microsoft Azure cloud make lasting, controlled business growth in the cloud practical, fast, and affordable. Before, during, and following your move to the cloud, we help you optimize processes, increase efficiencies, and reduce costs. We offer proven, practical solutions and approaches within an affordable subscription model that eliminates distractions and lets you focus on results.

To take the next step...



e-Book: How to move to the cloud



What happens when business takes to the cloud

These are some common cloud usage scenarios and outcomes we hear from companies:

- Predictive maintenance of machines, equipment, facilities, and complex products delivered to customers
- Accurate and timely resource planning of people, equipment, and facilities
- Increased agility to respond to changes in customer requirements, the supply chain, and the competitive climate
- Rewarding, and productive customer experience with greater potential for increasing customer lovalty and retention
- Ability to gather customer feedback and use it to improve processes and products
- Alignment of all sales channels behind common business goals, with efficient tracking of results
- $ig(\, {f 7}\,ig)$ Reliable and meaningful strategic planning and decision-making
- 8 Effective and meaningful collaboration among employee teams and with customers and trading partners
- Productive, reliable mobility with secure systems and resource access for sales, service, and other contributors at any location, any time
- Global, streamlined, and secure qualification, negotiation, and transactions with suppliers and resellers
- Reduced costs and times of developing, testing, and launching new offerings





At Columbus, we help our customers digitally **transform** their businesses and improve the value realization of their business application investments. We **mitigate** the inherent risks associated with implementing, upgrading and replacing legacy ERP systems. We **lead** our customers with best-practice consulting services we have refined over thousands of engagements. We take care of our customers and aspire to keep them for life.

To learn more about how Columbus can help you get the most out of your Microsoft solution, contact your local Columbus office.

> www.columbusglobal.com