Columbus

The cost of moving to Cloud ERP

The cost of moving to Cloud ERP

The factors that will drive your investment in migrating your business systems from on-premise to the cloud with Microsoft Dynamics 365 Finance and Dynamics 365 Supply Chain Management.

Regardless of the industry, the pressure to move to the cloud is high. Before your organization makes the decision to upgrade or migrate, it's important to have a full understanding of the costs involved. The financial impact, as well as the potential benefits, differ for each company. Where do you start-and how do you get to a realistic figure that takes into account all aspects of the migration?

First, break down the costs and weigh them against the benefits of Dynamics 365 Finance and Supply Chain Management. At a high level, Dynamics 365 Finance and Supply Chain Management unifies and automates your financial process with advanced Artificial Intelligence (AI), enabling your business to reduce operational expenses and make smarter and faster decisions. Additionally, the solution has numerous options for customizing and addressing operational reporting.

Cloud-migration costs can vary greatly as upgrades or migration varies from one company to another. Several aspects drive these differences.
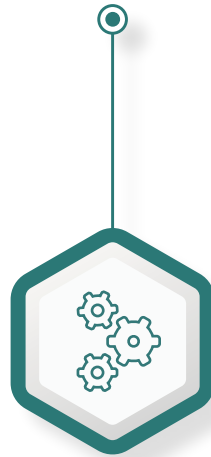
Do you have older systems, or is your infrastructure comprised primarily of cloud-friendly systems?

What is the condition of your current infrastructure?

What level of support will your organization require throughout the migration process?
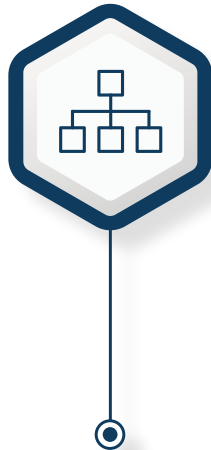
Are you planning to migrate one component at a time, or will you target a larger phase approach?

How easy will it be to integrate your workloads and applications with the cloud?

How virtualized are your functions today?

Bottom line:

The more complex your migration, the more you're likely to pay. If your current infrastructure is highly customized and entirely dependent on your on-premise system, replicating that infrastructure in the cloud will take more time and resources. It's also vitally important to choose a quality provider to partner with as you plan and execute your move to the cloud.

Columbus®

Step 1

Perform a 360-degree assessment of your on-premise system

Learn about your future in the cloud from your existing on-premise operations. This examination will help determine cost, create a blueprint for your cloud infrastructure, identify resources that can be cut, and discover necessary updates and replacements. As you review costs, be thorough and make sure to consider both direct and indirect expenditures.

Direct costs

These costs are visible and easier to track. For an on-premise system, direct costs include hardware and software. Document the cost of servers, software licenses, maintenance contracts, warranties and supplies.

Determine the labor required for maintenance of servers, databases and other technology, as well as upkeep of the facilities housing IT hardware and the cost of internet connectivity. Also gather administrative expenses, including the cost of managing both internal and external IT staff.

Indirect Costs

These costs are more difficult to identify, but still valuable to document, as they can make up a significant portion of overall IT costs. Indirect costs can include the cost of the loss of productivity suffered by your employees and customers if your IT infrastructure goes down. One way to quantify that is to review log files to determine how often your servers go down and for how long, and multiply that time by an average hourly rate. In addition, make sure to estimate revenue lost due to downtime and any other overhead costs that apply.

Columbus®

4

Step 2

Map out your anticipated cloud migration

Define your infrastructure and migration phasing

Build your blueprint for your cloud infrastructure by mapping out details like the number of servers, types of databases, network bandwidth and storage capacity you use. You should also determine which components you want in the cloud. Some workloads and applications may be a priority to move to the cloud-and others may require more prep before migrating them. Figure out which components to migrate first and which to schedule for later.

See if anything needs to be changed

Determine whether any components of your existing IT setup can be reduced or eliminated. Chances are you will find redundant or underused applications that you can eliminate or downsize. Additionally, analyze whether any components may have cloud-compatibility challenges. In your assessment, you may find components and applications that require modifications, upgrades or replacements to operate in the cloud.

Know your costs

Scope the cost of your current system versus a cloud migration and infrastructure. Be sure to factor in the indirect costs of not migrating, as well as the fact that operating off the cloud may keep you from being competitive.

Step 3

Identify potential challenges and added costs

As you work through your assessment, chances are that you will find some areas of concern that need to be addressed for your migration to be a success. Understanding the cost implications of these is important in building an accurate picture of total migration costs.

DATA

Cloud data warehouses support a different type of schema than your on-premise system. And that means that the allowed data types for your cloud system may be different, as well. Bear in mind that there are data types not supported by the cloud. You will need to comb through your data and figure out how you will transfer it.

SECURITY

Although initially it might seem like a time-saving idea to allow all developers and data consumers access to any cloud resource, this can have negative results. The more a comprehensive approach to permissions management is postponed, the harder it is to impose strict security.

APPLICATIONS

You have a lot of applications in your IT universe. You need to make sure that all the apps will work on your new platform, if you want to move forward with them in your new configuration.

Cost Impact

Migrating data to the cloud is involved. It takes time and resources to make sure that your operations continue to run smoothly throughout, your data transfers safely and securely, nothing drops off during the transfer, and the infrastructure is complete.

Take the time to plan for security and permissions management when the migration is rolling out to your organization. Map the groups and roles needing access to cloud resources and align policies. Your organization should review the Dynamics 365 tools for managing roles and permissions.

Before you switch to the cloud, it is vital that you test your applications in the new infrastructure. You'll want to address any issues that will keep your cloud operations from running smoothly once launched. Though many newer apps and cloud-ready workloads you currently have will be in good shape to deploy, you may need to modify, upgrade or even replace certain apps before they can function properly.

Consultant Fees:

For something as significant and intricate as a cloud migration, it's usually best to hire a third-party consultant. Consultants can ensure that you deploy the services that will work best for you, and that your operations remain secure from start to finish and into the future. If you have chosen wisely, the money spent will pay off in better system configuration, faster ROI, and ongoing optimization.

Other Costs

Time:

Migrating, testing, and securing the infrastructure all involve labor, and any extended needs in these areas will proportionally affect cost. According to Forrester brief, "Cost of Migrating an Enterprise Application to a Public Cloud Platform," labor actually comes out to be the largest cost factor in cloud migration at 50 percent of total expenditures.

Columbus®

Step 4

Architect your cloud system

After you have completed your audit, you should have a good understanding of the networking, storage and database capacity you need to run all of your company's applications.

With this full picture of your current system, you'll be able to select the resources and services you need to migrate to and operate in the cloud. These services, and the level of functionality you require for each of them, will greatly influence cost. Realize that since the cloud is costed as a usage model, you should ensure your choice meets both performance and economic targets.

Calculate Your Cloud Migration Cost:

Microsoft has a convenient calculator function for piecing together the components you need in order to determine potential cost for an on-premise to Azure cloud migration. **Get started with the Azure cloud calculator.**

Select a partner for the migration

There are many eligible service providers-but not all providers are created equal. Cloud infrastructure is a complex task and it has the best result when performed by a reliable cloud vendor who ensures security, flexibility, speed, accessibility, disaster recovery and cost-efficiency. Cost alone should not be your deciding factor as you make your selection.

Defining characteristics of your cloud provider should include:

Expertise to help you take advantage of fast-evolving cloud technologies such as containerization, microservices and serverless architecture. The prospective partner should demonstrate a collaborative approach that ensures productive engagement with your in-house IT team and provides users with required assistance.

Familiarity with the changes, challenges, and tech trends in your industry, as well as the ERP, CRM, PLM and other systems that matter in your business.

Knowledge of both your immediate and long-term goals, including cloud planning, migration of data and applications, virtualization strategy, and integrations between cloud and on-premise resources. Effective partnering requires effective communication, project management, and technical skills.

To ensure a cost-effective migration, ongoing ROI from your move, and reduced costs of challenges such as downtime, your new cloud technology solution should offer:

👍 Enterprise quality infrastructure

Look for a vendor that can equip data centers with the right security facilities, including fire-suppression systems, power redundancies and cooling capabilities. As a result, you will get a superior quality infrastructure that protects your data center against incidents.

⏳ High uptime guarantee with SLAs

An ideal vendor such as Microsoft can ensure high uptime for seamless business operations by offering a Service Level Agreement that suits your business requirements. They can provide you with a better alternative to manage the cost of potential downtime.

Scalability that aligns with your business model

The vendor's ability to scale up or down per your IT needs is critical to your changing business requirements. They must deliver scalability of cloud computing resources to meet your current and future workload and transaction requirements.

Expertise in incident and problem management

Incidents can occur even with the best systems and processes in place. Consider an IT vendor who can offer a team of experienced personnel that can help manage critical incidents by quickly finding the best solution and bringing back normalcy with minimal impact on the business.

24x7 expert support

You need a vendor that can offer support round the clock to get immediate help whenever needed and assist you in quickly resolving issues. Service contracts that meet your requirements, fit your budget and have flexibility to support growth and change in your business are vital.

Best-in-class security and compliance

Your vendor's certifications must match your legal and regulatory compliance requirements. Make sure that the supplier can offer a secure data center and have a reliable backup setup to eliminate any risk of data loss, data theft, or cyberattack.

Completely managed operations and pay-as-you-go model

The vendor should be able to cover all your requirements as well as offer flexibility to pay only for what you use. Generally, payment granularity of months, if not hours, would be ideal.

Step 6

Migrate

It's time to physically move your workloads and applications, including data, to the cloud-as well as plan to retire the on-premise versions. Here we'll focus on the rehost approach, which entails moving applications running on traditional servers and virtual machines to Azure IaaS for deployment of Dynamics 365 Finance and Supply Chain.

Often, your organization will start with "lift and shift" to drive rapid migration and early cost savings. This approach requires no change in your app or workload framework, or architecture-it simply means exchanging hardware and OS management with the cloud environment. Note that this approach requires confidence regarding two key issues:
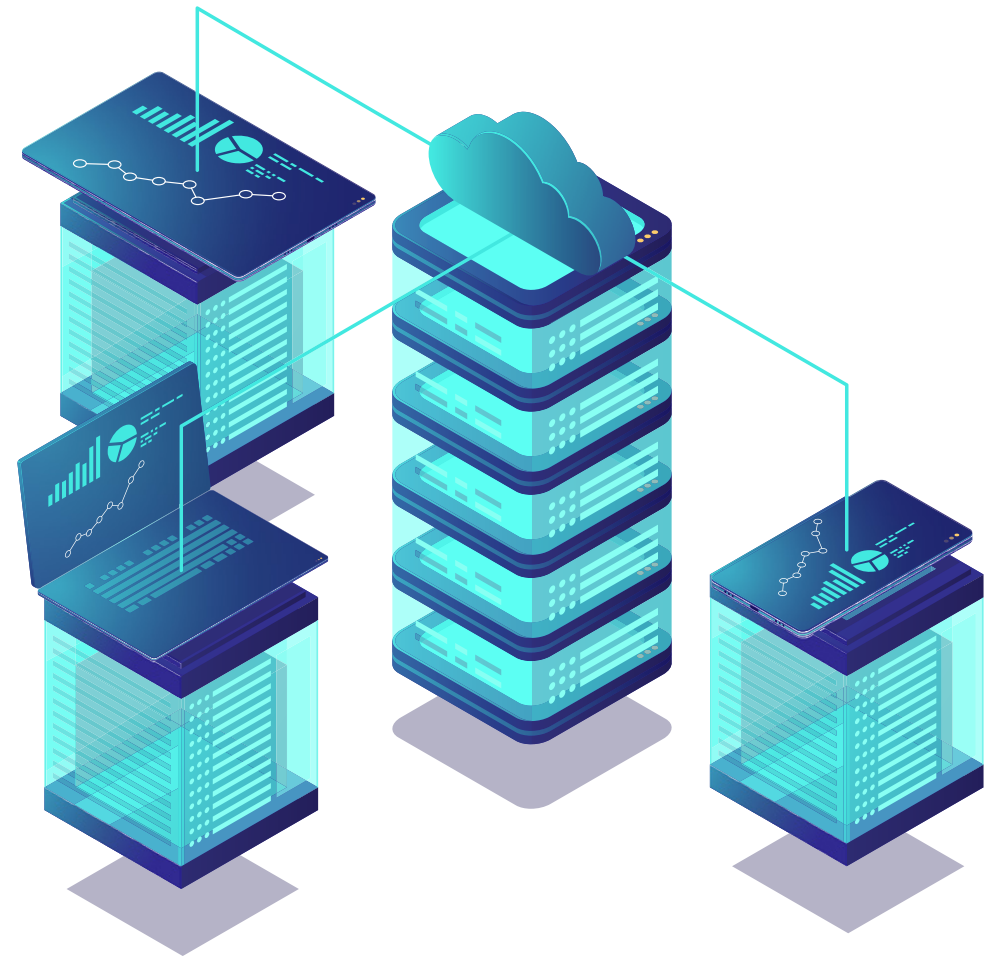
Can your workload be easily migrated, without too many manual steps?

Will your workload function as expected in the cloud?

Modern tools enable the system to cleanly migrate real-time data even when the system is actively being used.

Real-time replication

Real-time replication involves setting up a copy of the workload in the cloud and allowing asynchronous replication to keep the copy and the workload in sync. While you're building and executing your migration plans, any data or server updates are synced between the copies. It also enables groups of virtual machines to be connected, as in a multi-tiered application or workload, which is important when testing and the final migration cut-over begins.

Many tools support application-aware replication automatically. Microsoft applications including SharePoint, Dynamics, SQL Server, and Active Directory, as well as apps from other vendors such as Oracle, SAP, IBM and Red Hat, can be migrated with application-aware replication, ensuring source data consistency before replication.

Testing

Testing is integral to ensuring your new cloud system is functional and robust before final cut-over. It's important to start up your set of virtual machines in an isolated environment, which allows you to mimic the production environment in the cloud. This action allows you to fully test the application without affecting either the on-premises or cloud production versions.

When you're fully satisfied that both function as expected, it's time to perform the final cut-over. Migration tools can also do the final launch in your cloud and turn off the on-premises version.

"**Application innovation**-As you migrate your existing virtual machines in Azure, this is also the perfect time to continue on the path to application modernization. To do this, you can take advantage of your cloud provider, delivering even further cost savings and flexibility."

Columbus

⚒ Tools for migration

Migration of servers and virtual machines is different for each organization-and multiple tools are available to support your needs. These range from the Microsoft-provided Azure Site Recovery (ASR) to third-party tools. Third-party tools are valuable alternatives when you have specific needs not covered by ASR.

Database migration is uniquely supported by the Azure Database Migration Service (DMS). By using the DMS migration workflow, you will be able to move your on-premises databases to Microsoft Cloud.

You may have other specific needs, like rapid migration, where normal replication may not be sufficient. In this case, tools can assist in migrating the run-time to Azure first while leaving the storage on-premises. Then, over time, the storage is replicated.

Learn more

The information in this section was sourced from the Microsoft Azure white paper on cloud migration. Download the complete book to learn more

Step 7

Maintain, train and optimize

When you're operating in the cloud, there are several post-migration costs to consider, both direct and indirect. First, there is the cost of your cloud services in general as you'll have to pay the monthly infrastructure costs of your new system. You'll also have costs needed to maintain and improve your new cloud environment, and many of them will continue to be paid after your initial migration is complete.

These costs include:

Labor and training for maintaining and working with the infrastructure

Further integration activities, such as testing for apps and workloads

Evolving security needs for protecting your data and meeting compliance requirements

Administration of your new system

The above costs, as well as any others you identify, need to be forecast to determine an accurate post-migration budget.

Columbus®

How to take advantage of the ongoing cost benefits of cloud migration

Start looking at new services for modernizing your application, including migrating to PaaS and even SaaS, where applicable.

Transition other on-premises tools that were not included in your initial migration.

Monitor performance to achieve beneficial cost optimization. In the initial assessment, you performed right-sizing for your on-premises workload based on a point in time. Once those workloads are moved to Dynamics 365 Finance and Supply Chain Management, their usage may change.

Track trends, detect inefficiencies, and create alerts. Azure Cost Management is one tool that displays all usage and cost data are in intuitive dashboards and reports. Continually monitor for CPU and memory usage, enabling recommendations for virtual-machine instances that can be further right-sized.

Savings and Benefits

The benefits of moving to a cloud-based infrastructure go beyond cost savings of hardware and software. In fact, the Forrester Total Economic Impact Of Microsoft Dynamics 365 For Finance and Operations, September 2018, indicates an ROI of 60 percent.

Migrating to the cloud

Reduces legacy costs

When you operate in the cloud, you aren't tied to hardware or software that will need maintenance, upgrades, and additions in order to grow with and support your business. According to the Forrester report, you can save $10.6 million on legacy costs.

Creates an environment of adaptability

The cloud gives you greater opportunity to change with the market, whether that's expanding or downsizing functions of your business, introducing new products or reallocating resources.
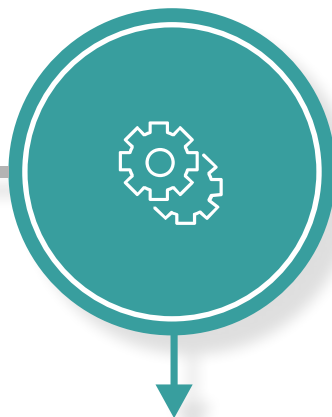
Enhances overall efficiency

Functions like automation and forecasting will help you to improve the efficiency of your business. According to the report, those surveyed indicated operation efficiency savings of $39 million.
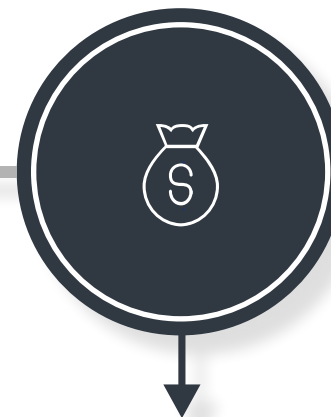
Increases wholesale profits

An enhanced user experience and the insights you can use to improve processes across major functions of your business can lead to dramatic profit increases. The report showed a wholesale profit increase of $3.3 million.

Greatly improves security

Microsoft's cloud services are monitored and protected with the most advanced technologies and tools available.

Dynamics 365 Finance and Supply Chain Management is the answer

With Dynamics 365 Finance and Supply Chain Management, your business can adopt a holistic approach for architecting the right solution that can comprehensively address your business challenges and position your organization for future enhancements.

Upgrading delivers additional advantages including

Predictive AI

Using state-of-the-art machine learning, you can close books faster, simplify global financial management, and improve cashflow.

Enhanced user interface

The new intuitive user interface is clear and user-friendly. With the personalized activity-based workspace, users can manage processes and assets in real-time.

Cost reduction

Dynamics 365 Finance and Supply Chain Management helps to identify the redundant resources in your business and minimizes the running costs though optimization and automation.

Built-in analytics

Powered by Microsoft Power BI, enhanced analytics lets you better analyze reports, produce data with ease and provide real-time visibility into your operations.

Columbus

Columbus can guide you

Cloud migrations are complex. Consulting with a third party like Columbus, a trusted Microsoft partner, can ease your migration challenges and help you realize ROI faster.

Our experts provide a high level of support in your transition. That means you will get the right services for your operations and experience the benefits of migrating without unnecessary risks or expenditures. Contact us today to get started.

Columbus®

Want to know more?

Get in touch with us today

marketingteam@columbusglobal.com

www.columbusglobal.com

About Columbus:

Columbus is a global IT services and consulting company with more than 2,000 employees serving 5,000+ customers worldwide. Columbus helps ambitious companies transform, maximize and futureproof their business digitally. We are specialized within the industries retail, distribution, food and manufacturing. We offer a comprehensive solution portfolio with deep industry knowledge, extensive technology expertise and profound customer insight. Columbus has offices and partners all over the world and we can deliver our solutions and services locally – on a global scale. www.columbusglobal.com

Columbus®