

Planning of successful Data Center move or relocation



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Planning of movement of any sort of resources creates significant stress and anxiety for any organization's team.

Planning of Data center movement / relocation has added pressure and responsibility towards the management as it is directly influence the critical business operations and/or it has chance to losses the stored information that can severely damage, even destroy the overall business and reputation of any organization.

As we know that information technology brings world together and distance has no more an obstacles. The global survey indicates that recently many organizations have encountered the possibility of movement/relocation of their data centers due to any valid reason. Before exploring the reasons, we must know the recent statistics that reflects the impact of deploying or establishing the new data center instead of moving or relocating the current/existing data center.

Obviously difference comes due to economic decisions. On the other hand the key business factors driving the decision to go forward with such a large-scale and expensive investment, estimated range from \$250 - \$450 per foot to move existing data center infrastructure and \$ 650 - \$1000 per foot to implement/deploy new data center infrastructure.

Now we would go through the reasons why any organization needs to move or relocate its data center.

- Need to upgrade data center facilities
- Need to identify cheaper data center facilities
- Requirement for redundancy.....Business continuity improvements.
- Physical data center consolidations as a result of mergers and acquisitions.

Once the business has decided to invest the necessary resources for a data center move or relocation, it is now critical to make, then follow a detailed and integrated roadmap to ensure a successful implementation/deployment. Experts says; A data center move or relocation plan requires diligent and seamless integration between the data center facilities Plan and IS organization Plan and ensuring coordinated project management and execution.

The difficulties which PMO organizers or team could face while movement or relocation of data center, can be traced to a breakdown between two major components;

- IS requirements
- Data center facilities location & design specification.

For example miscalculation in locations, equipment densities, power & heating and HVAC capabilities, that could severely damage IT operations and timely service unavailability.

Keeping in view, in real scenarios, the business strategic plans for improvement and growth of organization and the organization's management which already be in a continuous process to fight against the market issues/ hurdles or whatever, if they would face the project of moving or relocating data center, it would be hard enough to cope with this new challenge. But this challenge could become easier with the merger of responsibilities to avoid/minimize the risk of severely damages or failure of IT operations' project in terms of QoS, Project timeline, data security & integrity even organizations' important data loss which couldn't be acceptable by any organization.

To avoid these disasters, the following guidelines which are related to the most critical phase of data center move or relocation project and are applicable for smaller data centers 2000 to 4000 square feet of raised floor space as well as large facilities of more than 10,000 square feet of raised floor space.

Step 1: Form a PMO team with key advisors.

The PMO (Project Management Organization) team should include members from IT operations, applications, data network operations, facilities and real estate specialists and human resources. The team will require a dedicated project manager, who is closely aligned with the IT organization, to lead and coordinate all activities during the planning phase, through the implementation of the data move or relocation and during the post-move to ensure newly defined processes and procedures. Key stakeholders should be recruited early on as advisors for the data center move or relocation project to ensure smooth/reliable, confident and transparent moves throughout the organization.

Step 2: Create a business case with justification and technical "do-ability".

The business case should highlight the critical success factors of the data center move or relocation project as well as help the team and organization understand the potential obstacles that lay ahead. This step in the project helps the team prioritize key issues and manage expectations for the team and the rest of the organization.

Step 3: Develop a comprehensive requirements plan.

The PMO team must establish a comprehensive requirements plan that specifies both near-term and longer-term needs for data center operations. Included in this plan should be details on data center facility size, location, site plans, physical security requirements, risk management initiatives (security priorities and business continuity issues) and critical infrastructure capacities - initial estimates of equipment densities, power and cooling capacities and levels of redundancy.

Step 4: Prepare an inventory.

A detailed physical inventory of all data center equipment that will be moved and that

will need to be replaced should be developed. This analysis should be made on a multi-dimensional level to include the physical, logical and holistic aspects of everything within the existing data center and the relationships between each of the assets. Developing the inventory becomes a good starting point to document and tracking of assets on the other hand, the SLA associated with those assets must be under consideration to avoid the breach of agreement with vender, prior to the actual data center move or relocation.

Step 5: Create a detailed space layout and design for the new data center facility.

Review the desired state for the new data center with regards to functionality, technical and financial considerations and any new process improvements that must be made. The space layout and design should include all engineering and space aspects for the new data center including the logical and physical environment, the critical operations infrastructure (power, cooling, and network connectivity) and future growth considerations. Utilizing visual databases and maps to develop the rack layout and to determine the optimal electrical and air cooling distribution systems is highly recommended.

Step 6: Develop a detailed data center move/relocation project plan.

Perhaps one of the most critical steps within a data center move/relocation project, the team will need to create a detailed move plan that includes the equipment move sequence, back-up operations during the move, installation and testing and ongoing operations. The sequencing plan will outline the specific equipment relocation steps -- for example, how each device will be positioned within the racks and how each rack module will be positioned within the overall raised floor space. It is also essential to have a well-coordinated plan with facilities to ensure the appropriate electrical distribution, HVAC capacities, back-up power are in place and compliance with building codes and local ordinances are established.

Step 7: Conduct a post-move audit and process improvement analysis.

It is highly recommended for the PMO to conduct a post-move audit and review of the data center relocation project. The evaluation should compare the results to the initial business case, conformity to schedule and cost estimates and feedback from team members and key stakeholders. The lessons learned from the data center move/relocation project can be used to leverage process improvements to enhance future projects.

Success of data center move and relocation projects are highly dependent upon detailed and coordinated planning and execution of many functional participants. By taking the time to think through all possible scenarios and how they will be addressed and by understanding the details and interdependencies that exist for data center move/relocation projects, companies can avoid the risks of budget overruns, missed schedules and serious business disruptions and enable a successful relocation.