



To: Anita Lotta-Help
From: Luke Laricy
Date: Wednesday, May 14, 2025
Re: What's in a cloud?

Anita,

I understand you are asking about the cloud! Finally, Anita. While this is going to require some significant overhaul to our systems, the end product is going to be worth it. All of the changes we have been making to our systems has been leading up to this point. Prepare for our IT systems to be cheaper and more user friendly. I am glad I stuck with this company, and you, Anita, are going to be glad I did as well.

Recommendation

I recommend that TRU move all inventory and sales management to the cloud using cloud-based sales and inventory management systems that track everything in real-time and automatically reorder inventory which is running low and selling fast. I also recommend that we get an Infrastructure as a service provider and move the vast majority of our data storage to them. I recommend that we move our website to a cloud-based hosting provider. I recommend that we use a software as a service provider to manage our e-mail and office software needs. Finally, I recommend that we look into a platform as a service provider to develop an app that allows our customers to more easily navigate our stores and place orders online. We are going to have our heads in the cloud, Anita!

Background

See white paper.

A Times R Us White Paper



Shifting Brick and Mortar Retail Operations to the Cloud

*Prepared by:
Luke Laricy, CDM, Depaul University,
IS 324*

Contents

Contents	3
Introduction	4
Problem Statement	4
Supporting Data	5
Suggested Solutions	5
Conclusions.....	6

Introduction

The problem with Times R Us is that they are stuck in the past. They are two decades behind the rest of the retail industry, and it is costing them lots of money. Times R Us has the typical “if it aint broke, don’t fix it” attitude that has caused the downfall of so many companies before them. This attitude is directly caused by the lazy, scared, and stupid management that has plagued this company. If major changes are not implemented, Times R Us will soon join the ranks of companies like Sears and Circuit City.

Problem Statement

Almost all of the technological aspects of Times R Us are outdated to the point of uselessness. While every brick-and-mortar retailer has spent the last twenty years scrambling to modernize their business, Times R Us has been at a standstill. Times R Us has 200 stores, each with its own in-house server that records sales, then it transfers those sales to each regional office where the data is aggregated, then sent to HQ. We have seemingly no way of separating those sales based on individual stores. This loses vital data that could help decide which store sells more of certain products, and which stores need to abandon or restock certain items. Inventory is seemingly done by hand. This costs the stores countless man hours. The individual servers do not only cost money to buy, but they also cost money to run. In an era of brick-and-mortar retailing where every penny counts, TRU is wasting millions of them on slower, less reliable equipment.

Times R Us also has no web presence except for a minimal customer service program. This is beyond unacceptable in the digital era.

“In an era where digital presence dictates market success, recent data unveils that a staggering 81% of shoppers conduct thorough online research before making a purchase and 87% of consumers start their product searches online, regardless of whether the transaction occurs online or in-store.” (Mar 13 et al., 2024)

One of the reasons that TRU is unable to have any web presence is because they are hosting their site from in-house servers. Such a practice is almost unfeasible when one considers the elasticity that a website representing a seasonal business like TRU requires.

Furthermore, Times R Us seems to have completely missed the rise of the smartphone. I would not be surprised to find out that CIO Payne Indaneck still uses a flip phone. Local single location bars have apps. How a national chain with over 200 stores has been able to get away without one up until now is a stroke of luck personally gifted by the gods, and that luck will not continue.

Finally, Times R Us has one of the most inefficient e-mail solutions I have ever heard of. They host their own e-mail on four load balanced servers at

corporate HQ. How much power does that cost a month? What kind of delays are employees seeing when they have to send all communications to HQ first, then send it to the internet? How much is the maintenance on those machines costing the company? It is no wonder that they need 15 IT staff members at a building with less than 100 employees and no online presence.

All of these issues are not only hemorrhaging money, but they are costing something even more valuable, opportunity. Any company that blows the easy "gimmie shots" that this company has been blowing is one that is destined to fail. Grow or die.

Supporting Data

Brick-and-Mortar retailers have been facing an uphill battle for the last twenty years, and since Covid, it has gotten even worse. Times R Us' style of pen and paper inventory taking and networked servers were obsolete by the year 2000. Times R Us must start to modernize.

"The age of an online store to support a brick-and-mortar location or chain is over. The roles appear to have reversed with many primary sources of sales revenue for the last three months being the result of the use of an e-commerce platform." (The Death of Brick and Mortar Retail, 2020)

Times R Us might not be ready to leap into full online sales yet, but it must expand its online presence. 76% of all consumers check a store's online presence before physically visiting a store. It may seem expensive to build and host a website, but cloud computing has made it easier than ever. This is why over 94% of all companies worldwide use cloud computing. The savings can be enormous, as Times R Us would only pay for what they need. As a company that focuses on seasonal purchases, there are almost definitely times, like Christmas, when TRU is completely slammed with customers needing decorations and presents. Then there are times, like March, when there is very little going on. Instead of having to build a massive server that is Christmas ready year-round, Times R Us can instead rent space from an IaaS service that offers elastic options that scale up and down based on their needs. All of these companies are moving so rapidly to the cloud because they are sick and tired of having to pay for maintenance, electricity, and hardware for equipment they only use 5-20% of.

Suggested Solutions

While things may seem bleak, Times R Us can hold its head high knowing one thing for sure; we have a loyal customer base. If we didn't, we would surely have gone out of business by now. If we implement the solutions to these problems now, we will not only be able look at our past in the rear view mirror, we will be able to see our future expansion ahead of us.

The first thing I will focus on is our staff communications and office work. This can easily be solved by implementing a SaaS solution. Microsoft's Office 365 offers us all we need to manage our company e-mail. No need for load bearing servers that require power, maintenance, and space. Furthermore, instead of shelling out tons of money for MS Office products that are out of date in a year and sit unopened on unused PCs, we can simply subscribe to Office 365 on a user-by-user payment plan.

Next up, we can scrap all of our servers except for those needed for bare minimum backups and local office requirements. We can simply rent space from an IaaS company. I say bare minimum backups, because the infrastructure as a service company will provide us with backups as part of our SLA. I recommend using cloud-based inventory and sales management software that will upload all of our data directly to the cloud. This way it will be available to anyone in the company who has the credentials to view it and an internet connection. The inventory will be updated with every purchase. Stores who are running low on hot items will be able to automatically reorder them. Since each store will be uploading their data in real time, executives will be able to make inventory decisions based on each specific store, rather than just the region that store is in.

Lastly, we need to step up our online presence significantly. I recommend a cloud-based web hosting platform to launch our much-needed retail web page. That can be used to inform customers of new products, promotions, and even alternative TRU locations that have hot selling items in stock. We can then use a PaaS provider to develop and host our app. This is necessary in this day and age. Seasonal stores like TRU tend to be large and confusing. We can model our app off the Home Depot app. It can show the item's location in the store, and its quantity available.

Conclusions

The advantages of moving our digital operations to the cloud are numerous. Price is by far the biggest advantage. We must not fall victim to the sunk cost fallacy of looking at all of our current equipment and wanting to salvage it somehow. We must let it go. Over time the savings will be enormous. Although there might be a bit of a learning curve at first, as our staff become more familiar with the new technology, they will see it is far easier to use. If not, I will be here to teach them about it.

Resources

Mar 13, E. P., & Et, 4:32 P. (2024, March 13). New Study Shows 81% of Consumers Expect Small Businesses to Have an Online Presence, Impacting Buying Decisions. FOX 2. <https://fox2now.com/business/press-releases/ein->

[presswire/694573842/new-study-shows-81-of-consumers-expect-small-businesses-to-have-an-online-presence-impacting-buying-decisions/](https://www.prnewswire.com/news-releases/new-study-shows-81-of-consumers-expect-small-businesses-to-have-an-online-presence-impacting-buying-decisions-694573842.html)

Baishya, Munmun, et al. *The Cloud as Catalyst for Retail*. 2018.

The Death of Brick and Mortar Retail. (2020, June 17). [Www.globalreach.com](https://www.globalreach.com/global-reach-media/blog/2020/06/17/the-death-of-brick-and-mortar-retail).
<https://www.globalreach.com/global-reach-media/blog/2020/06/17/the-death-of-brick-and-mortar-retail>

Visual Objects. (2021, April 20). 76% of Consumers Look at Online Presence Before Physically Visiting a Business. [Www.prnewswire.com](https://www.prnewswire.com/news-releases/76-of-consumers-look-at-online-presence-before-physically-visiting-a-business-301272462.html).

<https://www.prnewswire.com/news-releases/76-of-consumers-look-at-online-presence-before-physically-visiting-a-business-301272462.html>

Edge Delta. (2024, May 17). How Many Companies Use Cloud Computing in 2024? [10 Statistics and Insights] | Edge Delta. *Edge Delta*.

<https://edgedelta.com/company/blog/how-many-companies-use-cloud-computing>

Enterprise Email Service for Business - MS Exchange Email. (2019). Microsoft.com.

<https://www.microsoft.com/en-us/microsoft-365/exchange/email/>