WELLS INTERNATIONAL COLLEGE

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Assessment 1 – Case Study

Instruction:

This task is to be completed individually. You need to analyse a case scenario and complete all the tasks mentioned after the scenario.

You need to demonstrate your IT project management ability to identify business strategy and gaps. You will also need to suggest a feasible solution to overcome identified gaps and produce a project charter along with a WBS to implement the proposed solution.

Duration:

Trainer will set the duration of the assessment.

Case Study:

Going Green application, Green IT Project Management

Project profile

Going "Green" is a mission of many companies around the globe not just for reasons of environmental responsibility, but also for cutting costs in these extremely tight economic times. Green IT efforts represent a specific focus area within enterprises that hold attention to this trend. Green IT leverages information technology to streamline operations, cut costly waste, and reduce the impact on the environment. IT typically consumes only about 10% of an organization's energy costs, but the net effect of a Green IT project is to go beyond just energy saving. To tackle the other 90%, a Green IT project extends into a variety of other departments, and to execute such an endeavor requires an effective project management function in order to identify and prioritize goals. A Green IT transformation can be a complex process.

Vital Statistics:

- Number of project tasks - 12
- Project duration - 16 months
- Project budget - $1,200,000
- Number of users - 50

Business situation

The company, a manufacturer of hardware products for businesses and consumers with $175 million in annual revenue, was asked by the board of directors to plan and implement an enterprise-wide Green IT initiative. A green team was selected consisting of managers from nearly all departments needed to participate in the project in terms of defining tasks, assigning priorities, managing the status of various tasks, adjusting target dates, maintaining the budget and keeping good notes that document issues along the way.

The action plan for a Green IT project included four primary components: revising processes and metrics, optimizing efficiency of existing IT assets, revamping architecture and infrastructure, and positioning IT to enable green business practices. The components can be broken up into individual tasks in support of the Green IT project:

- Server Virtualization – Server virtualization is the most popular power-saving strategy for data centers. The process involves replacing physical servers with virtual servers controlled by hypervisor software running on fewer physical servers.
- Server Power Capping – Capping the power drawn by servers. The power capping eliminates the need for over provisioning, allowing the company to reclaim trapped energy. The power allocations will be set in advance, based on previous server history.
- Active Power Management – The goal is to cut the amount of time PCs are powered on by more than half, from 21 hours to 10.3 hours daily, estimating it will save about $750,000 on energy annually by deploying active power management solutions. Studies show that PCs stay on more than double the amount of time they need to. This translates to an amount of wasted energy that costs about $150 per system per year.
- Alternative Energy Plan – Alternative energy sources is an important characteristic of a green data center so the company will investigate relocating the data center where wind or hydro power is widely available. The company will also explore the use of solar energy rather than diesel for backup.
- Computer Hardware Recycling – The company plans to follow the trend that 40% of companies already have in place, computer hardware recycling. Company issued cell phones will be part of this initiative.
- Data Center Chargeback Model – The Company plans to determine data center usage on a per department basis so more use is charged back more heavily to the department with the most use.
- Data Center Cooling and Airflow – The Company plans to reduce data center operational costs and carbon footprints by reducing the amount of power needed to run and cool the facilities. To do this,

the company will recycle more than 302,000 gallons of water a day at the data center and will also collect rainwater off its roof and store it underground in a 50,000 gallon tank for cooling IT systems.

- Energy Efficient Coding Practices – Thought should be given to understanding how much power custom developed software applications will use even as they are being coded. The company's IT department shall advise developers to determine which query method for example, might save a watt of energy and choose that method even if it might make the process slower by a nanosecond or two.
- Measure Data Center Energy Use – The Company's data center must be more energy efficient by deploying sensors measuring nearly all power consumption. The company will measure total data center energy use every 15 minutes and monitor at the subsystem level. This will develop baseline metrics and find trouble spots, taking measurements over the course of a year. The stated goal is to increase CPU utilization by 10% and cut power use by 5%. The long term goal is to obtain EPA Energy Star rating for the data center. The Power Usage Effectiveness (PUE) score compares the overall amount of energy used in the datacenter for all functions including computing, cooling, and power distribution, to the amount that just goes into computing. A lower PUE is better and a value of 1 is the goal.
- Printer and Display Efficiency – The Company plans to encourage employees to print on both sides of paper and cut duplicate printing. The company shall also initiate a campaign to have employees turn off their screens if they are going to be away.

Telecommuting Programs – The company shall institute guidelines to replace eco unfriendly air travel with tools for virtual work, such as instant messaging (IM) and teleconferencing. In addition, general telecommuting programs shall be instituted. IT's role is significant when putting a telecommuting policy in place.

- Carbon Footprint Calculator – The company plans to develop a web-based carbon footprint calculator to estimate CO2 emissions.
- Paperless Accounting – The company shall develop IT solutions to encourage customers to take advantage of paperless billing and payments.

Your tasks:

Task 1: Identify Business Strategy and Gap

Document the business's strategies of "Green IT" and also summarise the components required changes for the participating organisation to implement "Green IT Project". (Min. 300 words)

Task 2: Recommend a feasible solution

Assume "Wells International College" is thinking of going "Green" and asked for your assistance in this project. Research different project management applications on the Internet to compare with the Green IT project management application and recommend a feasible solution with proper reasons for Windsor. (Min. 300 words)

Task 3: Produce a Project Charter

Develop a project charter for the Windsor project specifying project start date, finish date, approximate budget, project manager, project team with roles and responsibilities, project objective, project approach and stakeholders.

You may follow the "Project Charter" template provided in the "Learner Guide" or find one that meets all the requirements.

Task 4: Project Document

Refer to "Go Green" of Well International College (WIC), you have been asked to develop a project plan for WIC. Project plan outline as following:

- Introduction (Select one recommendation from Task 2 for implement project plan)
- Project background
- Related factor to organization

- Scope and objective of the project
- Information gathering plan and approach
- Gathering method, can be one of the following
- Interview
- Questionnaire
- Observation
- Detail of information repositories
- Feasibility studies
- Technical
- Operational
- Economical
- Social
- Project plan and schedule (Development and Maintenance)
- Work breakdown structure
- Gantt Chart
- Milestone
- Project Deliverable
- Communication plan
- Deployment Plan (If needs)
- Training Plan (If needs)
- Recourse and budget, (budget has been limited by WIC Capital Expenditure of current fiscal year for Hardware $80,000, Software $10,000, and Outsourcing man-hours $100,000)
- Risk Management
- Risk identified
- Contingency plan
- Change management
- Change control
- Conflict management

Task 5: Project Closure

Prepare project closure document template as following:

- Project Sign-off document
- Project evaluation document
- Lesson learned template

Helpful web links to complete the assessment:

Project planning

1. http://www.ee.ed.ac.uk/~gerard/Management/art8.html
2. http://www.projectsmart.co.uk/project-planning-step-by-step.html

Project management plan

1. http://www2.cdc.gov/cdcup/library/templates/CDC_UP_Project_Management_Plan_Template.doc
2. http://blogs.pmi.org/blog/voices_on_project_management/2011/11/7-essential-project-planning-d.html

Project governance policy and processes

1. http://oit.ucla.edu/governance/process/documents/it_governance_guide_v1.2.pdf
2. http://www.aipm.com.au/resource/GARLAND_Project_Governance_Paper.pdf

Feasibility study

1. http://womeninbusiness.about.com/od/businessplans/a/feasibilitystud.htm
2. http://www.rochester.edu/entrepreneurship/pdfs/Business_Feasibility_Study_Outline.pdf

Information gathering, project requirements and feasibility analysis

1. http://www.jiscinfonet.ac.uk/InfoKits/edrm/stage-3
2. http://www-rohan.sdsu.edu/faculty/rnorman/course/ids306/chap2.doc
3. http://www.brighthubpm.com/project-planning/13669-gathering-requirements-for-a-feasibility-study/