



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Project (Spring 2021)

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Section

Master

Date

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Course Code

(PMG506)

Advanced project Management

Instructions:

- اخر موعد للتسليم هو يوم الخميس 2021-05-820 في تمام الساعة 9 مساءً.
- الإجابة متاحة باللغة الإنجليزية أو اللغة العربية مع مراعاة أن تكون المصطلحات العلمية باللغة الانجليزية.
- يتم تسليم المشروع في صيغة ملف . pdf مع الالتزام نموذج الجامعة ولن تقبل أي مستندات أخرى.
- يجب مراعاة أقسام البحث الرئيسية (مقدمة Introduction، دراسات علمية سابقة Literature Review، طريقة البحث Methodology، النتائج والمناقشة Results and Discussion، وأخيراً المراجع References. وان كان هناك ملحقات Appendices يتم إضافتها)
- يجب الالتزام بـ Theme موحد كما يلي:
- حجم الخط 12.
- نوع الخط Arial.
- لون الخط أسود.
- المسافة بين الأسطر 1.5 line spacing
- عدد صفحات البحث (لا يقل عن ثلاث صفحات ولا يزيد عن ست صفحات).

Instructor's Name: ~~Eng. Amaal Aburumman~~ **Eng. Dr. Akram M. S. Ali**

Project:

You are required to document your role in administering a project. The project may be set in a business, social, sporting, or family environment but must be of a significant size and scale. If you do not have an actual project to write about you may complete the project hypothetically. **This report will be between three to six pages in length.** This is a significant research project.

Your report must address ~~each~~ **ONE** of the following issues:

1. Identify and describe the purpose, scope, and objectives of the project. **Display this information using an appropriate tool.**
2. Describe how the team is given an outline of the project.
3. Describe the strategies that are going to be set up to maintain communication with the team members.
4. Describe the tools that are going to be used to monitor the goals, time frames or milestones.
5. Identify project milestones and activities. **Display this information using an appropriate tool.**
6. Create a budget and link the costs to the key milestones for a project.
7. Describe how you are going to divide tasks and resources amongst a project team. **Display this information using an appropriate tool.**
8. Briefly describe how the progress will be monitored.
9. How are current project records maintained? Who has responsibility for this? provide some recommendations on how this process could be improved.
10. Describe the current procedure for finalizing projects. Create your own procedure and identify how you will evaluate the success of the project.
11. Legislation that may affect the project including health and safety, and anti-discrimination legislation.

Best of luck...

- مع تمنياتي بالتوفيق..

Servers and Data Center Capacity Process Management Project

INTRODUCTION

Capacity and Demand Management is the process of managing risk to ensure server availability, optimal utilization and forecasting of the required infrastructure and computing resources to meet the current and future demand of a company's business units in a cost-effective manner.

My role in the project is a project manager to ensure the delivery of the scope of the project scope within time, budget, and quality. I shall further demonstrate the details of all of this information specified in the required format

Which Stage is my project?

Our project is in the initial phase of defining the purpose, scope, and objectives.

The reason of selecting this project:

Capacity management is not only about having sufficient infrastructure resources for a business but also about sizing and saving costs; by ensuring that the overcapacity provisions have disclosed and withdrawn.

LITERATURE REVIEW

This article highlights why data center managers must ensure that their data center strategy remains ahead of the organization's expansion needs as well as monitoring sudden-peak requirements that have the potential to overwhelm current systems. The way to achieve this is through data center capacity planning.

The article implemented TeamQuest Surveyor to streamline forecasting, automate the process and heighten accuracy. This made it possible for forecasts and reports to make available and updated weekly and daily if necessary. This enabled the data center to exit interactive mode, understand changes as they occur and take action to ensure their systems are not subjected to any event.

METHODOLOGY

A table will be used to identify the projects purpose, scope, and objectives.

RESULTS AND DISCUSSION

1. PURPOSE

- To provide enhanced and clear view of Servers and Data Center capacity utilization.
- Need to understand in terms of their capacity utilization and value to company made throughout its “deployed” lifecycle state.
- To ensure that Servers and Data Center is right-sized to meet current and future business requirements in a cost-effective manner.

2. SCOPE

- To review, improve and govern the Servers and Data Center Capacity around resources availability and utilization management process, ensuring efficient use of resources.
- Capacity and Demand Management scope is to manage the current and future capacity based on demand.
- To focuses on managing the Servers and Data Center capacity and demand utilization.
- Capacity and Demand Management will be monitored basis the inputs provided by Servers and Data Center Capacity and Demand Management team which uses a tool – Team Quest to capture the Servers and Data Center capacity records.
- To enhance the reporting capabilities of the existing reports which shall be expanded to encompass the requirements of the company.
- Reporting enhancements will be focused on expanding the capabilities with respect to Servers and Data Center reporting.
- Taking a proactive approach to manage demand to meet business requirements.
- Scope also includes the identification of unavailability of the Servers and Data Center, which is one of the most visible indicators of service quality in the eyes of the service user and customer.
- The scope of Capacity and Demand Management can be one tool/application system or multiple tool/application systems. Service provider shall be using the

Team Quest tool for assessing the current performance and Servers and Data Center utilization.
3. Objectives
• To bring the goal of sizing the application and infrastructure resources accurately, by mapping and aligning the current capacity and future business unit demand at an evaluated optimum cost
• To transfer infrastructure and computing resources from places of excess capacity to where needed, without additional spend
• To help in the development of the application performance testing function within an organization
• To increase customer or end-user experience satisfaction, loyalty, and retention
• To provide data needed for incident investigation and problem root cause analysis

Here is how to make smarter capacity planning decisions

The world is riddled with thousands of examples of issues associated with data center strategy errors around capacity and performance.

For example, a deluge of online shoppers caused the data center to crash after Target.com was bombed in a massive sales event. And of course, there was the notorious health.gov disaster, when an advertising campaign prompted millions of Americans to flock to the website for healthcare coverage only to face long default lines and endless error messages. In total, it is estimated that more than 40,000 people at any one time have been forced to sit in virtual waiting rooms as available capacity has been exceeded.

Each of these examples highlights why data center managers have to ensure that their data center strategy remains ahead of the needs of enterprise expansion as well as monitoring sudden peak requirements that have the potential to overwhelm existing systems. The way to achieve this is by planning the capacity of the data center.

“When organizations lose sight of what is happening or what might happen in their environment, performance problems and capacity shortfalls can arise, which can result in the loss of revenue, reduced productivity, and an unacceptable customer experience,” says John Micheleka, former product marketing manager at capacity management firm TeamQuest and now a consultant for Stratagem, Inc.

Artificial intelligence tells AWS how many servers to purchase and when the old saying, “If it ain't broke, don't fix it,” might be a working principle in many different

scenarios. When it comes to data center strategy for capacity; however, it can be a deadly philosophy as the examples above illustrate.

One European data center, Miecielica says, has implemented capacity planning to go from being able to fix things only on collapse to being able to fine-tune its virtual environment based on accurate capacity projections. The result: That organization avoided infrastructure costs totaling \$ 65,000 per month. Moreover, its ability to identify bottlenecks helped eliminate hundreds of underperforming virtual machines (VMs).

Implementing Asset Management Plans

The successful implementation of an asset management plan is one of the indirect goals that is associated with my role within the organization. My teams KPI mandates various interactions with cross functional teams within the organization to help them execute the actionable plans we have laid out for each of the business lines in line with the objectives of the organization to execute the asset management vision and objectives.

While my current role is supervising the actionable plans as part of the asset management plan, in my previous roles I was involved in implementing low level activities around asset management plan like executing asset management system, consolidate and streamline various IT hardware requests within the ecosystem to ensure quick time to market, reduce the deployment time of the hardware provisioning, maximize the utilization of the existing IT hardware within the ecosystem etc. This experience coupled with my current role provides me an end-to-end visibility to various operational problems that teams face during the implementation.

The team supports these identified cross functional teams and asset owners to support on the following fronts:

- **Resource:** Help teams understand the various resourcing needs in order to successfully execute the asset management plan. My team supports various teams in identifying contractors, tools, equipment, facilities, IT hardware and software requirements etc. to drive the plan.
- **Competency:** Understand available competency within the other business units in terms of teams, training and skill requirements, job sharing, planning and budgeting and help them map it with the larger organizational goals.
- **Awareness:** Conduct various awareness campaigns and sessions on why asset management is important, how can they improve and realize benefits for the organization,

what are the risks and their consequences along with roles and responsibilities the teams shall have.

- **Communication:** We help communicate to raise awareness, engage stakeholders, manage information impacting asset management systems. We also simultaneously work on creating communication awareness channels like regular email newsletter, organization magazines, involvement in team meetings, briefing for top management etc. The team also contributes in developing communication plans that includes benefits of implementing programs, improvement schedules, resource plans, internal and external stakeholders, details of person in-charge, feedback forms, checklists etc.
- **Information requirements:** Assist the cross functional teams with regards to information related to strategy and planning, processes, technical, operation and maintenance, performance, financial, risk, contingency, contracts etc. and act as consultants to guide the teams in achieving the maximum benefit.
- **Documentation:** The team is responsible to ensure documentation around asset management system with revision control, access control, knowledge management in place which defined who does what and when. The team is also responsible to document various change management policies around asset management to make them relevant.

Mine and my teams responsibility with respect to implementation is to ensure that teams within the business line realize the larger goals that needs to be aligned to at an organizational level and take a consultative approach to solve any problems that come in their way of a successful implementation of the various asset management initiatives prescribed to them and report the progress on these activities to the leadership team to highlight support required at their level.

Asset Management Capability Development

Capability and competency development are an area within asset management that the team indirectly provides to. My responsibility within the organization is to highlight the list of capabilities needed to execute a successful asset management plan and procure the necessary buy-ins from stakeholders across levels and business units.

My team guided by me works around the following key areas within the capability development domain:

- Establish a list of requirements to clearly identify and maintain competences to meet the asset management plan requirements.
- Include risk assessment of competences based on both internal and external factors, such as service delivery suppliers and contractors that may affect the organization's overall capabilities.
- Ensuring tools and delivery mechanisms to transfer the capabilities and competencies across the staff and manage effective knowledge transitions within employees.
- Identify and help in executing successful asset management trainings to staff across levels to educate them on the benefits of a robust asset management process within the organization.
- Influence the end-to-end asset lifecycle processes to incorporate various capability transfer initiatives amongst the staff to enable a smooth handover between processes.

These are some of the key aspects me and my team-work with the other internal stakeholders within the strategy department to realize and develop capabilities around asset management at an organization wide level and align them with the large goals set in the asset management plan.

REFERENCES

Robb, Drew (Robb, 2017) Data Center Strategy: Tips for Better Capacity Planning, DATACENTERKNOWLEDGE, <https://www.datacenterknowledge.com/print/154209>