LAMBDA
SOLUTIONS

DIY VS. MANAGED CLOUD HOSTING

Why outsourcing your organization's LMS hosting is crucial for success

SECURITY

FLEXIBILITY

SUPPORT

MAINTENANCE

COST

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IS MANAGED CLOUD HOSTING FOR YOUR LMS A STRATEGIC MOVE FOR YOUR ORGANIZATION?

As more and more information becomes digitized and as the tools and applications we use move online, organizations are requiring increasingly larger data centers. As data grows, the cost to store this data in-house is exponentially increasing. Managed or outsourced cloud hosting provides an organization with flexibility, expertise and significant cost savings due to focused research and development into cutting edge information technology. In this white paper, you will learn about the benefits and cost savings of outsourcing your cloud-based hosting to professionals. Managed cloud hosting allows your organization to free up resources providing you with the opportunity to allocate more focus to what you do best. Managed hosting firms utilize economies of scale allowing those that use an outsourcing strategy to remain ahead of the curve and cutting edge. Outsourcing and specialization enables humans and civilizations to evolve at a rapid pace—managed hosting takes us one step further.

DIY VERSUS MANAGED HOSTING: DOLLARS AND SENSE

Do-it-yourself (DIY) hosting is when an organization secures their own equipment to store content and run applications connecting to the internet either at your business or through an off-site location. The DIY process is complicated and requires the expertise of trained IT professionals. In short, an organization will need to do as follows:

• Source and purchase IT equipment: servers, routers switching devices, firewalls, load balancers and storage (minimum of $10,000 every 5 years once technology obsolete)

• Set up a secure facility ($50,000-$5,000,000 depending on the size of the facility)

• Procure the connectivity ($500 - $5,000 per month depending on data storage needs)

• Manage everything top to bottom (minimum of $110,00 per year in salaries)

• Install software ($3,000-$30,000 depending on organization size)

In contrast, managed cloud hosting is an advanced form of hosting that incorporates greater support and service levels, and offloads the aforementioned duties to the managed hosting firm. With an army of trained hosting specialists, organizations who opt for managed hosting benefit from the following additional ongoing activities:

• Deployment of trans-geographic data centers

• 24x7 monitoring to recognize potential traffic jams and latencies while also helping to reroute data to optimal routes

• Routine maintenance

• Increased security

• Flexible data storage with the ability to grow as your organization does

• Disaster recovery via trans-geographic back-ups

• 24/7 technical support

• Application Support (for new features and upgrades)

Compared to the high costs of DIY hosting, outsourcing your LMS hosting services can be purchased in affordable bundles for a monthly (or annual) payments. There are no upfront costs when organizations opt for managed cloud hosting allowing for high capital expenditures to be converted into economical operating costs. Additional advanced services that may be provided include:

• Frequent vulnerability scans to ensure your hosting system is protected

• Intrusion detection

• Load balancing for increased consistency and stability to end users

• Data backups

• DDoS (Distributed Denial-of-service) attack mitigation

• Firewalls

DATA CENTERS: SECURITY AND MAINTENANCE

When organizations use DIY hosting, they often do so because they believe that it is beneficial to have data centers on premise to enable control via proximity. For small to mid-size firms, this is often too costly as it consumes limited space and resources. Data centers require IT managers to monitor and maintain the IT equipment. When data centers lack around-the-clock attention, servers become prone to physical security breaches, outages and damage to equipment due to overheating and other environmental issues. By outsourcing a firm's data center to a third-party operator, much of the costly maintenance work performed by IT managers is taken out of the equation. For example, economies of scale capabilities and close relations with IT equipment providers, enable third-party data centers to provide around-the-clock security and surveillance, multiple connectivity options, backups and frequent upgrades. Outsourcing your hosting will also ensure that you meet national security standards. For Amazon Web Services (AWS) data centers security must meet the following requirements:

- SOC 1/SSAE 16 (formerly SAS70)/ISAE 3402
- PCI DSS Level 1
- ISO 27001

For Canadian data centers, CSAE 2416 Type II must also be incorporated to meet security standards. Most organizations are not even aware that these security standards are legislated. Considering managed hosting companies are required to meet the aforementioned standards, organizations that outsource their hosting can be assured that mandatory security requirements are met.

Third party data centers also allow you to expand as your data needs as they increase. Often times, organizations will build data centers based on their future estimated needs. If your data needs grow larger than the allotted space, it becomes even more costly when you need to build additional or new centers. When an organization uses managed hosting, they benefit from being able to upgrade their data needs at a fraction of the alternative cost.
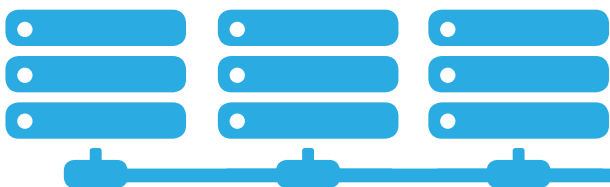
SCALING INFRASTRUCTURE, UPFRONT COSTS & CDN

As previously mentioned, when you DIY, you are allocating a significant amount of resources to the capital costs of building and maintaining your data center. Due to the fact that technology is always rapidly improving, the average age that equipment needs to be replaced is every five years and this replacement period is increasingly shrinking—just think how often you replace your smartphone or your personal computer!

With outsourced cloud hosting, the client benefits from increased flexibility and scalability. Managed hosting uses cloud technology that drives more efficient resource use than physical servers allowing many organizations to share IT infrastructure without strangling resources. For example, rather than having to forgo large expenditures on new hardware to manage your applications' peak traffic, managed hosting provides predictable (monthly or annual) billing from the operating budget, and often pay-per-use billing for periods of peak usage. An additional benefit of outsourcing your hosting is a larger and more reliable content delivery network (CDN)

CDN is "a network of servers that deliver cached static content from websites to users based on the geographic location of the user". More plainly, when a learner comes to your learning management system, they are redirected to your web host's server. Your web host's server is located at a central location typically where your firm's headquarters is. With DIY hosting, this means that every user on your LMS is accessing this one server to access the LMS. If you have a high volume of traffic, then you can overload your server which leads to a slow loading site or even server crash. This is where a CDN comes in handy because it is a network of servers spread throughout the world. When you use a CDN, your static content is cached and stored on all of these servers. Static content includes images, stylesheets (CSS files), javascripts, Flash, etc. With managed hosting, when a user visits your LMS (original server); the CDN technology redirects them to the closest server to their location. By putting your content delivery network (CDN) in the hands of a managed hosting firm the storage, the maintenance and delivery of your data is maintained on multiple data centers across the internet allowing for faster upload time.

TRANS-GEOGRAPHIC DATA & DISASTER MANAGEMENT

Having your data stored in multiple geographic locations or 'trans-geographically' is beneficial for multiple reasons. One reason may be that you are a small firm that operates globally. If this is the case, in order to ensure fast uploading time on your LMS, it is imperative to have your data stored in multiple places within the countries you operate. The costs to achieve this are astronomical if hosting is not your firm's core capability. Another benefit may be that if you are a firm that conducts business in the European Union. Under the EU Data Protection Directive, businesses that operate within this continent are required to store their data within the EU. Since managed cloud hosting firms already store data in multiple countries, it is highly likely your organization will be covered but be sure to ask before you sign on.

Another advantage of managed cloud hosting is that the costs for additional data centers are included in the hosting agreement. At a fraction of the cost, managed cloud hosting firms can store your data in your desired foreign markets. Furthermore, many managed cloud hosting firms provide disaster recovery and business continuity services from remote sites enabling quick recovery following disasters. In the case of a disaster, having servers in different physical locations can mean the difference between a database being briefly unavailable and database being gone for good.

TECHNICAL SUPPORT: 24X7

In a true DIY hosting environment, IT managers and their team are responsible for fixing server and hosting problems when they arise. Most firms cannot afford to pay IT specialists around the clock so an additional benefit of outsourcing hosting is 24/7 technical support and 99% uptime. Due to the fact that many organizations in different time zones rely on third party hosting from a single firm, IT specialists have full administrative control over the server around the clock. Equipped with 24/7 chat support, unexpected hosting issues are dealt with promptly when a firm outsources their hosting. With 99% uptime, you can rest assured knowing that students or staff who rely on your learning management system will be able to experience uninterrupted and accessible learning all day everyday.

KEEPING UP WITH INNOVATION

Many organizations that choose DIY hosting do so because they have an infatuation with owning innovative technologies that drive business forward. Having industry standard, cutting edge hosting, requires a significant commitment to stay ahead of the curve (aka, your competitors). In the business of hosting this entails spending significant time learning new technologies and researching/buying the latest equipment.

According to Moore's law, the number of transistors on an integrated circuit will double every two years. This means that technology will continue to evolve towards greater speed and responsiveness forcing companies to invest in hosting. Specialization of managed hosting firms allows for a platform that is constantly up to date with new servers and networking infrastructure to provide your learning management system with optimal speed and performance. As the demands of critical applications and user expectations continue to grow year after year, managed hosts remain dedicated to keeping up with innovation in order to remain competitive.

Unlike most DIY hosting systems, a managed cloud hosting firm benefits from being able to purchase equipment in bulk through special arrangements with equipment suppliers. Given that managed hosting is their area of expertise and research, managed cloud hosting firms are more likely to make good product decisions at a lower cost.

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MANAGED HOSTING FOR THE WIN

If your company is large enough and has the in-house IT resources to afford the costly capital and maintenance costs of DIY hosting, then this may be the strategic choice. If your organizations is like most, the asset costs and technical expertise that is required to build and manage cutting edge cloud hosting is financially crippling.

The cost and complexity of managing applications and their hosting can be avoided with managed infrastructure and hosting that offers the size, scale, and expertise that most private organizations cannot afford. If DIY cloud hosting is something your business is seriously considering, it is highly advisable to run a cost vs. benefits analysis of both options. While managed cloud hosting will almost always prove to be the leanest solution, there are isolated scenarios where this may not be the case. For most businesses, the overall management and maintenance provided by managed hosting is of higher quality and less costly than managing the infrastructure internally. Managed hosting allows businesses to focus efforts and resources to their core competencies allowing them to focus on what they do best. Be an early adopter and stay ahead of your competitors by opting for managed cloud hosting. Get in touch with Lambda Solutions today to find a hosting package that best suits your needs.

MANAGED
HOSTING

WHO WE ARE

Lambda Solutions

Founded in 2002, Lambda Solutions provides learning and talent management solutions based on an open technology platform. Lambda Solutions works with both institutional and corporate clients to help them achieve better learning outcomes and develop the value of their human resources. Focused on healthcare, education and government, Lambda Solutions provides expertise, systems integration, customization, training and support to customers, including Four Seasons Hotels, Mt. Sinai Hospital, CGI, Rutgers University, and the Canadian International Development Agency. The company has offices in the United States and Canada.

Contact our team

We want to talk to you if you are looking for an accessible training and talent management solution, or if you need customization and consulting for your existing system. Our solutions combine a choice of robust hosting platforms and seamless integration with your enterprise applications, as well as friendly, easy to access support.

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