# Metric Machine Parts and supplies Corporation

### Introduction

The complex and critical nature of a telecommunication network in the Information Technology sector is extremely influential in every business application and venture. This simply means that the poor management of the same would lead to performance degradation and service failures within the organization. In this case, it is extremely significant that every business organization manages and monitors its service level applications in order to quickly correct the problems before the problems impact crucial operations in the business.

### **Business Problem**

Metric Machine Parts and supplies Corporation is a corporation that is located in the United States of America. The company cannot be described as an international or large company but is growing gradually. The company is facing many problems in the service management of its current telecommunication network which is supplied and managed by an external service provider. The external telecommunication management system does not provide comprehensive monitoring solution for the effective management services for the organization. In this way, the administrative costs used to identify, diagnose and resolve the problems are extremely expensive to the organization (Vacca 2009). This simply means that the telecommunication service providers do not provide accurate measures of performance, availability, usage and application of the system.



#### **Context of the Scenario**

The context scenario is based on the Metric Machines Parts and supplies corporation which consists of 75,000 customers worldwide. The corporation has employed 250 employees working in four different locations within the United States of America. It is amusing to note that this corporation substantially relies on its operations for its survival and growth. However, its telecommunication network is overwhelming. This is because the external telecom network management company, which currently manages the telecommunication network of Metric Machine Parts and Supplies Corporation, is not competent. This is because the external communication company is not responsive to the corporations needs especially after a crash in the network. In this case, the corporation is disappointed with the service provider. Since the contract with the external service provider is nearly its expiry date, the corporation's mangers desire or seek better network solutions for the corporation.

This simply means that the corporation requires the implementation of a new telecommunication design. The new technology should be able to eliminate the frequent crashes within the system and facilitate fast expansion in the company's operations. In this way, the network should be designed with higher economic efficiency, higher scalability, higher security, higher availability and reliability. The new technology should also be designed developed and implemented in a way that it will connect all the remote offices by offering user security and facilitating the expansion of the company. In this case, the availability will ensure that the authorized users will be readily available. Additionally, data reliability will ensure that the customers load is managed within the system.

The telecommunication network should be implemented and designed with future expansion and growth in mind. This simply means that the new system



should consider and make room for future expansion and growth (Hyden 2010). This requires employment of technical staff to help in the operations and running of the Information Technology section. It will also ensure that the network is maintained internally. However, the proposed solutions should be carefully adopted and introduced in order to prevent non consistency in the telecommunication network system.

### **Proposed Technology Solutions**

The CIO of the Metric Machine Parts and supplies corporation has proposed a remarkably workable method and technology solution. This is because the manager has identified and realized that the particular service provides extremely valuable function to the customers, end users and organization, as well. In this way, the proposal provides a truly unique comprehensive monitoring solution that will not only help to effectively manage the telecommunication services, but that will also help to manage individual branch component level. This means that the organization will put in place a grid control system that will act as a diagnostic tool. In this case, every time the service breaks down, fails or performs poorly the problems will be resolved efficiently, quickly and effectively in order to reduce the costs spent on problem resolutions and identifications.

An internal Information technology center will help to effectively monitor the grid control the organization. In this case, the components will be hosted by the applications and thus allow the modeling and monitoring of the organizations functions from the end user approach to the business function approach (Wheeler 2011). The management should develop the model the system correctly to ensure that the service accurately provides availability, performance and monitoring measures of the same. This mere effective proposed technology solution will feature the service by modeling the business applications and processes. Policies and processes should also be put in place to ensure that the Metric Machine Parts and supplies corporation problems are



solved and sorted out. These policies and processes include; availability which entails and determines whether or not the telecommunication system is accessible to all the users, service test, which determines or tests whether the service is available and performing, system which entails all the underlining components such as data bases, hosts and application servers, beacons which help in pre- recording of transactions in relation to functionality of the telecommunication system, performance and usage which entails and indicates the response time and performance according to demand or load on the telecommunication system, service level which ensures that the contractual or operational objective in relation to the performance and service availability is in place and root cause analysis which is used as a diagnostic tool to ensure that the possible causes of the new service failure is easily identified and resolved immediately.

### Policies and Processes in the Proposed Technology

The Metric Machine Parts and supplies corporation should implement technical controls, laws and policies in order to ensure that excellent performance in the network and data & information security. In this case, the organization should implement security policies to help define the procedures and rules as assets of the organization towards non acceptable and acceptable behavior traits from the staff and employees. The organization should also ensure that there is data integrity, reliability and availability in the new system. Some of the most fundamental laws are the federal privacy Act and the Computer fraud and abuse Act. These Acts help to maintain confidentiality and prevent breeches of the customer's information that is confidential (Hyden 2010).

### **Business Solution and Needs**



An advanced telecommunication technology solution will help to forecast and develop engine specifics in order to overcome chain business realities and inherent limitations from models of time series. This new technology model is designed to meet all the business needs and solutions. In this way, the technology enterprise is used to solve telecommunication problems in the organization and narrow the technical architecture domain of the application of the system. However, this type of solution requires broad and deep knowledge and expertise on the same. However, the issues and problems related to the business should be addressed before the implementation of the new system. The telecommunication network that is best for the company should be one that is easy to mange, more secure and offers better solutions for the company. The management should consider the implementing and development costs of the new proposed technology as a business investment that will not only help in the sharing of resources and information but will also help in the successful business growth.

It is necessary to note that one of the Metric Machine parts and supplies corporations needs is to incorporate a telecommunication system that is secure, available, reliable, flexible, manageable, economically efficient and scalable. The system should be available to allow quick repairs and maximum time is needed, the network should be designed function and produce accurate results, the system should uphold the integrity and confidentiality in order to protect the clients and company's data and information, the system should be able to respond to the many business changing needs and prospects, the system should allow quick access within the network for customers and employees, the system should be developed and implemented and designed to be managed by the organization and a small team from the organization, the maintenance and operational costs should be offset to reduce long term operational costs.

The company does not have to waste a lengthy amount of time discussing the opportunities and options of the new system. This is because the needs and



concerns of the business is enough to help the company to make informed solutions and resolutions on the same. Apparently, the old telecommunication system was not able to deliver the needs and requirements of the organization effectively. This simply means that the old program was poorly programmed, designed and installed from the initial designing and installation in the beginning. This simply means that the new telecommunication system should be designed in a way that is programmed to meet the needs of the entire company, its branches and the customers. This process should be thoroughly prepared and organized in a knowledgeable way in order to ensure that the system will meet all the company's needs and requirements.

The new technology solution should also be integrated to provide critical solutions to the infrastructure and information services in the company. This will help to implement and identify the best client solutions in order to communicate, transact and connect different modalities in relation to the subscription management of the service. The new technology solution should also ensure efficient communication amongst the employees, ensure cost effective communication with clients and help the company to achieve its minimum goals and top line costs. This simply means that the system should be able to increase staff efficiency and garner productivity from the company solutions. However, this new system should be implemented in conjunction with a knowledgeable network administration. This will not only ensure courteous and professional operations but will also ensure responsive and quick response from the same. The telecommunication solutions should be professionally supported and maintained. This will help to foster fair and amicable working conditions and provide outstanding value for the developed service.

## Risks Involved in the New Applied Solution & Proposed Mitigation Strategies against the Risks



The proposed technology solutions within the organization must face rapid face challenges. These risks involve risk of equipment intrusion, physical attacks and sabotage, eaves dropping, development of access points and Trojan horses. It is not easy to mitigate such risks. However, measures should be put in place to help control and prevent such risks. In this way, the company should monitor unauthorized entrance into the central control area, monitor the disclosure of sensitive information and monitor fake signals from being integrated into the new system. This simply means that the company should implement security technology solutions such as implementing firewalls, installing surveillance cameras, auditing the network regularly, control logical access amongst t many other measures.

The company should develop and implement project risk management in order to prevent, monitor and take quick action when a risk occurs. Many times the company may develop risks associated with delay in the scope of work or lack of clear definition in relation to the impact of the project efforts (Wheeler 2011). In this way, the project plan should ensure that it reflects on the milestone and implements a dependency interface system that ensures that all dependencies are closely recognized and tracked.

The other common risk in relation to the applied solution within the context of the business strategy is the risk of higher cost variance. In this way, the proposed technology solution lacks the ability to provide and identify the details scheduled for the components. This leads to limited requirements thus higher cost variance. In this case, the project risk management strategy should ensure sufficient capacity analysis. This will help the company management to conform the infrastructure costs and other related coasts. However, this requires quantitative analysis in order to justify the pricing. An additional bench marking activity should be introduced and implemented in order to provide sufficient information during the repricing and evaluation phase.



The other popular risk or impact of applied solutions in this case is the impact on the business processes. The introduction and implementation of the new technology can significantly impact the company processes. This is because of the introduction of technologies that are not familiar to users. In this case, the project risk managers should ensure communication and promotion of their project status and initiatives in order to facilitate acceptance by the users. This will help to gain approval and review the development process.

The risks of running out of the systems control in the telecommunication system are also extremely common risk faced by any different organizations. This causes an overrun in the costs and delays, in the system. In this way, the project risk managers should ensure that there is an existing control management scope. This simply means that there should be frequent testing and integration plans within the system. There should also be a scheduled review on the development progress and gained approval before any increment of the approval (Andress 2011). The final risk is the risk of delay to deliver. This risk occurs due to unplanned efforts in resolving management, security and performance issues with require a lot of work in its new approach orientation and architecture. In view of this, the integrated system should assess the viability in solutions, identify and optimize key issues.

It is necessary for Metric machine parts and supplies corporation to mitigate these risks by properly controlling the implemented system. The company should physically protect the system by installing surveillance cameras. This will help to prevent and protect the company against vandalism and theft. There should also be a clear definition of how tom access and assess the control. In this case, the Information technology or IT team should trace through the users credential every event. This will help the company to enforce accountability in relation to the user. In this way, the network design will be able to achieve better data security and reliability of the same.



### **Conclusion**

Adopting and implementing the new proposed technology solutions in to the Metric Machine Parts and supplies corporation will have enormous benefits. However, it may also attract many impacts and risks from the same. This simply means that in order to ensure productivity and reliability in the system, the management needs to laws, policies and security controls in order to govern the new proposed technology solutions. This will ensure that the new system positively impacts the Metric Machine Parts and supplies corp.



### References

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