

Technology adoption in troubled times: a cloud computing case study



Executive Summary

In the article Technology Adoption in Troubled Times: A Cloud Computing Case Study the authors discuss the issues associated with Timely Technologies with regards to the technology adoption by a large publicly traded firm. In this case, the primary objective is to identify the issues faced by Timely Technologies as it relates to Information Systems Management and pinpoint how the company handled these issues while making recommendations. The article focuses on cloud computing as a means to resolve the problems related to outdated systems being used by the company. This has also been quite a difficult situation due to the financial distress being faced by the company.

Background

The company has constantly been challenged to weigh accounting and information needs against costs of gathering that information as it identifies the most efficient cost reductions. The case focuses on how basic economic factors may have impacted the company's choices as it relates to Information Technology (IT) specifically cloud computing and its access to accounting and other data relating to operations. The financial distress within the company has created reductions within areas such as administrative functions, production capacity, cuts in the workforce and the IT department. The company considers IT a necessary function which is used to capture operational information from the company's many information systems. This would then be used to make decisions at all levels, however

the company's current ERP system, MacPac, is no longer supported by its vendor nor is it well integrated with the company's other systems yet it is so vital to the decision-making process it is still being used (Drum, Becker & Fish, 2013)

This is one of the major issues faced by Timely Technologies, their IT department is also constantly under pressure since the economic downturn for the company began. The department has experienced cuts and currently have only 47 employees down from over 100 to ease the various needs of the company which stem from programming, networking and helpdesk support. Their current ratio of IT employees to users is approximately 1 to 43 because of the 2100 employees working at the company, this makes it difficult for them to support operations in widespread locations since they are stretched so thinly. The IT staff although running at capacity has also been providing support for the ERP system since it is no longer being supported by the vendor. This means time is allotted to troubleshooting and little capacity is left to fulfill requests for new or additional information, streamline information processes or expand customer service-oriented data requests (Drum, Becker & Fish, 2013)

In order to tackle the issues stated above the company has chosen to incorporate Cloud Computing in order to address the outdated systems. This solution however has been met with some resistance by management within the company who believe that it is costly and that the current system although having issues can still be used. Through analyzing the case, it can be concluded that the issues being faced by the company revolve around the

Information Systems Strategy Triangle.

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Problem Statement

After reviewing the case revolving around Timely Technologies, it was concluded that the main problem for the company was related to information strategy, specifically their outdated ERP systems software MacPac.

Analysis

In today's economy, information is a valuable asset for organizations with it being often stated that information is to the digital revolution what oil was for the industrial revolution. Information powers the digital economy with those who possess the right information being able to succeed and those who don't struggle to survive in a world where information is vital (Hiltbrand, 2017). Information can be seen as more than just data as data can reside in a data lake forever and never truly become information. Data becomes information when it is transformed in a way that meets a business need, an example of which is when it can be consumed as part of the decision-making process. Timely Technologies is no different and makes use of information to make decisions for the company with their current problems making it difficult for the company to make proper business decisions (Hiltbrand, 2017).

As mentioned previously, after thorough analysis of the case it was discovered that the main issue faced by the company was the information strategy. According to Pearlson, Saunders and Galleta (2016), Information Strategy is the plan that businesses execute to offer information services; it enables an organization to determine its capabilities. Information strategy is also made up of four key components which consists of networking, <https://assignbuster.com/technology-adoption-in-troubled-times-a-cloud-computing-case-study/>

hardware, data and software (Pearlson, Saunders & Galletta, 2016). The information strategy in question was software related; this software was outdated and no longer supported by the vendor. The Enterprise Resource Planning system, MacPac, specialized in meeting the manufacturing, logistics and financial information needs of global organizations. Situations such as workarounds have become commonplace and accepted amongst accounting staff who feel they are getting the information they need from sources they have created outside of the ERP system due to the system being outdated (Drum, Becker & Fish, 2013).

The current Business Strategy was also a factor which not only contributed to the financial downpour of the company but also areas related to the Information Strategy and Organization Strategy. For an organization to work efficiently, all strategies within the information systems strategy triangle must be working properly and in conjunction with each other. A change in one of these strategies would create a change in the other two strategies (Pearlson, Saunders & Galletta, 2016). The Business Strategy being used by the company made it difficult for adjustments to be made with regards to selling of the products. This was due to how the industry works, instead of contracts being made and orders fulfilled, the products built by the company were created first with the hope that the supply would be met. This caused financial strain on the company as they had to create a large amount of product without guarantee it would be sold especially due to the fall of demand in the market.

The current organizational strategy of the company was also an issue, due to the business strategy being incorporated by the company the organizational <https://assignbuster.com/technology-adoption-in-troubled-times-a-cloud-computing-case-study/>

strategy had to follow in accordance. Organization strategy is defined as how well a company is organized to make use of the resources available to them in order to achieve the organization's business strategy. This strategy must be supported by the information strategy which means the organizational strategy must work in all areas with people, information, tasks, control and structure which in turn would support the information strategy. This would then cause the information strategy to use the organizations' resources to offer information services (Pearlson, Saunders & Galletta, 2016).

Upper management who were experiencing the burden of the financial decline were faced with the choice of implementing new information strategies to help improve the upon making decisions on requests being received. These individuals were skeptical of the plans of changing to a cloud computing program and could not weigh the cost of implementing this system against that of the IT staff who they believed were so good at their jobs that they had little confidence in whether a new software package could meet their needs. The use of a cloud service may alleviate the issues presented throughout the company and the management team believe it's in the company's best interest to move forward and make use of cloud computing.

For cloud computing, there are three main models: Infrastructure as a Service (IaaS), allowing users to deploy hardware computing resources as a service such as outsourcing data storage equipment and processing; the second is Platform as a Service (PaaS), which provides developers with a cloud platform to create applications and services meaning providing all the necessary components for creating a new software application,; and, lastly, <https://assignbuster.com/technology-adoption-in-troubled-times-a-cloud-computing-case-study/>

Software as a Service (SaaS), offering the consumer a wide variety of applications provided by service providers and running on the infrastructure of the cloud (Bildosola, Río-Belver, Cilleruelo & Garechana, 2015). The SaaS model also provides automatic updates, hosting and centralized configuration, which in turn releases users from installing and maintaining software and simply allowing them access to said software via the Internet (Palos-Sanchez, Arenas-Marquez, & Aguayo-Camacho, 2017).

The use of cloud computing can have several benefits for businesses some of which are the reduction in software and hardware resource costs and access to services from anywhere in the world, a market-oriented, scalable architecture with the potential to transform business processes, the noncomplex use of cloud-based solutions, its potential to provide better knowledge management and a tighter link between information systems and management requirements and its ability to provide competitive advantages, given the reductions in capital outlay and IT-related operating and maintenance costs that enable resources to be redirected toward core business activities (Palos-Sanchez, Arenas-Marquez, & Aguayo-Camacho, 2017). All of these benefits could help Timely Technologies with both their issues related to software and their current move towards cost saving and reductions to tackle the financial burden faced by the company

Recommendations

The management team strongly suggests the implementation of cloud computing in order to correct the issues found within the company's information strategy. The use of Software as a Service (SaaS) could provide

many benefits to the company in alleviating the current issues related to the outdated ERP systems. Since the SaaS vendor would be held responsible for updating the system, this would no longer be done by IT staff who would then get to work in other areas. The company would also only pay for software they use, essentially lowering costs over time. Management would also be able to acquire much needed information and make use of big data analytics that are more accurate to the company's needs.

Conclusion

In conclusion, the company will only do harm to itself in the long run if it stays in its current state. Cloud Computing despite its disadvantages would help propel the company forward as it corrects issues within the company and alleviate some of the workload of the current IT staff while being more efficient than the current system being used by the company.

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