Time Going To Cloud

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Introduction

I find out we can make our own data center to cloud to cut down the cost and safely protect the date. In this case I suggest to use IaaS to replace our server, and SaaS to replace local software. And also I believe use two different type cloud could make things effectively.

Problem Statement

Right now we use our own data center. I know there are some High costs, Limited upgrade, Mutual interference and Data Backup issues on it.

To build own data center, we need to consider many thing and purchase infrastructure for next few years. And also must get everything done before starting the own data center, even only use few server. There are huge extra overhead on it since we didn't use them at all.

In other hand, after few years we may start use 90% of them, but at that time we need consider the upgrade. Our own data center is very hard to upgrade everything, for example if you want upgrade RAM, but the motherboard already full, then the only way to solve it is to get a new motherboard. If you want put more then one 4U on the data center you need find the space in the cabinet, and the IT cost was be another big cost. If you want put full 42U in the data center, you need cabling and need to find some room for the big cabinet.

The traditional data center doesn't use virtualization technology much. Although the data center have big server but the application still can introduce each others. And most of own data centers don't have the application or hardware to manage sharing same CPU, RAM and HDD function. If one of them gets an error, the whole application in the server will get an error.

Usually own data center don't have full backup plans. If some can't controllable things happened such as earthquake or fire in this center, the data would be very hard to restore. Even if date center has backup, they still need to build one same own date center in another palace and it would use broadband and IT support which costs even more.

Supporting Data

Many website services switched to AWS EC2, such as ShareThis, Flipboard, Airbnb etc. Because AWS Low Ongoing Cost, Apps not Ops, Flexible Capacity, Speed & Agility, and Global Reach. AWS is the technology for further date center. Dropbox is the cloud application for file system, and they save all date on the AWS S3 so have high stability. Salesforce is the first company to support SaaS for business, and they have many applications for business needs.

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1. *About AWS (http://aws.amazon.com/about-aws/)*
2. *Global Infrastructure(http://aws.amazon.com/about-aws/global-infrastructure/)*
3. *Cloud Computing with(http://aws.amazon.com/cn/what-is-aws/)*
4. *Google Apps(https://www.google.com/work/apps/business/learn-more/evaluation.html)*
5. *Why Choose Salesforce(http://www.salesforce.com/ap/smallbusinesscenter/why/)*
6. *Why Dropbox(https://www.dropbox.com/business/why-dropbox-for-business)*

Suggested Solutions

Because of the compelling need in addressing problem move own data center to cloud , we offer the following solution(s)

1. Move Times R Us website to AWS EC2(IaaS), for easier controlling and upgrading during the holiday seasons or the time when get huge visits on the website. No longer need to worry when the fiber broke or the data center shutdown accidently.

2. Put website under CloudFront(IaaS). There are several benefits of this. First, it could upgrade the speed for different regions of customers. Second the hacker can not find the exact target of attacks, to protect the security of data. Also it can help business to analysis which state and country has more visits to the website.

3. Move the email system to Google Apps Gmail(SaaS). It could help IT save much more time on maintenance the email system. From the Google Apps support mobile app, the employee can safely check email everywhere. No longer need to worry the space of the email, and it is very easy to upgrade.

4. Save the document to Dropbox(SaaS). Help the data safe and rechargeable anywhere. When the employee is not in the office, or accident happened in company area, they still can use other device to check and edit file. If they deleted files accidently, Dropbox has the service to restore them.

5. Switch CRM and accounting to Salesforce. The customer data will be very safe and there will be different ranks of permission to view the customer data. Salesforce also supports mobile app, check customer information everywhere would be achievable. Accounting is the other big issue. Help to show the financial statement, and easy to tax, and also don't need to worry if the company accidently lost the financial data.

6. We still need small server not data center to have private cloud for top secret files. Use VPN to let some employee content in and use that server IP or ssh to content with some APP with withe-list.

7. Most of time we also need a public cloud system for everyone. Such like business logo or some template documents. In that case every employee can get it faster. Just need setup one servers run the basic HTTP service would be enough.

Conclusions

Cloud would be use super wisely in the future. For example the retail industries need some changes to improve their business. AWS could help the retail industries on the B2C part, and Google Apps could help the low IT knowledge employee to use the communication tool easily and safety. Dropbox has the ability to let employment work anywhere, even many employee of retail industries not necessary need the ability to work at home, but still they could use it to share pictures of products, and reporting issues or files would be much quicker and more convenient. Most of the apps in Salesforce is for retail industry, it makes everybody understand how to use special tools. Also Salesforce could let different stores or warehouses share and update data in the same time, which also could help the managers easily to view the statements and analysis.

Nowadays technology is developing and improving very fast. Apply the modern technology to retail industry traditional business would be the key to evolve and succeed. From all the above, I believe AWS, Google App, Dropbox, and Salesforce can help Times RUS to same a lot of money on the IT department and let employee work more effective.