**Business Requirements and IS/IT Alignments for**

**Power Engineering Technologies**

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**1.0 SUMMARY**

Power Engineering Technologies also known as (P.E.T) is a player in the UK energy sector it currently employs 75 people, 50 are based in Wolverhampton whereas 25 are based in Taipei, Taiwan. it has 2 offices ,a high staff turnover has been reported to happen as a result of temporary employees. Power Engineering Technologies makes and install power plants in developing countries ,they are vying the opportunity to expand Into Eastern European countries. In order to note the level of competitive advantage it has , various strategies like Michael Porter’s Five Forces Model , Porter’s competitive strategies, Porter’s value chain analysis, McFarlan’s strategic grid was analyzed.

Furthermore an IS/IT strategic solution was earmarked to address the challenges that has bedeviled Power Engineering Technologies IT Infrastructure for a while .,

This paper is divided into two part the business analysis and IS/IT analysis.

**2.0 PROBLEM STATEMENT**

According to the brief, The problems that Power Engineering Technologies is facing can be categorized into two factors and they are

1. **A Lack of a Business Strategy ;** which can be visible as a result of the company’s plan to expand into Eastern Europe
2. **A Lack of IS/IT Strategy** : This came up as a necessary requirement with (the)

* Office staff at Power Engineering Technologies using different range of PCs with different specifications
* Number of staff and managers using various laptops and mobile devices to log In to the company’s data.
* Different operating system : some system uses Microsoft 2007, Microsoft 2010 and Microsoft XP for access to bespoke
* Senior staff uses iPhone, iPad etc. to access their mail ,work related file
* Company server are all windows 2008, whereas one is windows 2003 which is outdated.
* Weekly backups are taken weekly and stored in removal hard disk and locked in the MD's office
* Microsoft Share point is used for collaboration, Outlook access is also used for remote working
* Some staff still use their email to access work office files
* Sales and purchase system
* Power Engineering Technologies’ website is hosted by an external host and has a platform for remote workers
* Power Engineering Technologies’ account found in nearby skip
* Malware found in computer
* Reducing company time to remote time
* The need for a cloud
* A Lack of IT training for the staffs

**3.0 BUSINESS ANALYSIS**

**3.0.1 SUPPLIERS in UK and Europe:**

Drax Global

Ramboll UK

Power Minerals

**3.0.2 MAJOR COMPETITORS**

Shell Energy Europe

Eni

Gazprom

Statkraft

British Petroleum

Total

**3.1.0 BUSINESS STRATEGIC PLAN FOR POWER ENGINEERING TECHNOLOGIES’S EXPANSION INTO EASTERN EUROPE**

With a view of expansion into Eastern Europe, we will have to do an analysis of Power Engineering Technologies both Internally and externally ,This analysis framework is to evaluate the root causes of profitability in the energy sector of Eastern Europe, The most favorable model for analysis ,externally, is the Micheal Porter Five forces of external influence.

**3.1.1 THE MICHAEL E. PORTER FIVE FORCES OF EXTERNAL INFLUENCE**

This is used to analyze and ascertain what external forces affect the competitive advantage of Power Engineering Technologies and these are stated in five principles below, namely

1. **Threat of New Entrants**: as a result of Power Engineering Technologies moving into the Eastern European market the problems that they are likely to face include

* Barriers to entry (Border control and Language barrier): Since Power Engineering Technologies is a British registered company there are bound to be issues that will affect it as a result of Brexit, According to Colwell(2022) the result of Brexit occurring seem to be a double-edged sword, but due to the negotiations of the team from the UK, they secured a post-trade deal with the EU, which allows for UK businesses to trade tariff-free for now, also the fact that the eastern Europeans speak diverse languages aside from English poses a problem
* Legal (Patents and licenses): Much of the energy efficiency legislation in eastern European countries originates from EU-wide legislation before Brexit ,CISL (2019). However they are still the same ,they follow the same market trends and legal obligations required to keep energy efficient.
* Economies Of Scale: Going into a larger and wider market like the Eastern European countries will be cost disadvantageous to Power Engineering Technologies because they are going to face much larger existing companies who already have an established brand, customer and workforce. Startup Sloth,(2021),it is synonymous to a case of stretching the resources of the company thin.
* Brand loyalty/recognition *:* With the amount of staff available, Power Engineering Technologies doesn’t have the workforce to operate and grow the company to overcome cost disadvantages, this in hindsight could be a permanent disadvantage because they will lack the brand to build up production volumes ,this further compounds their challenge to grow like various incumbent firms resulting to a competitive disadvantage in the long run.
* Capital Requirements*:* huge amount of money is needed to enter into the market or expand, so are the investors willing to dole out money
* Cumulative Experience: The combined experiences of the staff was enough for what Power Engineering Technologies was as a small midlands company, but as a result of the company vying the eastern European market they need more staff, The HR team will need to outsource and look for talent, to supplement the ones available, which is not enough.
* Government policies: a lot of government policies affects energy for example the E.U Green deal,
* Access to distribution channels*:* The transportation system in Europe is so good ,they have a great road network, good air port system and rail network these help to make distribution to be easy

*The threat of new entrant to energy industry is* ***low***

1. **Bargaining power of suppliers** : There are many suppliers in the energy sector most are located around Europe and some in UK *see suppliers list* , and as a result of the strides of development in the continent it is easy to get spare parts across . The cost of changing suppliers wont be expensive because there are a lot of suppliers in the sector and all of them offer if not the same service but everything. There is no uniqueness in the product they supply.

*So the risk of the bargaining power of supplier affecting the business is* ***low***

1. **Bargaining power of buyers** : Energy is necessary to do a lot of things, energy services are closely associated to the quality of life. Semenov ,(1993). So that means the more development increases the demand for energy also increases , economic growth is also influenced by energy usage.one way or the other everybody uses energy. The consumers of this energy are the buyers and they are the populace of the entire Eastern Europe according to Worldometers(2022) there are 292,223,480 people in the Eastern European region, the average consumer looks at the cheapest option available ,they look at the price, since there are lot of players in this sector there will likely be price fluctuations to attract customers. Furthermore this encourages the buyers to substitute easily and switch cost because they have a lot of bargaining power

*The risk of bargaining power of buyer affecting the business is* ***high***

**D)** **Threat Of Substitute Product**: The presence of numerous substitutes which include renewable energy like wind , solar energy ,generator and also other products offered by rival company a possess high risk to the profitability of expansion into Eastern Europe. According to Eurostats (2020), In 2020 renewable energy represented 22.1% of energy consumed in the E.U. which implies that there are a lot of alternatives available .

*The risk of threat to substitute product affecting the business is* ***high***

**Rivalry Among Existing Competitors**: The rivalry in this industry is high because of the presence of numerous companies who are in competition to get a large chunk of the market share, also there similarity in size and power is alike .However the industry has a high growth rate .Product differentiation in this industry is almost similar because they offer the same services of providing energy for the consumer ,there is a high propensity for the players to engage in price wars so as to lure the consumers away. The already established player in this game are Royal Dutch Shell, Total Energy, British Petroleum, Gazprom.

*The risk of rivalry among existing competitor affecting the business is* ***high***

With this analysis of Michael Porter’s five forces of external influence for Power Engineering Technologies we have a Score of 3 high risk activities and 2 Low risk activities, which is not great for this company at the moment. However In order to compete with the other players In the energy sector of Eastern Europe, we have to utilize the **Porter’s Competitive Strategies** to analyze where Power Engineering Technologies can be profitable and have its slice of the market shareDiagram

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Image 1: Michael Porter’s Five Forces Model Showing Power Engineering Technologies External Factors of influences

**3,1.2 PORTER’S COMPETITIVE STRATEGIES**

Chart

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Image 2 :Showing Image Of Porter Competitive Strategies

The Porter Competitive Strategies is made up of four quadrants ,which is

* Cost Leadership
* Differentiation
* Cost Focus
* Differentiation Focus

**Cost leadership**: In this quadrant ,Power Engineering Technologies aims to become the lowest-cost producer in the industry, by reducing costs, Power Engineering Technologies is more likely to retain customers and reduce the threat posed by substitute products offered by its rivals and alternative energy

**Differentiation**: In a differentiation strategy,Power Engineering Technologies seeks to be different or unique in the products and service it offers to the industry, It earmarks one or more attributes that many consumers /customers in the energy sector of Eastern Europe perceive to be necessary and uniquely positions itself to meet those needs .

**Cost focus:** This strategy of cost focus rest on the choice of a narrow competitive scope within the Eastern European energy Sector, Power Engineering Technologies seeks differentiation in its target segment

**Differentiation Focus** :This strategy of differentiation focus rest on the choice of a narrow competitive scope within the Eastern European energy Sector, Power Engineering Technologies seeks a cost advantage in its target segment

**SHORT TERM STRATEGY(1-5 YEARS)**

As a result of the sector being saturated with other established players I recommend that Power Engineering Technologies focuses on a niche, on an area for example a country or two in Eastern Europe and then scale up instead of trying to partake in the product differentiation or cost leadership strategy, why because , Hart(2021) stated that ,businesses that makes product differentiation work for them have the following qualities , Innovation ,The availability of a Great Research and development team , Marketing and sales strategies that showcases the benefits and competitive advantage of the product and service ,also these businesses have the resources to create high-quality products and services, which is not available for now in Power Engineering Technologies.

Furthermore, using the cost leadership strategy will only result in a loss in the nearest future,because when the other established industry players like Shell, British Petroleum, Gazprom finds out there is a price war, they will also reduce their prices so as to attract and gain back their customers, who have already been used to their products and services .So therefore they should focus on a Niche market with respect to **Cost Focus**, this will make them more profitable in the short term

**LONG TERM STRATEGY(5-10 YEARS)**

I recommend that Power Engineering Technologies should focus on product differentiation in the future, By this time they would have been profitable or sought for more funds from investors and therefore would invest in R&D research and development they will have to partner effectively with the Human resources in the acquisition of talents this will be an inhouse thing.

**3.1.3 VALUE CHAIN ANALYSIS**

After analyzing the Michael Porter Power of Five forces for Power Engineering Technologies And Porter’s competitive strategy, the next analysis to do is an internal analysis ,and the best way of analyzing corporate firm’s internally is using the Michael Porter Value Chain Analysis. The reason for a company is to produce great products in a way that they are valuable and solve a problem to customers that needs it, most times they have a more superior value than the original cost of manufacturing these products according to De Bruin (2018) . A company can also be called a collection of functions that are performed to design ,deliver ,produce ,market and support its product(or service).

Strategically a company gains competitive advantage over its competition when it delivers services more efficiently, cheaply and better. The value chain system of Michael Porter helps to disaggregate a company in this case Power Engineering Technologies into its roles, strategically , and help locate where the weaknesses of the Power Engineering Technologies lies so as to strengthen it, This helps in creating a clear and distinct overview of the internal organization in Power Engineering Technologies, De Bruin(2018).It is now easy to access where the true value will be created in the company and where improvements are made.

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Image 3: Michael Porter’s Value Chain Analysis

The value chain activities can be divided into two broader types

A)Primary activities

B)Support activities

Generally ,there are five primary activities, which include

* Inbound logistics
* Operations
* Outbound logistics
* Marketing and sales
* Support

Whereas the Support activities includes

* Firm infrastructure
* Human Resource Management
* Technology Development
* Procurement

All these activities goes into the services offered by Power Engineering Technologies, the value chain of Power Engineering Technologies is embedded in a larger stream of activities, this is considered to be its Supply chain or Value system .In the long run the products and services offered by POWER ENGINEERING TECHNOLOGIES becomes part of its buyer’s value chain. The suppliers value chain is also called the upstream value ,suppliers of power plant equipment’s like ***Drax Global, Power Minerals ,Ramboll UK***are up on this segment De Bruin (2018) stated that the suppliers of any company in this case Power Engineering Technologies possesses a value chain that creates and delivers the purchased inputs via a channel of values on the way to the buyer.

**Primary Activities**

**1)Inbound Logistics**: This is how the resources and materials needed for Power Engineering Technologies to function is gotten ,Power Engineering Technologies has selected some of the best low-cost suppliers in UK and Europe, that not only supply the raw materials to its competitors ,but also supply to them ,a look is made at the shipping costs and location of the suppliers facility to Power Engineering Technologies facility, some of the suppliers are based in the UK and around Europe, so therefore it will be easy to send across because of the good roads and transportation system.

**2)Operations**: The operations represents how the resources from the supplies materials and resources are produced, which results to a final product and service, The business has 2 locations one Wolverhampton and the other in Taiwan also the cost of running the machineries , warehouse and warehousing at other locations, testing, packaging, equipment maintenance of machinery and assembly lines is thought of.

**3)Outbound Logistics**: Distribution is chief in this criteria of outbound logistics , Once a product is finished i.e. once an energy plant has been made, it needs to be sent to the consumers ,sometimes this could be direct to a wholesaler, other times this could be a retailer or at times this could be a consumer itself like a company. Worth putting into consideration is the shipping cost, relationship with the distributors

**4)Marketing and sales**: This is the presentation of Power Engineering Technologies product and service to the general populace viz-a-viz the ideal target market.. When products are produced it doesn’t necessarily mean that there are people willing to purchase them, that’s why marketing and sales people come into action, they create an awareness and avenue to showcase the products ,Its marketing strategies focus on social media posts, media and print advertising, magazine advertising, billboards etc.

**5)Services**: Since Power Engineering Technologies has to do more of the manufacturing, considerations has been exercised in other to satisfy the need of the customers with in depth training and support to the customers, this is in a bid to achieve a high quality customer service .especially when we supply to various wholesalers, retailers and direct consumers who do not know zilch about installations

**Support Activities :**

The support activities include

**1)Firm Infrastructure**: Power Engineering Technologies has both managers and staff located at Wolverhampton whereas some are in Taiwan ,The managers of various departments oversees the firm’s operations in both regions

**2)Human Resource Management**: This is the process of employing workers, firing the underwhelming ones and generally assisting in training of workers and staff ,The Human Resource Personnel are tasked with finding the ideal replacements incase a staff leaves , emphasis should be placed here on POWER ENGINEERING TECHNOLOGIES talent acquisition

**3)Technology Development** : An IT support team is already available in Power Engineering Technologies ,these individuals helps to install softwares , hardware’s, and trouble shoots I.T problems

In alignment with the vision, Research and Development occupies this sector, Human Resource has to be able to fill in competently the vacant position

**4)Procurement:** This generally refers to the purchase of raw materials, devices, supplies etc. For instance The I.T personnels and the finance department with the approval of the MD’ laisse together on the best I.T devices needed in the organization .

For the successful day to day running of Power Engineering Technologies, work relations are built between all or some of the department e.g. Firm infrastructure works with operations, inbound logistics, technology development and human resources.

In order to align itself with the Long term Vision of Power Engineering Technologies, which is to say more focus will be made on **Product differentiation** that will enable them gain a competitive advantage over its competitors . That means all hands must be on deck ,a page dedicated to careers should be made Is available on their website, A research and Development Department should be opened and Human resources fill the spaces astutely and accordingly, failure to do so result in the company not achieving its goals.

**4.0 IS/IT ANALYSIS FOR POWER ENGINEERING TECHNOLOGIES**

**4.0.1 Requirements Specification**

STAKEHOLDERS

The stakeholders include :

* Investors/Shareholders
* Board of Directors
* Customers
* International staff(Taipei)
* Local Staff(Wolverhampton)
* Temporary staff
* Office staff
* MD
* Senior staff
* Remote workers
* Human Resources Staff
* General staff this includes the secretary
* People of the Community whose lands the energy plants are installed on
* Operations Staff
* Sales Staff
* Finance Staff
* IT Staff
* Management team
* Government regulatory bodies

|  |  |  |
| --- | --- | --- |
|  | STAKEHOLDERS | User Requirements |
| 1 | Shareholder/Investor | * Requires that his/her shares are valuable * Requires that POWER ENGINEERING TECHNOLOGIES is accountable, accessible and reliable * Requires that he/she makes profit in the share they bought |
| 2 | Community were energy plants are installed | * Requires that the environment is not affected by the installation of energy plants * Requires that the various licensing bodies give a go ahead |
| 3 | Board of Directors | * Requires that the company is moving in the right direction * Requires that the company aligns to its vision and mission * Are charged with the duty of firing and hiring senior executives * Makes and execute important decisions as to mergers, price of the shares ,investors, loans |
| 4 | Local Staff  General Staff, Operations department, Sales and Marketing, Support ,Inbound Logistics | * Requires that the ERP’s (softwares) needed to perform his /her duty is installed, updated and paid for * Requires that they have unrestricted access to the workplace when hired * Requires access to whatever department they need to partner with fluently * Requires that they are paid on time * Requires that their bonuses aren’t left out * Send out their reports to their various managers * Requires that their data are protected as a result of being GDPR compliant * Requires that they are given access when working remotely |
| 5 | International Staff | * Requires that they are not left behind in the running of the business * They want the same policies that is implemented at the headquarters to be implemented at their branches too * Requires that they get access to the headquarters communication wise |
| 6 | Customers | * Requires that the products and services being offered to them are of standard * Requires that the company match or surpass their expectations * Requires that their data are always protected * Requires supports when goods are purchased this could come inform of a manual ,a documentation, support team installing it or an instructional video * Requires bonanzas this could come inform of discount prices, freebies * Requires warranty for the goods and services asked of |
| 7 | MD | * Requires that the staff and workers are productive and efficient in their duties * Requires that managers report to him/her * Requires that he isn’t left out by the board of directors in terms of key decisions * Reports to the board of directors |
| 8 | Human Resources | * Requires that they can access data, metrics and reports of every worker in the company * Requires that the managers of each departments give feedback as to their wants ,lack and needs they want in a talent to enable them put out the best job description * Requires that each departments earmarks the outstanding talent and those lagging behind * Organizes employee trainings |
| 9 | Remote workers | * Requires access to their files ,jobspace even while remote |
| 10 | System administrator | * Requires that the hardware and software needed to perform his duties is acquired by the company * Requires that the needs of every department is spelled out * Requires that |
| 11 | IT personnel | * Requires that the Information Technology needs are spelt out |
| 12 | Managers | * Requires that all staff in the department communicates effectively to him * Requires that staff be productive * Gets information from the Managing Director as to his task * Passes down this task to the staffs and workers * Sends across list of people that are exceptional,needs training to the HRM |
| 13 | Regulatory bodies | * Requires that Power Engineering Technologies is compliant to their policies * Requires that reports are sent to them yearly to ascertain if they have breached the policies or not * Does survey with the parties involved the community ,the company |

Table 1. Showing the user requirements of the stakeholders

**4.1.0 SYSTEM REQUIREMENTS FOR POWER ENGINEERING TECHNOLOGIES**

* The Operating System at Power Engineering Technologies must be the same Windows 11(Professional Edition) or Windows 10(Professional Edition).
* The Computer in the office must be the same, no different type of Computer with different specifications .
* Staff and managers must use Microsoft outlook to share work related files among them selves
* The company must be GDPR compliant
* A database for the company should be created for arrangements of information and data that has to do with all company related activities
* A database for customers should be created
* A database for suppliers should be created
* No staff should use their personal or private mail to send work related materials
* Cloud computing should be supported ASAP
* All backups must be stored in the cloud
* Backup should be on auto-save, other wise it should be done daily , at most weekly.
* All system must be antivirus enabled .
* Microsoft SharePoint and Outlook will be used for collaboration and remote working
* All company servers should be The same
* A page on the website for remote workers should be created
* Power Engineering Technologies Website should be handled by the I.T department this is to avoid espionage
* All the ERP’s must be updated when the latest update comes out
* All the staff should be trained about the basics of ICT usage

**4.2.0 SYSTEM SPECIFICATIONs FOR POWER ENGINEERING TECHNOLOGIES**

|  |  |  |  |
| --- | --- | --- | --- |
|  | WHAT | WHO | WHERE |
| HARDWARE | * Desktop * Server * Routers * Firewall * Mouse * Keyboard * Laptops * Scanner * USB Cords * Printers | System Administrator  IT Personnel  Staff  Managers | Both offices |
| SOFTWARE | * Operating system-Windows 11 or 10 * Antivirus * Firewall * ERP’s * Accounting software -SAGE 50 Accounts professional * Sage 50 Forecasting Package * Microsoft outlook for email * Microsoft CRM(Customer Relationship Management software) * Microsoft Sharepoint (Remote workers * Payroll software * Network Operating Software * Warehouse and inventory * Web browser * General ledger and Budgeting | * Staff * Customers * Managers * IT personnel * Board of Directors | * Desktop * Microsoft Exchange Server |
| NETWORK | L.A.N and W.A.N | Wolverhampton Office And Taiwan Office Will Use The L.A.N (Local Area Network) Individually  And then a (W.A.N)Wide area Network will be used to Connect both Wolverhampton and Taipei | Wolverhampton and Taipei |
| DATA | * Procurement of supplies * List of suppliers * Customer record * Record of sales * Cost of operations * Payroll * Staff Records | * Staff * Managers * Customers * Suppliers | * Database -Oracle 11g * Cloud |

Table 2: Showing Information Systems Strategy Matrix showing the proposed system requirements for Power Engineering Technologies

**4.3.0 APPLICATIONS SOFTWARE AND MANAGEMENT**

The Ward and Peppard modified strategic grid is used to explain the applications software management

|  |  |
| --- | --- |
| **High Potential** | **Strategic**: |
| * Sale forecasting/Marketing analysis * Online customer specification system * Data warehouse-customer analysis * E procurement | * Customer Relationship Management * Warehouse management * Purchasing materials |
| **Support** | **Key Operational** |
| * Marketing Campaigns * Adverts * Online customer specification system * Website * ERP’s | * Payroll System * Office systems * Production Control * Order processing * General ledger and budgeting Product database/inventory management |

Table 3: Showing Ward and Peppard modified strategic grid

Using the Ward and Peppard modified strategic grid ,the office systems are key operational necessities, because without them the office won’t function, and since Power Engineering Technologies is in the business of taking orders for power plants order processing and production control falls into key operational .

In the Support grid, marketing campaigns ,adverts, online customer specification system, website and ERP’s are here because they are valuable to Power Engineering Technologies but not critical to its success,most times the website stands as the first point of contact between customers and staffs , The marketing and advert campaigns project the products and services that the company does, regardless of its success or not , Power Engineering Technologies still stands

In the Strategic grid. Customer Relationship management is used to foster a relationship with the customers, getting data input from them which can be use to analyze their needs and wants are critical in sustaining Power Engineering Technologies customer relationship, Furthermore, purchasing materials and warehouse management are strategic because they are critical for sustaining future business strategys

Sale forecasting/marketing analysis, online customer specification system, customer analysis can be said to be high potential because they are necessary for the future success of Power Engineering Technologies.

However, Online specification system falls under the support and High potential grid because they are valuable to Power Engineering Technologies but not critical to its success and also important for the future of the success of Power Engineering Technologies.

**4.4.0 RISK ASSESSMENT**

The fact that Power Engineering Technologies aligns its business with IS/IT , results in little or no risk ,the risk and challenges spelt out in the problem statement like malware attack, company files found in the skip have been solved ,only if the IT personnels and all stakeholders adhere to the system specification of always backing up the data, using the designated email to send work related items, switching on the antivirus, adhering to GDPR laws the risk of the customer data being out in the open will be low.

**4.5.0 RECOMMENDATIONS OF SUPPLIERS AND PRODUCTS**

Desktop

* HP 24-dd1001na All in one Pc

Internet Service Provider in Wolverhampton:

* BT

Internet Service provider in Taipei(Taiwan) :

* Chungwa Telecom

Scanner

* Fujitsu Scan Snap Ix1400

Keyboard

* Logitech MK850 Wireless Keyboard

Mouse:

* Logitech MX

Printer

* HP G3Q47A#B19

Operating System:

* Linux (Server) and
* Windows 10 Professional Edition or Windows 11 (Office System)

Office System

* Should have a processor speed of at least i5 and storage space of 512 GB.

Router:

* TP-link AX6000

Network Cables:

* Cat 5 cables and RJ45s

Network Port:

* RJ45 ports

Switch:

* Catalyst 2960-L

Firewall (Hardware):

* SonicWall Advanced Protection service

Server:

* Dell PowerEdge series

Anti-virus and Internet Security (Software):

* Norton

Hardware, Software and Training Supplier:

* + - Oracle ,Microsoft

Quantity of system required for installation

|  |  |
| --- | --- |
|  | QTY |
| DESKTOP | 80 |
| SERVER | 10 |
| ROUTERS | 10 |
| FIREWALL | 2 |
| MOUSE | 80 |
| SCANNERS | 4 |
| PRINTERS | 10 |
| ANTIVIRUS | 20 (4 systems can use the antivirus) |
| KEYBOARD | 80 |

* Table 4: showing the quantity of hardware required for the System installation

**5.0 CONCLUSIONS**

With view to expand into Eastern Europe I recommend that Power Engineering Technologies focuses on a niche, on an area for example a country or two in Eastern Europe and then scale up instead of trying to partake in the product differentiation or cost leadership strategy, Also Aligning IS/IT to the business came at the right time, with a view to expand into Europe, sensititive data’s as such is not meant to be breached, An adherence to the system specifications outlined above will result in a formidable and business intelligent system. Also, Training should be giving to the staffs on the mode of operations for 21st century IS/It company

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