CLOUD U

RUNNING A BUSINESS
ON THE CLOUD
Management Strategies For The New IT

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Executive Summary

The move from traditional IT to Cloud Computing is a massive opportunity for an IT department to add value to the organization it serves. As with any major technology shift however, this change also introduces challenges that need to be proactively managed.

When management is faced with a shift to Cloud Computing, there are three areas that need to be assessed to ensure they are ready for the opportunities and challenges that accompany the move, which are identified in this paper.

These three areas are;

- Planning for Shifting IT Responsibilities
- Developing New Skills
- Recruitment, Training, Hiring and Retention of Cloud Professionals

Armed with the information in this paper, management will be sufficiently aware of specific areas to look at and should be able to greatly lessen the problematic business impacts of a move to the Cloud.

Accounting – A Historical Parallel

To illustrate the thrust of this paper, it is worth drawing parallels to an industry that has seen similar paradigm shifts as we believe Cloud Computing is causing for IT. In this case we have chosen to use accountants as an example.

Up until very recently, accountant offices looked very much as they had for the previous several hundred years – processes were manual, documents were recorded on paper in large repositories, the ability to report on performance in a timely manner was a pipe dream and innovation was unheard of.

Yet with the advent of the personal computer and the meteoric shift that saw PC's enter into every Certified Public Accountant (CPA) firm, change occurred in which accountants could largely forget about the most mundane of their tasks and instead focus on adding value for their clients.

Similarly the PC age created a situation where financial information could be processed almost instantaneously and could therefore drive changes and improvements for a CPA's clients. While the type of work that accountants used to have to do manually- computations- was devalued, the profession as a whole increased its value by taking on new, and more important tasks.

We believe that Cloud Computing is a shift that is analogous to that which occurred a generation ago in the accounting profession and as such management strategies for organizations utilizing Cloud should be colored by those utilized in that case.

Planning for Shifting IT Responsibilities

It is unrealistic to think that Cloud Computing does not impact upon the skills required within an organization. Abstracting non-core operations away from the organization, and focusing more on strategic tasks introduces a varied spectrum of skills and capabilities within the organization.

We advise organizations looking at a move to the Cloud to engage with the Human Resources (HR) department at a very early stage to identify both areas where the organization lacks key people to fulfill the needs of the new paradigm, but also to identify specific operational areas that will be eliminated or reduced after a move to the Cloud.

As with any other move that impacts upon staffing and skills profiles, a move to Cloud Computing will introduce both challenges and opportunities within the organization. While it may be tempting for an IT department to deal with these issues themselves, we believe it is crucial that HR be involved in the process so that a clear and painless transition can be made that ensures buy-in from all concerned.

Part of this move is the development of new skills within the organization and it is to this area we now turn.

Developing New Skills

The move to Cloud Computing introduces significant opportunities for those working within the IT industry – broadly these opportunities fall within three different skill sets namely:

- Vendor Relationships
- New Technologies
- Strategic Business Skills

We will look at these three areas individually.

Vendor Relationships

Cloud Computing did not create the concept of IT outsourcing. Outsourcing has been a growing trend in IT for many years. However Cloud Computing is a step change in outsourcing as it involves outsourcing multiple services at multiple levels of the computing stack. It also tends to involve a far higher number of individual vendors than previously was the case.

There are real opportunities for IT staff to learn new skills specializing in dealing with vendor relationships. These skills are very commercially based and sit well with IT practitioners who have an interest in the business side of the industry.

The positive aspect of this opportunity is that there are many existing opportunities for people to learn these new skills – ongoing training in commerce and strategy can fit well within an existing role and can result in a progression from pure IT practitioner to a role that has a significantly higher business focus to it, and in many cases, higher business value.

We recommend that organizations identify IT practitioners who have the skills and attributes to move into more commercial roles and proactively manage their professional development. In doing so there can be a smooth progression from hands-on technical roles to commercial IT roles.

New Technologies

Some IT practitioners are involved in the industry precisely because they are interested in the engineering and development aspects of the job. Often these

people have little or no interest in the business aspects of IT and may possibly feel that a move to Cloud Computing, with its tendency to abstract responsibility for technology away from the organization, will leave them with few opportunities.

For practitioners who fall into this class, there are some real opportunities around the interface between the different applications and services the organization will use in the Cloud. The advent and rise of Application Programming Interfaces (APIs) for example has led to an entire industry based around the utilization, creation and manipulation of the "glue" that binds different services together. While system integrator firms are popping up all over the place, there is still the need for internal system integrators to tie together the various cloud services utilized by an organization.

Similarly there are opportunities for practitioners to specialize in the areas of Cloud Computing monitoring and control – while there are many tools from third parties that automate some of these processes, there will always be opportunities for internal staff to have an interaction with the services.

In terms of professional development for these types of practitioners, there are less formal opportunities for learning. We would recommend the organization having a flexible approach towards technical professional development and that employees are encouraged to attend industry events and spend time reading blogs and social sites dedicated to cloud computing.

While this more flexible approach towards learning may not sit well with traditional HR approaches, in such a new area as Cloud Computing, where formal learnings have not yet caught up with technological developments, a more flexible approach is crucial.

Strategic Business Skills

We contend that what is truly unique about Cloud Computing is that it enables IT departments to minimize their involvement in the technical aspects of IT but rather become true strategic partners of the business – rather than being simply a cost center of the organization, IT an become a value-adding department that is actively involved in delivering solutions that drive benefits.

Much like the vendor-relationship skills as discussed previously, there are a plethora of opportunities for practitioners to gain the skills and knowledge that allows them to deliver upon this new opportunity. Organizations should look at a professional development program that teams up IT practitioners with staff dealing with strategy – in his way IT can learn about the strategic process and become much more able to identify solutions that can deliver value in line with the organizations goals.

These three areas— vendor relationships, new technologies and strategic business skills are the direct result of recruitment, training and retention practices that ensure the very best possible people to staff the IT department, it is to these areas that we now turn.

Recruitment, Training, Hiring and Retention of Cloud Professionals

As we have alluded to previously, there are some distinct issues that offer both opportunities and challenges for IT departments planning the human impact of a move to the clouds. These areas revolve around:

- The lack of formal qualifications
- The narrow talent pool

The Lack of Formal Qualifications

As mentioned previously in this report, the fact that Cloud Computing is a relatively nascent area results in a dearth of formal qualifications. Much like computing in a previous age, Cloud Computing practitioners are pioneers going into a new space and very much learning as they go.

While this is a huge driver of innovation within the space, it is also a risk and problem for organizations who want to hire practitioners with clear proof of the skills and attributes needed to drive the organization's move to the Cloud.

We contend however that there are alternative ways to assess a candidate's suitability for a Cloud Computing role. As with other pioneering paradigms, Cloud Computing has built a very strong community of practitioners who tend to put aside vendor allegiances to collaborate and share knowledge about the industry. Organizations should assess individual candidate's engagement with these communities of interest and should target individuals with a track record of such engagement. Examples of such engagement would include blogging, twitter contributions and question and answer sites such as focus.com.

In the absence of formal qualifications, proof of competency and thought leadership by way of engagement by blogging, event attendance and community involvement is a valuable proxy.

The Narrow Talent Pool

Cloud Computing is very much at top of mind for IT professionals[1]. While this is very much a positive thing for the industry at large, it also means that good talent is quickly snapped up. This is especially so the case with Cloud Computing

where the large vendors hire the best talent, leaving slim pickings for individual organizations looking to make a move to the Cloud.

For this reason, and in keeping with our recommendations about formal qualifications, we contend that organizations can create talent by embarking on an aggressive and robust professional development program with new or incumbent staff. Organizations should look to encourage the sort of activities that are a replacement for formal qualifications – by identifying staff or candidates that have the aptitude to learn new skills, and encouraging those individuals to engage with the Cloud Computing community, good talent can be created.

There are a number of Online resources to point staff to, but an initial start would be this list of the top 50 Cloud Computing blogs[2] or this loose community of Cloud Computing thought leaders, the Clouderati[3].

With the human resources issues dealt with, it is now time to turn our attention to dealing with the inevitable negative reactions to Cloud Computing.

Dealing with Opposition to Cloud Computing

It cannot be denied that Cloud Computing is a new approach towards computing and, as such, is challenging for some practitioners[4]. Many traditional IT staffers have an attitude that technology solutions should always be built in house. This syndrome, often coined the "not built here" mentality, suggests that any solution that is obtained from third party provider is sub-optimal when compared to something built, and deployed, in-house.

An analogy which can be effective in responding to these issues is that of electricity. It is undeniable that organizations benefit from the ability to purchase clean electricity supply as, and when, they need it. Part of this benefit is the ability to forget about the intricacies of electricity generation and supply and in doing so to focus more on core business.

In the same way, we contend that the core business of an organization is not to manage and run mail servers, database servers or application infrastructure. We contend that Cloud Computing enables organizations to abstract the responsibilities for these non-core operations away from themselves and in doing so to focus on core strategic issues.

Some practitioners will oppose Cloud Computing on a technical level; they will identify security issues, legislative issues or other reasons why Cloud Computing is inappropriate for the organization. We believe that this opposition is not valid and there is a growing body of resources to answer these individual concerns. First point of call for answers to specific issues can be CloudU, this series of whitepapers on the most talked about issues in Cloud Computing or the resources mentioned previously in this paper.

Conclusion

Cloud Computing undeniably introduces management challenges to an organization. Rather than problems however, management should see them as opportunities to build a more highly skilled workforce, a more responsive IT department and, ultimately, a better organization overall.

While we cannot gloss over the fact that a move to the Cloud is a paradigm change and will create some tension and opposition, we believe that ultimately Cloud Computing will be the default way of delivering computing resources in the future. As such, it is better for organizations to identify and deal with the issues early, so that they can gain maximum benefit from the changing technology landscape.

Using this individual whitepaper, and leveraging the content from the entire CloudU series, management dealing with this shift can gain the skills and understanding necessary to create a smooth and positive transition.

About Diversity Analysis

Diversity Analysis is a broad spectrum consultancy specialising in SaaS, Cloud Computing and business strategy. Our research focuses on the trends in these areas with greater emphasis on technology, business strategies, mergers and acquisitions. The extensive experience of our analysts in the field and our closer interactions with both vendors and users of these technologies puts us in a unique position to understand their perspectives perfectly and, also, to offer our analysis to match their needs. Our Analysts take a deep dive into the latest technological developments in the above mentioned areas. This, in turn, helps our clients stay ahead of the competition by taking advantage of these newer technologies and, also, by understanding any pitfalls they have to avoid.

Our Offerings: We offer both analysis and consultancy in the areas related to SaaS and Cloud Computing. Our focus is on technology, business strategy, mergers and acquisitions. Our methodology is structured as follows:

- Research Alerts
- Research Briefings
- Whitepapers
- Case Studies

We also participate in various conferences and are available for vendor briefings through Telephone and/or Voice Over IP.

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Endnotes

[1]   http://imagesrv.gartner.com/pv_obj_cache/pv_obj_id_FEBE73FFDD2C23B394DEB88DD0A369E6A42C2E00/filename/ES_reimaginingIT.pdf

[2]   http://cloudcomputing.sys-con.com/node/1505800

[3]   http://twitter.com/#!/clouderati

[4]   http://broadcast.rackspace.com/hosting_knowledge/whitepapers/Revolution_Not_Evolution-Whitepaper.pdf