The Factors Implementation of Green IT in Organization

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Highlights: The objectives of this research is to develop a checklist system for Green IT factors. This system aims to promote Green IT for organization to implement in their company and also to propose how to reduce the cost of energy consumption in the organization. Green IT is a set of practical measures designed to ensure that Information Technology is developed, delivered and used in a way that is environmentally friendly, sustainable and energy efficient.

Key words: *Green IT, energy, sustainable, environmental, checklist*

Introduction

Information technology is one of the most important thing that happens in the world. There are many types of information technology suitable with the era globalization. Green Information Technology (IT) is one of the information technology that have been introduced to the world, however it is still new in the society. Thus, the aim for this research is to promote Green IT for organization and to help the organization to check the level of Green IT that has been implemented in their organizations.
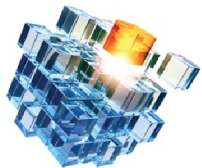
Objective

The objective of this research is to develop a checklist system for Green IT factors. Besides, it is also to promote Green IT for organization to implement in their companies and also to propose how to reduce the cost of energy consumption. A website will be developed that focus on the checklist of Green IT factors. In the website, the user will need to register and to sign up to be able to do the checklist for their organizations.

Method

The methodology used for this research is the System Development Life Cycle (SDLC). Every phases in the methodology shows the steps and techniques used in doing the research as shown in Figure 1.0

*Figure 1.0: System Development Life Cycle (SDLC) phases*

Finding

In IT sectors, Green practices are being the common issues nowadays since there are many global effects especially in energy consumed and carbon emissions. Many organizations started to implement the Green IT in their company especially in energy usage. There are several methods to implement Green IT in organizations as follows (Dan 2013):

i) Placing Green IT high on the program, with panel representation
ii) Organized the organization to upkeep Green IT advantages
iii) Alter IT processes (such as Service Assets and Configuration Management) at the micro level to insert Green IT
iv) Accomplish data center power productivity in which review metrics to make sure that they able to achieve energy consumption decreases efficiently
v) Change to server virtualization, cloud computing and software as a service where suitable
vi) Implement server power management
vii) Practice renewable and domestic power sources

Sustainability is a part of Green IT. The three pillars of sustainability consists of social, economic and environmental. Social sustainability is the capability of a social system, such as a nation, family, or organization, to function at a clear level of social comfort and harmony open-endedly. Environmental sustainability is the capability of the environment to upkeep a distinct level of environment quality and natural supply extraction rates indeterminately (Kates et al. 2005) (Katz 2013). Economic sustainability is the capability of an
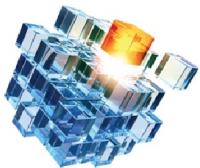
economy to sustenance a definite level of economic creation indefinitely (AL Shayeb 2013). Therefore, these three pillars must include all together as the solutions to the sustainability issues.

Conclusion

The Green IT checklist website has been developed to be easily and widely applicable to the organization to check their level of the implementation of Green IT. This website helps the organization to check their achievement on Green IT implementation and will give suggestions to improve it.

Acknowledgement

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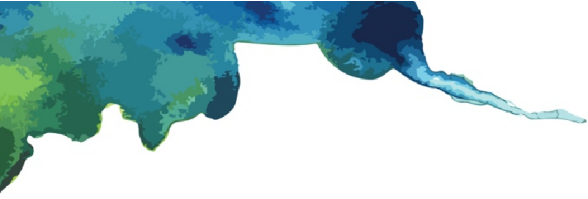
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