

ANALYSIS ON CLOUD BASED WEB SERVICES FOR BUSINESS EFFICIENCY

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ABSTRACT- Cloud computing is the efficient way to resolve the organizational problem in enterprise level and growth of business shall meet new heights helping maintaining their brand equity. Ease of Doing Business (EODB) with the help of Cloud services is being considered as productive way to develop business operations and management on the move. Cloud computing provides the lateral way of elevation of the operational growth of business and managing simultaneously other activities of deploying strategic concepts. Effective cost reduction replaces the organizational expenses on software, hardware, manpower, work share and other miscellaneous requirements. Cloud security is being considered as major risk and the possible ways like unique Id for users, Information storage and re-verification, reluctant STAMP bit while communication, Key management, Etc., is being implemented to overcome the possible risks. This paper points the analysis on cloud based web services that can be used for EODB and business productivity.

KEYWORDS- Business, productivity, efficiency, cloud services, computing, operations, work share

1. INTRODUCTION

Cloud services are most demanded and advantageous for the business development and business activities. The most popular AWS Is being used by many small and medium business organizations and large Enterprises at Higher scale and its demand is being increased day to day because of the reliability, scalability, integrity and quick responsive and interactive medium to access the cloud. Adoption of cloud services by many organizations have become the latest trend for being competitive with the established organizations. Deployment of strategic and competitive ideas on the move shall be possible and the ease of doing business is achieved with the caliber and potential of the cloud services and cause all the upcoming and developing Organizations related to enterprise level or the small and medium scale is being used with the web services of cloud for business. Now the cloud services for business have become a tool to stay competitive, to increase business value. to integrate and combine many different services

together and to increases the creativity and productivity, flexibility, scalability, agility and to reduces costs and higher efficiencies. Thus majority of the organizations started migrating their services and applications to the cloud as the optimized market results based on the cost reduction and the increment of turnover than the expected is resulted with the cloud services. Robustness at the Rapid development of the cloud services is extensive and inexhaustible such that numerous organizations and companies can access and make their services available instantly and simultaneously to reduce the workload and time consumption.

2. CLOUD OVERVIEW

The definition of the cloud computing is defined in many ways as the professionals and experts of cloud have provided various definitions depending on the type of services what they are using from the cloud and what the extensibility and robustness of the cloud is providing to the end users. Basically the cloud services are nothing but the client and server communication but here the only difference is the average of cloud that means in the context of Information Technology the accessibility of the files or any information will be made available remotely. creation, insertion, updation and deletion of the files in the cloud is the major advantage for the business and other Web Services providing these above stated operations that can be managed by any one of the organization to reduce the workload making the large pool of resources of computation remotely is the formation of the basic architecture of cloud computing. model view controller of the cloud services will be the interface which is of the user interactive medium and the platform to upload something that Innocence of files media information that are or any relative content of any organization and the final

one is the server and however the logic. For a prospective developer to store this information and deploying his applications are the software's and make it available to the prospective end users is the best example for the usage of Web Services through the cloud and the accessibility of this crowd remotely 24 by 7 and tracing the resources and applications on the need of changing the business models it also provides the platform to enable the developers to develop and deploy any typical application and also provides the users to access this application as well as their files.

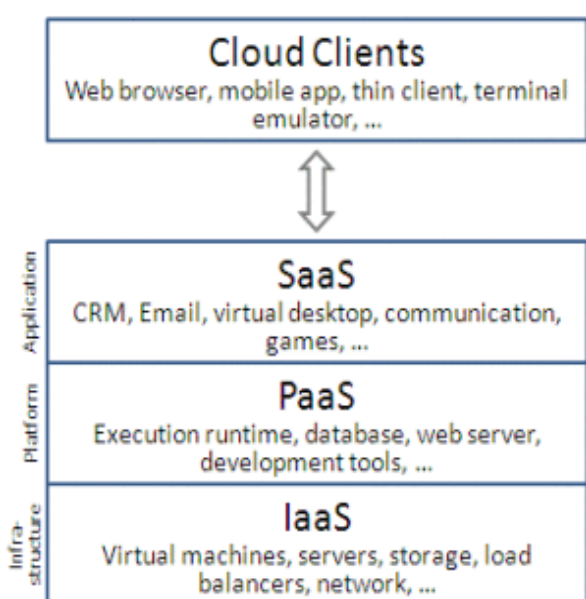


Fig.1. Platforms on Cloud Computing

2.1 SERVICE AS A SERVICE (SAAS)

SaaS is a method of software delivery that allows data to be accessed from any device with an Internet connection and web browser. In this web-based model, software vendors host and maintain the servers, databases and code that constitute an application. In addition to allowing remote access via the web to the software applications and data, SaaS also differs from on-premise software in its pricing model. On-premise software is typically purchased through a perpetual license, which means buyers own a license to the software. They also pay 15% to 20% per year in maintenance and support fees. SaaS, on the other hand, allows buyers to pay an annual or monthly subscription fee, which typically includes the software license, support and

most other fees. A major benefit of SaaS is being able to spread out costs over time.

2.2. PLATFORM AS A SERVICE (PAAS)

In a PaaS environment, the service provider not only is responsible for provisioning and managing the lower level infrastructure resources, but also for providing a fully managed application development and deployment platform. PaaS provides the developers with the appropriate flavors of operating systems, databases, middleware, software tools and managed services, usually in a multitenant environment. The biggest added value of PaaS is that developers are completely abstracted from the lower-level details of the environment, so they can fully focus on what they are really good at (rapid development and deployment) and not worry about things like scalability, security and more that are fully managed by PaaS.

The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment.

2.3. INFRASTRUCTURE AS A SERVICE (IAAS)

It refers to the underlying hardware resources such as network, storage and compute resources, usually with some virtualization technology. While the advent of IaaS opened new territory for businesses to better manage IT hardware costs, it put developers in a challenging situation. Developers are now responsible for more of the operational work during development and test. They have to develop skills to provision, configure, manage and update hardware resources that they would have never needed in a traditional model.

A. Campaigner Email Marketing:

If you require a bit more flexibility than Mail Chimp allows, then check out Campaigner. A

small business with 2,500 contacts in its marketing database could send an unlimited amount of messages for about \$29.95 per month. This isn't a cheap option, but we're talking about a tool that has everything you'll need to run robust and easily-automated email campaigns. Plus, you can test the tool for 30 days for free.

B. Shopify e-Commerce:

Yes, Shopify is the king of all e-commerce platforms. But "best" doesn't always translate to "best for everyone." In Shopify's case, you should be considering this online shopping cart for your web-based storefront regardless of your company's size. That's because it requires very little technological expertise to set up, you can try it for free for 30 days, and it provides an abundance of free templates and tools that will make your online business easier to oversee.

C. Sprout Social:

Sprout Social is one of the best social media analytics tools available regardless of your company's size. However, for SMBs, you'll love that Sprout Social offers a free 30-day trial, multiple price tiers, and a clean design that makes sorting and discovering data easy.

D. Hootsuite:

If you're more interested in managing your social campaigns than you are in measuring them, then try Hootsuite. This tool scales as you grow by letting you pay for extras (rather than bundling everything into one price package). Hootsuite offers the most comprehensive package of listening, publishing, and third-party integration options for businesses of all sizes.

E. Zoho Survey:

If you need to gauge how well your product is doing with consumers or if you just want to know what people think of your new ad campaign, then you should consider survey management software. Zoho Survey is optimal for SMBs. It has one of the simplest user interfaces (UIs) to manage, offers superb reporting, and is available for about \$19 per month. You can also use the free option, which

has more than enough to get you the most basic information (but you'll lose some more advanced features such as email notifications and multi-language support).

F. Slack:

Even if you've never used Slack, you've probably heard all about it. This chat-based communications tool is designed for teams of all sizes to communicate with one another throughout the workday. Slack lets users create chat rooms, private chats with small groups, and one-on-one private chats. You can use the tool to share files, have a laugh with animated GIFs, or connect to other tools via plug-and-play integrations, including Asana and Twitter.

G. Microsoft Teams:

If you want everything that Slack has to offer but you'd also like to be able to video conference and connect your employees to Microsoft's entire ecosystem of apps (i.e., Excel, PowerPoint, and Word), then Microsoft Teams presents an intriguing competitor to Slack. In addition to more organized channel management, Teams offers its users more creative opportunities to interact with colleagues, including in-app meme creation. The only caveat: You must be an Office 365 Business user to gain access to the tool.

H. Zenefits Z2

Human resources (HR) software and management system Zenefits offers excellent benefits administration, integration with most of the industry's popular payroll tools, and its own regionally-based payroll tool. It offers a sleek UI and benefits marketplace designed to look like an e-commerce portal, both of which encourage users to take advantage of the tool rather than run away from it (as with other HR tools).

3. BENEFITS OF CLOUD COMPUTING IN BUSINESS



Fig.2. Benefits of Cloud computing in business productivity

A. OFF SITE DATA STORING

Cloud computing may seem complicated, but it actually has way fewer issues than other infrastructures. Since the cloud runs on its own servers through a company whose only job is to make the cloud functional and bug-free, it's usually a whole lot more reliable than your own, on-location server.

In fact, the minute a small bug arises, the company that runs your cloud network is probably already looking for a fix. If this was your remote server, you'd have to file a claim with tech support and have the department send someone down to look at it.

The average server owner is way more likely to let small issues escape them (since there, you know, busy running a business). These issues turn into larger ones that take time and money to fix.

B. LOWER COST OF OWNERSHIP

One of the best parts of the cloud is that it actually saves you money in the long run. If you don't have to hire a tech support team to fix server issues, well, that's already cash in your pocket. We can admit that one of the hardest parts of running a startup is coming up with the capital to make your business model work and pay your employees. Server costs can be astronomical and a huge investment.

C. NO IT MAINTENANCE COSTS

One of cloud computing major advantages is that it requires less startup costs than a regular, local server. You simply pay for the amount of storage you need per month. Since it's your cloud computing service's job to upgrade your system

with new patches, this happens automatically. You don't have to spend money on fancy, time-consuming hardware upgrades. You get purely what you need, when you need it.

D. PRODUCTIVITY ANYWHERE

Cloud computing is made for collaboration and file-sharing. Cloud computing lets your team edit files in real time and access them from anywhere in the world. Your team can be anywhere in the world and still work together.

Cloud computing allows you to easily pick out which documents can be edited, viewed and shared by which users. It also allows for real-time collaboration so you don't have 100 versions of the same file floating around. One copy is a whole lot easier to control. There's no reason not to streamline your business practices. Document control is necessary to keep a secure business. You never know what can happen if a document gets into the wrong hands, even if it's just the hands of an untrained employee.

E. ALWAYS UP

Remember the importance of increasing collaboration and how the cloud is always on? Well, one of the many cloud computing benefits is directly related. Cloud computing creates a better work-life balance for your employees. If employees can work from anywhere, they can quickly run home when school lets out and finish their tasks while spending time with their kids. They can even work from their tropical vacation. Happier employees make for a better workplace.

F. DISASTER ASSISTANCE AND SECURITY

Cloud computing offers more security than local servers. You never have to worry about losing critical data and business applications because of a natural disaster or full-on computer meltdown. Some cloud providers even backup data to additional remote servers so data loss just won't happen. Cloud providers also perform more regular security audits than you probably would on your local server. This makes it airtight and your sensitive information is kept under wraps.

G. EASILY UPGRADED

Getting started with the cloud seems like it would be complicated, but it's really not compared to installing a brand new local server. Companies like DevTeamSpace can help you seamlessly migrate. According to the Cloud Security Alliance, 79% companies receive regular requests from users to buy more cloud applications with file sharing and collaboration being one of the top-requested cloud services.

4. CONCLUSION AND FUTURE WORK

Cloud computing advantages far outweigh the disadvantages. There's a reason 85% of enterprises have implemented a multi-cloud strategy in 2017. Cloud challenges have actually declined across the board since just last year, so it's easier than ever to adopt and use. Don't wait. Save yourself the time, money and resources and put your business on the cloud.

So, the majority of the organizational growth depends upon the productivity which is interrelated to the above specified advantages that are practically possible with cloud based web services.

In our future work we would like to describe some real world scenarios that made appreciable impact on the technical and business strategy through the usage of cloud services and computation of work share in the cloud.

REFERENCES

- [1] Abdulaziz, A., 2012. *Cloud Computing for Increased Business Value*. International Journal of Business and Social Science, 3(1), pp. 234-239.
- [2] Abhinay, B. A., Akshata, B. A. & Karuna, C. G., 2013. *Security Issues with Possible Solutions in Cloud Computing - A Survey*. International Journal of Advanced Research in Computer Engineering & Technology, 2(2), pp. 652-661.
- [3] Adam, M. M. et al., 2014. *Impact of Cloud Computing Adoption on Stock Price*. Savannah, AISeL.
- [4] Ahmed, Y., 2012. *Exploring Cloud Computing Services and Applications*. Journal of Emerging Trends in Computing and Information Sciences, 3(6), pp. 838-847.
- [5] Akhila, R. & Rakesh, R., 2015. *Study and Analysis of Big Data in Cloud Computing*. International Journal of Advance Research in Computer Science and Management Studies, 3(6), pp. 416-422.
- [6] Ali, K. H., David, G. & Ian, S., 2010. *Cloud Migration: A Case Study of Migrating an Enterprise IT System to IaaS*. Washington, IEEE.

- [7] Amol, C. A., Vikram, D. S., Seema, H. P. & Gopakumaran, T. T., 2015. *Cloud Computing – A Market Perspective and Research Directions*. International Journal of Information Technology and Computer Science, 10(1), pp. 42-53.
- [8] Andrew, C., Mohammad, H. & Omar, A., 2015. *Defence for Distributed Denial of Service Attacks in Cloud Computing*. Tunisia, Elsevier.
- [9] Angadi, A. B., Angadi, A. B. & Gull, K. C., 2013. *Security Issues with Possible Solutions in Cloud Computing - A Survey*. International Journal of Advanced Research in Computer Engineering & Technology, 2(2), pp. 652-661.
- [10] Angela, L. & Chen, N. C., 2012. *Cloud Computing as An Innovation: Perception, Attitude and Adoption*. International Journal of Information Management, 32(6), pp. 533-540.