



Everyone's Smart University (ESU)

Midocean University

College of Management

Master of Risk Management

Uninterruptible Power Supply in Data Center Risk Management

إدارة مخاطر الطاقة الغير منقطعة في مركز البيانات

Team Leader: Ahmed Almutairi (221002097)

Riyadh Alzahrani (221002507)

Final Project and MGM697

Dr. Walid

Everyone's Smart University (ESU)

Midocean University

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Introduction

Data center risk management is a critical practice that is being used by organizations with specific governance, process, and procedures alongside the compliance for acquiring being able to store, process, adequately transform and even use various forms of data for the purposes of adequately managing and eliminating different types of risks that might be associated with the data. Furthermore, the act of risk analysis normally entails being able to look at various assets within an organizational environment, possible threats together with a wide variety of different vulnerabilities for the purposes of determining any risks and then going further to come on board with various forms of countermeasures that are capable of being relative to issues associated with risk management (Anthony Jr, Abdul Majid & Romli, 2018). Data is always the core pillar of every organization, and due to this, any incorrect or even poor implementation of any data type can end up severely impacting various operations together with expected outcomes within an organizational environment. Furthermore, different types of risks always have to be identified, clearly understood, quantified and even parsed into different types of categories that might entail things like transferring, mitigation and many more. Moreover, issues associated with data risk management majorly entail the implementation of different practices for identifying a variety of risks, accessing them and even scaling them down to minimum acceptable levels (Yang, Li, Yang & Tang, 2018). This has always been very fundamental, but currently, stakes are higher, most so with the emergence of quite a number of remote work and various cyber security breaches alongside different risks that are known to be associated with cloud security.

Problem statement

Based on the annual cost of a Data Breach Report that was implemented by the Ponemon Institute, it clearly found that various forms of data security breaches are currently costing organizations an approximated value of about \$4.24 million per incident. Furthermore, security-related issues have been reported to be lagging quite a number of rapid IT changes that entail things like remote work or even cloud-based activities, thereby bringing on board a lot of significant consequences. Furthermore, a good number of organizations have been able to report loss of data due to unstable power supply hence making it hectic for them to adequately implement a reliable data risk management process. Due to this, the use of UPS is in a position to change the entire situation of data center risk management by offering an appropriate time frame to power down various sensitive equipment and servers without the loss of any single data.

Justification of the study

The advancement of various forms of technologies in this modern world has played a significant role in dealing with quite a number of modern-related problems. As a result, this research will therefore be implemented for the purposes of creating awareness and providing reasonable insights into some of the positive benefits that are associated with the use of uninterrupted power supply within the boundaries of data risk management. Furthermore, this will also ensure a clear understanding of how higher levels of competitiveness can always be embraced in data risk management through the implementation of this significant technology that is known to be having the potential of acting as a game changer when it comes to exploring a vast range of different goals and objectives in relation to data risk management most so from an organizational perspective.

Research objectives

- Creating awareness of some of the potential benefits that can be brought on board due to the implementation of UPS in Data Center Risk Management
- Providing appropriate insights on how UPS can be implemented to address different goals and objectives within the boundaries of Data Center Risk Management

Research Questions

- (1) What are some of the potential benefits of using UPS in Data Risk Management?
- (2) Do you think that different types of modern organizations have a clear clue on how UPS can be used in Data Risk Management?
- (3) How can the use of UPS in Data Risk Management be used to bring a competitive advantage within an organizational environment?

Literature Review

Different types of data centers in this modern developed world are at the epicenter of the most crucial and essential part of a wide range of companies. Due to this, quite a number of data center management organizations have been able to learn some of the most critical lessons the hard way. This is a result of different problems like the crushing of the systems and even the loss of various forms of critical data. According to research conducted by Barroso, Hölzle & Ranganathan (2019), CISA, together with the Energy Department aware of quite a number of threat actors gaining access to different types of internet-connected uninterruptable power supply devices, most so through various forms of unchanged default usernames together with passwords. Furthermore, Engemann (2019) asserts that different types of organizations in this modern developed world can always mitigate any form of attacks against their respective UPS devices, which majorly offer power in a variety of applications, most so when the normal source of power is lost, by eradicating management interfaces away from the internet. Again, (Araz, Choi, Olson & Salman (2020) believes that just like any other form of financial instrument or even other forms of corporate assets, various types of data drive organizations always have to come in order to realize that data is something that is more than just data. It is a critical asset that, when leveraged in an appropriate manner, can always be utilized for the purposes of competitive advantage in order to help in the growth of a given business or even ensure that there is sustained growth within the boundaries of that business.

Methodology

In order to ensure that credible information is collected within the research boundaries for a much better outcome to be attained, this research will embrace an advanced and well-organized form of qualitative research. One of the major reasons why this methodology will have to be implemented within the research is due to its capability of enabling a much deeper understanding of various forms of experiences and phenomena together with contexts. Again, it will also offer one of the best opportunities for asking a variety of questions, most so the ones that are not capable of being put into numbers in order to understand various forms of human experiences. As a result, the following data collection methods will be embraced within the research to ensure that accurate and credible information is collected;

Interviews- Different types of data risk management experts will be subjected to a one-on-one interview where they will be asked different questions regarding how the use of UPS has been embraced within their respective boundaries of Data Risk Management alongside some of the major benefits that it has been able to bring on board. Every interview will last for a total of around thirty minutes in order to create ample time for every research participant to be subjected to the interview process.

Online surveys- The use of online surveys will also be embraced within the research, where the participants will have to be provided with one common link, which they will have to access and respond to the online survey questions.

Questionnaires- The participants will be offered questionnaires that will contain a total of ten questions. They will be expected to respond to the questions and make their submissions after a maximum of two days. Their response to the questions within the questionnaires will be strictly based on the knowledge that they have in relation to the research topic.

Conclusion

The use of an uninterrupted power supply in handling Data Center Risk Management is currently becoming popular in almost all organizations in this digital world. Moreover, data has emerged to be a very crucial component that needs to be fully protected in any organization, and in order to ensure that this is done perfectly, various forms of risk management techniques need to be involved, and as a result, this has ended up calling for the need of using UPS mechanisms that adequately enhance a continuation of the Data Center Risk Management process at any given time.

References

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