

# The True Cost of Ownership When Choosing Between the Cloud and On-Premises Deployment

Epicor® White Paper

**EPICOR**



## Introduction

The cloud computing model is becoming more and more pervasive. In their most recent survey of 100 CIOs, (77 in the U.S. and 23 in Europe), Morgan Stanley identified that 47% of those surveyed are expecting more of their application workload to move to the cloud this year. Cloud computing is their area of highest expected spending increase with ERP ranked seventh—right behind Security.<sup>1</sup> Therefore, when evaluating software, companies more commonly find themselves in a position of weighing a cloud offering against an on-premises offering.

How should an organization go about deciding which model is right for them? There are several factors to consider, but one of the first factors to consider is **choice**.

Providers that offer the same software and functionality in both a cloud and on-premises model provide the greatest level of choice and consideration of the client base, in that they not only recognize that their software has value to customers, but that also the choice of deployment is a serious issue.

When offered the choice of deployment, most companies begin by looking at the cost of ownership, and with this exercise, it is necessary to consider all the cost variables.

Also, the comparison of cloud deployment costs to on-premises is not always as simple as it seems, as it needs to be viewed over a **period of time**, typically five years, as once a commitment is made to either deployment model—you'll be on it for a while.

In this white paper, we examine which cost factors should be accounted for, as well as additional thoughts on the role of cloud as a long-term strategic driver—not a cost center.

<sup>1</sup>Source: AlphaWise, Morgan Stanley Research n=100 (US and EU Data, 2019)



## Cost Overview

When considering their deployment options, many companies fail to consider all of the hidden costs or to rationalize what the impact is of deferring them. For example, what is the associated cost assumed with an increased risk of hardware failure and downtime by not replacing hardware on a cadence?

On-premises costs are typically higher in both the initial investment and over a period of time if a true “apples to apples” evaluation is done. What “apples to apples” means is that all the costs are considered—including the license cost, servers, administration resources, as well as the cost of upgrades, security, disaster recovery etc.

### Capital Expenditure versus Operational Expenditure

The consideration of whether your organization is structured for capital expenditure (Cap Ex) or operational expenditure (Op Ex) often enters into the decision-making process as a factor of cash flow. Depending on the financial methodology, organizations typically have a preference for either Cap Ex or Op Ex.

On-premises is based on a Cap Ex model, with a large upfront purchase that can be capitalized over a working life expectancy of the software—typically five to eight years—with an annual maintenance and support component, whereas cloud is recognized as an Op Ex model, with a per user fee that is typically billed annually over the term of the contract, (three to five years).

### Implementation Services

Implementation services costs should, in theory, be a little lower for cloud deployments from an initial install, as hardware does not need to be

configured or software installed, and standard tools are used for integrations. Longer term maintenance costs are also lower—specifically around testing during upgrades—as the use of standard tools means there is less likelihood of an integration breaking or a customization failing, as vendors develop with backward compatibility in mind for standard tools.

On-premises deployments are often burdened with non-standard customizations that both slow and increase the cost of upgrades.

## Detailed Cost Factors: Cloud versus On-premises

In this section we’ll dig a little deeper into six additional cost factors.

### 1. Hardware Considerations

Software, unfortunately, runs on hardware. In an on-premises deployment, the client is responsible for the purchase, running and maintenance of that hardware, and the associated power and cooling costs.

This hardware configuration includes the servers, storage, cabling, racks, and networking. In addition to this, there should be physical space allocated to hold this equipment. Best practice would also suggest that some level of redundancy would be prudent for switching to, should the primary hardware fail.

Many companies provide this redundancy by running their test environments on a separate physical server, which means in the event of failure of the primary hardware, the backup can be loaded to the test server and used as the primary, live environment. Sizing your hardware needs must account for growth of the

business, so you should purchase hardware that will allow for anticipated storage needs in the future, and processing power for both a growth of users and transaction volumes.

If the client has other applications on-premises, then likely some of this already exists, such as the physical space and some of the cabling to user devices, network, and local devices. Once the hardware is purchased and installed—either by the client or third-party consulting services—plans should be made for replacement as a best practice on a four-or five-year cadence. Hardware can be used for longer, but as time extends, the risk of failure and disruption to the business increases, so you need to balance cost of hardware with cost of replacement and downtime.

Now, let’s contrast this to a cloud offering. In the cloud, companies are provided the infrastructure for running the application, although they are still required, in the typical office environment, to connect to the network in order to access the Internet and have a local device to connect from. Because of the reduction in infrastructure needs, there can be a significant simplification, and hardware is kept up to date, with plenty of redundancy, backups, and disaster recovery. Outside of the office, connection to the application can be made over a public Internet connection.

### 2. Software

The initial purchase of the software will be different. How?

In a cloud model, this will be based on users, and in the case of Epicor®—it is concurrent users of the ERP application. The SaaS cost includes all applicable maintenance and support fees.

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With on-premises deployments, software purchases are not restricted to the application user fees. The client is also responsible for other software purchases necessary to run the application such as the operating system licenses, the database licenses, and security software licenses. Each of these software components will come with its own associated annual maintenance and support fee.

### 3. Upgrades

Upgrades cover more than one purpose. They provide stability and performance improvements to the application so that there are less issues and the potential exists to improve system availability. They patch potential security vulnerabilities—providing a secure and robust environment to protect your data and your client's data.

With cloud deployments, updates and patches are applied in regular, published maintenance windows by the cloud provider. Upgrades are also done on a cadence and the only requirement for the client is to optionally test the upgrade.

With on-premises deployments, the client is responsible for retrieving the patch or upgrade software and applying it and testing it once applied. Because of the effort of doing this, on-premises deployments often fall behind several years of releases—robbing the client of the benefit and enhancements added to the software over time.

### 4. Staffing

Whether you run in the cloud or on-premises you will need staff to support your application. The difference between the two is that your staff supporting your cloud environment will primarily be supporting the end users by acting as a subject matter expert on capabilities and providing reports—where they can't be self-service—as well as optionally testing upgrades and patches.

Your staff supporting an on-premises application will be responsible for every aspect of the application, operating system, and database administration, as well as executing upgrades, patch applications, and hardware maintenance and upgrades. This means the anticipated cost of either direct employees or outsourced consulting will be significantly more on-premises with potentially lower productivity, than the staff covering the cloud-based application.

### 5. Security

Security is an ongoing issue—especially as the sophistication of cyber criminals increases. These threats will change over time as cyber criminals look for more effective ways to breach systems, exploit vulnerabilities, and gain a hold of your data, either for sale or ransom.

Installing a firewall and malware protection is a good step, but it is also a good idea to constantly update that software, educate employees to the threats, and be aware of industry threats.

Cloud software companies invest significant amounts of money and resources into securing their system. Microsoft® Azure®, for example, has 3,500 employees dedicated to security and spends around \$1 billion per year on this initiative.

While an on-premises based business can secure their environments, they are unlikely to be able to commit as much to the security effort as a cloud provider can and may or may not have a security officer to keep an eye on these threats.

### 6. Training

Training and education are a necessary component that needs to be accounted for. In the case of cloud applications, there is training and research to take advantage of the capabilities in the upgrades in order to be able to make

prescriptive recommendations for the business.

Where on-premises deployment is chosen, this training and education should include understanding changes to the operating system and database software as well.

## The Long-term View

The decision to go cloud or not isn't just a cost decision—it's a strategic decision. You have to decide if you are prepared to stay current with software upgrades (application, operating system, database, security etc.), where you want to focus your resources and how you want to recognize your IT expenditure.

Cost will always be a constraint in that decision. To maintain software and hardware the way it is recommended, as well as work with the business to ensure that you get the best from the implementation of enhancements, can take a considerable amount of resources on-premises. It obviously takes less resources to not stay current and upgrade incrementally, but then there is a lag in getting the enhancements—sometimes for years.

The question comes down to where you want to focus—on IT or the business. The true cost benefit of an ERP application is the value it brings to the business, and those benefits are degraded over time if you aren't leveraging the latest capabilities the software has to offer. After all, when you purchased the software you wanted something up-to-date, not something that was five years behind. Do you want to be strategic in your use of software and use it to grow the business, or be tactical and meet the minimum requirements of just running the business?

## Conclusion

As you can see, evaluating the decision for either on-premises or cloud deployment isn't as simple as it first appears. The recommendation would be to capture as many costs as you can think of and evaluate them in a comparative template over the course of five years. This allows the capture of hardware refreshes and one or two upgrades to ensure that a realistic representation is made.

Doing the evaluation in this way will allow visibility to both the overall cost over five years of each deployment model and also the cost flow on a yearly basis. The decision will then come down to two factors—what the cost is and what the strategy of the business is. You must determine if what's best for the business is to run as is and maintain a baseline ERP system, or use your IT resources to evaluate improvements in the ERP. Then, sit down with business leaders to determine how each option can solve business problems. Epicor® is here to help.

## About Epicor

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