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ISQA 3420  
Assignment 2  
  
**Motivation**Many organizations know what they do, and how they do it. But where many organizations fail is not knowing *why* they do it and what the core motivation is. Knowing the “why” is especially important when deciding to implement cloud computing for an organization or not. Perhaps knowing the why before the how is the first step of understanding the motivation behind cloud computing

Anytime an organization wants to implement anything that requires capital – no matter how big or small- a solid return on investment is crucial. This is one of many reasons why cloud computing has gained so much traction for large and small businesses the past decade – the solid return on investment. Total Cost of Ownership (TCO) is significantly less for almost any non-IT organization that has hardware, software, and infrastructure needs. Server costs, storage costs, and network costs are significantly less with cloud computing. Additionally, IT Labor costs and overhead that are traditionally required to run these components within an organization can be nearly cut out entirely. This is all in help to what Amazon Web Services proposes to be an average Return on Investment of 626% on their cloud services after five year of use. The law of diminishing returns would play into this expected ROI, but regardless, cloud services offer a much more cost effective way to expand or consolidate their IT infrastructure for an organization depending on the organizations demand. This flexibility and cost effectiveness that most organizations would lake from an in house solution.

This briefly answers the motivation on “why” an organization should implement cloud infrastructure, but does not explain the “how” it is handled in practice. HTC wanted a more cost effective and reliable solution over their current in house solution. With this, HTC chose the Google Cloud Storage for it’s developers so they could experience higher and more stable performance that allowed for more time improving features rather than fixing common performance issues that were present with their in house solution. Additionally, the service is instantly scalable for both Google’s Datastore and Bigtable services which was another strong reason for the switch over in-house solutions. Performance is not the only benefit as the Google Cloud platform has allowed HTC to save money with a lower TCO through improved resource allocation as HTC saved the company an estimated 40 percent of costs since it’s implementation.  
 **Organizational Structure**For any cloud infrastructure that is implemented within an organization, there has to be a foundation of what changes will come with the addition of implementing the cloud computing. When it comes to organizational structure, it is important to know exactly what parts of the organization will change based on the type of cloud computing used. Both Infrastructure as a Service and Platform as a Service will typically only concern those working within an IT department within an organization. Software as a service on the other hand, will commonly involve many different areas of the organization other than IT from finance, to sales, to even external customers. With so many areas being affected by the implementation, comes a number of accommodations that must be made for the organization. This includes training, resource allocations, management of the services and many other factors. Additionally, the idea of technical capability with SAAS means a shift of resources from an existing IT department that may have very different roles within IT with the shift if they are no longer developing an in house solution, but rather supporting one. Ultimately, using any sort of cloud computing has many implications downstream, so it is vital that during the transition period, expectations upon implementation must be communicated effectively to all stakeholders within the organization.

Coca Cola is one of many organizations that have had motivation to implement cloud computing within their organization. Over half of Coca-Cola’s 74,000 employees are mobile workers – meaning they all need to be connected with one another whether they are vendors, technicians, or sales representatives. Up until the company’s use of Cloud Computing in 2011, there was a significant disconnect within the structure of the organization. Since Coca-Cola will and always will be a soft drink company, creating an in house IT solution for this problem is not entirely feasible. From IAAS to SAAS, Microsoft Online has been able to provide an all in one solution for Coca-Cola allowing the company to solely focus on their product and the customer, rather than any administrative needs with in house IT solutions. Some of these solutions that Microsoft has been able to provide is real-times sales, standardized video conferencing, and customer relationship management through mobile devices, This focus on cloud computing has allowed for much more dialogue, rather than just a one way message, between Coca-Cola’s employees and customers. With collaboration through cloud computing within the organizations structure both parties know where the company is going and what the agenda for change is.

<https://www.youtube.com/watch?v=T1FC7VA1Dj8>

https://cloud.google.com/customers/htc/