

# ACS RECOGNITION OF PRIOR LEARNING (RPL) FORM - 2018

This document is required to be completed for all **Recognition of Prior Learning (RPL)** applications and uploaded as a PDF to the application form.

#### **IMPORTANT NOTICE:**

Misleading and false information is viewed as a major breach of ethical behaviour and will seriously jeopardise your migration prospects.

It is your responsibility to indicate when you have drawn on the work of others. Other people's original ideas and methods should be clearly distinguished, and other people's words, illustrations and diagrams should be clearly indicated regardless of whether they are copied exactly, paraphrased, or adapted.

Failure to acknowledge your source by clear citation and referencing constitutes plagiarism. All plagiarism will be assessed as not suitable and reported to the Department of Immigration and Border Protection.

The ACS reserves the right to use software applications to screen your submitted work for matches either to published sources or to other submitted applications. In some cases, you may be asked to submit project reports and other written work submitted with the application for screening by plagiarism detection services.

If at any stage in the assessment process plagiarism is detected, the information may be provided to other Australian Government agencies. The assessment will be terminated and the outcome recorded as unsuitable. A refund of the application fee cannot be provided for cases assessed as containing false information or plagiarism.

#### Please complete the following 2 sections:

- 1. The Key Areas of Knowledge Section 1
- 2. The Project Report Forms Section 2

RPL applications are for those applicants who do <u>not</u> hold a recognised tertiary ICT qualification and who have a minimum of 6 years of closely related experience.

This document provides the opportunity for applicants to demonstrate the knowledge learnt throughout their professional experience.

Applicant Name	
Applicant Email Address	
Applicant Date of Birth	DD/MM/YY



# SECTION 1 - KEY AREAS OF KNOWLEDGE

Section 1 is based and will be assessed on the following document. Please ensure you read and understand - <u>The ACS Core Body of Knowledge for ICT Professionals (CBOK)</u>.

You must clearly explain how your experience and qualifications meet the selected Areas of Knowledge and specifically how and where you acquired the knowledge.

You are required to select one topic from the Essential Core ICT Knowledge (Topic 1 or Topic 2) and one topic from the General ICT Knowledge (Topic 3, Topic 4 or Topic 5).

Please ensure you address at least 2 subtopics from each of the topics chosen.

#### The ICT Key Areas of Knowledge:

#### Essential Core ICT Knowledge

- Topic 1. ICT Professional Knowledge
  - Sub Topics are
    - a. Ethics
    - b. Professional Expectations
    - c. Teamwork Concepts and Issues
    - d. Communication
    - e. Societal Issues
- Topic 2. ICT Problem Solving
  - Sub Topics are
    - a. Modelling Methods
    - b. Processes to understand problems
    - c. Methods and tools for handling abstraction

# General ICT Knowledge

- Topic 3. Technology Resources
  - Sub Topics are
    - a. Hardware and Software Fundamentals
    - b. Data and Information Management
    - c. Data Communications and Networking
- Topic 4. Technology Building

Sub Topics are -

- a. Human Factors
- b. Programming
- c. Information Systems Development and Acquisition

Topic 5. ICT Management

#### Sub Topics are -

- a. IT Governance and Organisational Issues
- b. IT Project Management
- c. ICT Service Management
- d. Security Management



Important:

- Identify the Area of Knowledge topic that you have chosen to explain by entering the name of the Area of Knowledge topic in the box.
- Explain, in the expandable typing area, how you have acquired the knowledge and illustrate the depth of that knowledge.
- You should NOT address all sub topics included in the Area of Knowledge in your explanation. Address at least TWO of the sub topics. Enter the sub topic name(s) in the box.
- Be clear and concise in your explanation.
- Limit each explanation to no more than one to one and a half pages.

In the following expandable typing areas, explain **how you have acquired your in-depth knowledge** in these topic areas through your professional experience.

# Essential Core ICT Area of Knowledge: Topic 1. ICT Professional Knowledge (PK)

PK1. Teamwork Concepts and Issues PK2. Communication

How have you acquired this knowledge in your working environment? Illustrate your depth of knowledge.

#### PK1. Teamwork Concepts and Issues

I have learned throughout the span of my professional career in IT that teamwork is very important. Teamwork plays a big part regardless of what specific task or project you are working on, and regardless of which field of IT you are in. A group becomes more efficient when working as a team and the rewards are apparent. When working as a group or team, all members are aligned to the same direction and have a common goal. This helps in achieving the desired outcome and reaching the goal quicker. I have been a part of many groups and working as a team is significant in fixing a problem, finding a solution, and successfully meeting the goal of various projects.

To further expound the importance of teamwork, a task, work, or project can be accomplished faster and efficiently when working as team. This results to a more satisfied customer, and the team can allot more time to other work or projects. With teamwork and proper communication, workload can be distributed depending on a member's capacity. This is substantial when meeting tight deadlines and when working on urgent and high priority tasks. In addition, trust, camaraderie, and good work relationships are also developed through teamwork.

I have experienced the importance of teamwork in my career both as a team member and a team leader, and also throughout the execution of numerous IT projects. Being a team leader, communication has been a major key in making the team work harmoniously, addressing conflicts and misunderstanding within the team, and in developing my team members to progress and achieve their career goals.

In every role in my career, I have always worked with teams and teamwork has always been a major factor to success in providing technical support, system and network administration and management, project implementation and other business-as-usual tasks. I have acquired this through various workplace trainings, management trainings, and numerous team buildings that I have attended throughout my career with Atos, P-Square, and Stellar. I am also fortunate to have worked with employers that are keen in developing their workforce.

# PK2. Communication



IT enables various important communication systems across the world, like email, instant messaging, social media, telecommunication, and the internet. Disruption to this communication services have a great impact to the operations of businesses and even to a country's economy. This is comparable to the importance of communication skills in any industry, including IT and its various fields.

In my profession IT career, I have learned that communication is a life skill. And this skill should not be inferior and at the mercy of other skills. No matter how great our idea or skill is, it will not be successful if we are unable to express it effectively. Communication is a medium for sharing and receiving information, and by communicating, you are conveying to others that you are engaging them and that you can be engaged. In IT, namely in the fields of service delivery, software development, systems and network, and project management, communication and engagement are important when dealing with customers and in working with the team. This could influence and be the difference between customer satisfaction/retention and dissatisfaction, as well as project success and project failure.

Other than conveying ideas, receiving information is also an integral part of communication. Therefore, listening, particularly active listening, is an essential communication technique. Communication is a two-way road, so aside from voicing out an idea, it is also important that you understand what others are communicating and letting them know that they are understood. When a person begins to understand another, that's the only time he can ask the correct questions.

Since the beginning of my career, I have always been given the opportunity to take part in various leadership and development trainings, and even business writing trainings. Early in my professional year, I learned the 4 C's of effective communication. These C's are being clear, concise, coherent, and compelling when communicating. In another training I have attended, particularly the 7 Habits of Highly Effective People, I have learned that the fifth habit is to 'Seek first to understand, then be understood.' This habit has proved to be useful throughout my career when communicating with my team, customers, vendors, contractors, and stakeholders and has always led to a desirable result. Furthermore, I have also showcased my writing and visualization skills through project documentation, reports, and procedural manual documentations.

# General ICT Area of Knowledge:

# Topic 1. ICT Management (IM)

Sub Topics are a. IT Project Management b. Security Management

How have you acquired this knowledge in your working environment? Illustrate your depth of knowledge.

# **IT Project Management**

I learned that in IT, a project is a systematic undertaking which has a start and an end with the goal to build a service, product, or solution. Project evolves from an idea which goes through various development phases including planning, testing and implementation with the use of professional knowledge, techniques and tools to fulfill the requirements and achieve the goal. This systematic approach is called project management. Project Management plays a big role in IT because development in Information Technology grows exponentially. This growth has direct relation to the increasing number of IT Projects. However, a significant percentage of IT projects fail, thus proper implementation through good project management is vital.

Common mistakes in project management, includes rushing a half-baked idea to implementation, ineffectual leadership or project manager, use of inappropriate methodology, and many more. The good thing is that these can be avoided by applying the best practices in Project Management. In general, a



project must be divided into different phases. Below is a list of the basic phases of project management.

- Conceptualization and initialization
- Project planning
- Execution and control
- Closing
- Project evaluation

I have also learned in my career the two common project Methodologies - Waterfall and Agile. Though agile approach is mostly in play in IT, I am privileged to work with P-square, a building design and construction company, where waterfall methodology is mostly applied. This prove that though agile is newer, it does not replace waterfall. Both methodologies still have its uses and any of these methods can be the best approach depending on the nature of the project.

Conceptualization and initialization are crucial, it is the first phase and the foundation of the project. This the phase where a business case is developed. A good business case must have a convincing analysis of the organizational value of the project. It also should have a detailed analysis of the risks, cost, risks, and benefits of the project. In addition to that, it should be compared to other alternative solutions to understand its value to the organization.

Project planning is where documentation happens. This is when project scope, roles and responsibilities are defined. Work breakdown structure also happens in project planning. The implementation phases are also defined which are broken down into manageable tasks. Key project elements like the tasks, deliverables, milestones, resources are identified too. Project estimation techniques are also applied. Some of the estimation techniques are time boxing, analogous estimate which is based on similar projects, and bottom-up estimate which is commonly used. There are various tools used in project management. Some of the commonly used are the Gantt chart, Microsoft Project, network diagram, critical path, and PERT/CPM.

Details and breakdown of the implementation phase varies depending on the nature of the project and the chosen methodology. In some IT projects, staging, development and testing stages are necessary to ensure smooth and successful implementation. A successful implementation is not the end of the project and it doesn't equate to a successful project. The last phase which is project evaluation is an important undertaking to identify the project's value to the organization and whether it is a success. I have acquired my knowledge in project management from working on different projects during my

employment with P-Square and Stellar and from attending project management seminars. Working with experienced project managers also helped learn more about project management.

# Security Management

# How have you acquired this knowledge in your working environment?

Security has always been a requirement and a major consideration in IT. I have learned it throughout my career, where different security systems are in place and is continuously being improved. Working with IT systems and network has raised my awareness in the importance of IT security. I have been involved in various projects that has security implications, as well as projects on security compliance.

Security in IT is not just about electronic data security but it includes basic physical access security. Access to the workplace and its areas must be secured and only authorized personnel must be granted access. In addition, access must be logged regardless whether the person is authorized or a visitor. Having CCTV in place is also a requirement for physical security.

Other than securing the premises, access to computers and another IT equipment must also be secured. This include securing the systems in its physical location and that it cannot be tampered. It is also



imperative that users can only access information granted to their role or user level. This can be done by defining access level and permissions. In Windows systems, group policies can be applied to restrict or lockdown computer access. Furthermore, data encryption can be implemented like Bit locker or other data encryption systems.

Securing the network and infrastructure is also a must to protect against malicious network attacks. This can be done by deploying Antivirus systems, IDS and IPS, firewall appliances, web security and email gateways, and many more. The implementation of up-to-date security protocols is also required to secure network communication. These are example of the security measures that I have implemented and managed in my career. Enabling logging and auditing on these systems is also a good security measure which can be needed during investigation and other types of analysis.

Defining processes, policies and procedures are also part of security management. An example is 'Data center access policy' which is critical because the data center houses servers and network equipment. 'Computer usage policy' is another example that defines the proper use of computer equipment. 'Password Policy' is a policy that explains the password requirement and conditions. Another example is 'IT equipment disposal policy' which defines the proper disposal of IT equipment to avoid data breach and leakage. I have been involved in the formulation and implementation of several other IT policies that were put in place to increase security.

As they say, prevention is better than cure. One of the proactive measures in IT security is through security standards compliance. I was fortunate to be involved on numerous projects to meet the compliance requirements of some security standards like ISO 27001 and PCI-DSS. I started to gain knowledge on IT security since my first employment, and my knowledge has constantly and continuously grown across my career through experience, training, and shared knowledge.

# **SECTION 2 - RPL PROJECT REPORTS**

A project report is a clear written description of a project or engagement that provides you with the opportunity to show how you perform as an ICT Professional.

Each report is to relate to a significant project or work episode undertaken by you during your professional ICT career.

The purpose of these reports is to enable you to demonstrate your command and implementation of the Areas of Knowledge described in Section 1 of this application.

#### Please Note: You are required to provide two project reports.

Of the two reports, one must apply to a project undertaken within the last three years, and the other for a project within the last five years.

Projects over two years long may be used for both reports under either of the following conditions:

- The project has clearly-defined work efforts which took place in parallel, each with their own solution development and design activities and their own deliverables.
- The project had clearly-defined phases that were executed in succession, each with its own solution development and design activities and deliverables. Note that a second project phase that constructs and implements the solution developed by the first phase does not meet this requirement.

Depending on the nature of your role in each project, the Project Report should cover an appropriate selection of factors.



Appropriate factors will be determined based on the type of ICT project selected. Possible factors include:

- System Analysis and Design and Software Engineering methodologies used;
- Contribution to the processes involved in the design and implementation of enterprise-wide computing systems;
- Programming languages, design paradigms and implementation procedures adopted;
- Database and/or file design and management techniques employed;
- Network topologies, including size, distribution and security facilities installed;
- Project Management and quality assurance techniques followed;
- Internet application design, including database interactivity and security measures implemented;
- ICT managerial activities, demonstrating the nature and extent of responsibilities

Project Summary:			
	Project Name	Start Date	End Date
Project 1	Security Solution for Network and Server Solution		
Project 2	Wireless Local Area Network (WLAN)		

#### Instructions

#### The following pages provide a template for your reports.

When writing your reports please provide your own thoughts – do not just copy project documentation.

Please use the first person in your discussion, so it is clear to the assessor what you did versus what others did – say "I did X" rather than "X was done".

Diagrams from the project documentation may be helpful, but the text should be in your own words. Please ensure that diagrams are relevant, readable, and help the assessor to understand what you did as a member of the project team.

If sections of the Project Report template (see below) are not relevant to your participation in the project, then leave the section blank.

Focus on quality rather than quantity. Each Project Report should be no more than four or five pages in length.

#### **SPECIAL NOTE:**

By submitting this RPL Knowledge and Project Report form as a component of your ACS skills assessment application, you agree with the following statement:

The applicant confirms that the explanation of their knowledge and project reports submitted in this application truthfully and accurately describe the applicant and the applicant's personal involvement in the projects. The applicant is aware that plagiarism by the applicant will automatically invalidate this application, will jeopardise any future applications from the applicant and will be reported by the Australian Computer Society to the Australian Department of Immigration and Border Protection.



# Project 1: Security Solution for Network & Server

#### 1. Project Summary

1.1. Identification	
Client's Company	
Name	
Business Address	
Contact Numbers	
Web Address	
Email Address	
Nature of project	
Location of project	
Name of your	
employer	

#### 1.2. Duration

	From	То
Total project duration		
Your involvement		

#### 1.3. Resources

	Number
Your team size	
Total project team size	

#### 1.4. Personal Involvement

#### Please list the phases of the project in which you were personally involved

Start	Completion	Phase Description
		Requirements analysis & listing
		Requirements Attainment
		Project Planning Stage
		Designing od Infrastructure for Security
		Amendment of Server
		Supplementary Security Actions
		Testing of new setup
		End User Acceptance Test
		Maintenance and performance monitoring

# 1.5. Describe your role(s) and responsibilities in the project.



Job Role: Lead Networking Engineer (Senior Network Expert)

I was selected for this important project based on my long-haul expertise in the same type of projects. I had couple of meetings with the project director to certain the team for this noteworthy task. My prime Roles & Responsibilities were

- ➢ Having meet ups with the prime stake holder and our team members for getting the requirements they have in mind
- > Requirement analysis and subsequently discussing it with the team
- > After requirement analysis finalizing the proper appropriate solution
- > Finalizing the opted solution in congregation with the company executives and the customer
- Contract drafting and sign up
- ➢ Finalizing the contract steps in concern with the stake holders to evade any future misconception's
- > Arranging & writing the overall flow chart of the project
- Assigning roles & responsibilities to the team members
- > Network security substructure design and documentation
- Supervising the alteration of Windows Exchange Server
- Executing supplementary security techniques
- Making accuracy a prime aspect at each step
- > Testing of the new activated security system
- Presenting the new executed solution to the stake holders
- $\succ$  Handing over the system to the client
- Leading the Monitoring System
- End user training
- Overviewing the maintenance system offered

#### 2. Business Opportunity or Problem

#### 2.1. Describe the business opportunity or problem(s) this project addressed.

Client organization is one of the top assemblers in the region. One of their facility located in a remote area was facing numerous snags. Beside having implemented proper security strategies for network, for the last over 8 months the Admin Section was confronting glitches linked to the network own security. The Windows Exchange Server was serving as the central system for network and sharing including being the Email service provider.

The main matters confronted were;

- > Its was hard for the staff to log in to their email portal and avail subsequent services
- > The email portal had log in authentication glitches
- Numerous times when some emails were opted for the directors only; these very intercepted by hackers.

The main prospects drafted by the customer were;

- Email portal should be easy to access without any authentication snags
- No unauthorize access to the email portal
- All emails to the directors must be SSL secured
- The new security system must track the hacking body and trace it accordingly
- > The Webmail portal system should be properly secured

#### 3. Solution

#### 3.1. Discuss your contribution to the solution, project or engagement.



#### My Contribution:

As a profound Computer Network & Systems Professional and leader I was responsible for the entire project and was also catering the need analysis and expectations of the esteemed customer. My prime contributions for this project were

- I studied the present Exchange Server & Network to identify the ambiguities & security glitches
- ➢ I had long discussions with the client regarding the problems faced. This played key role in understanding their requirements
- ➢ I discussed with my team about the present issues in the client system, their remedy and how to opt for the best optimised solution
- I implemented my management skills and adequately spliced the project tasks amid the team members
- ▶ I designed the substructure for the Network Security
- I devised a master plan for the alteration of the Windows Exchange Server for making it a secure network for the client with ZERO intrusions
- ➢ I developed and installed most powerful firewall to evade any hacker intrusion and keep record & track of the attacks
- I realized specific integrated Webmail Authentication system for the most secure log in portal
- I created the SSL channel & executed the Certification services to enhance the security management
- I realized POP commands
- > The email portal was running on live security firewall management system
- > I implemented all the relative needs from the customer in to the system
- Prepared project documentation
- Designed the Security Architecture and discussed the same with client
- Signed contract with client after convincing them for the proposed solution.
- Supervised every step of the project
- Supervised the Network Security Testing after implementation
- Also did the END user training and Q & A exercise
- Project handover session was led by me
- Carried out the post installation maintenance and monitoring for some weeks

#### 3.2. Describe any design or problem solving methods you used on this project.

Based on numerous successful projects I adopted Top-Down Design Procedure for the Network. The cause behind using this procedure was that it primarily concentrates in the requirements emphasized by the customer.

- > This method concentrates on the application needs drafted or discussed by the end user.
- > This helps in upgrading the new network security methodology for future requirements
- This procedure acts like a concept and let the company to concentrate more on the client's needs and obligation
- This methodology helps in doing analysis of organizations necessities instead of selecting the Network hardware
- > The systems is designed by this methodology by starting with the analysis of the requirements & thus adding in final solution design

#### **3.3.** List the major deliverables of the project that you were responsible for or contributed to.



The major deliverables of the project were;

- > Discussing, listing and fastening the needs and drafting the basic complete project scope note
- Signing of the contract amid our company and the client
- > Designing & validating the Architecture for the security of the existing network.
- Execution of the designed solution
- Securing the Server
- Implementation & Realization of the Firewall
- Securing the Web mail platform
- > Isolating the higher management Email from other staff

#### 4. Results

# 4.1. Was your solution implemented? If so, describe the role, if any, you had in the implementation.

Obviously, the resolution was successfully executed and installed under my supervision. I as a team lead and as computer network & systems engineer fulfilled my job responsibilities. I designed the entire Network security system along with the web mail management system for secure email executions. The firewall was later found very active in stopping any hacker attack and in turn this firewall made the entire system Secure.

# **4.2.** Assess the overall success or failure of the project.

The project was a noteworthy success and added as another successfully attained milestone in my career. This project aided me in believing in my continuous growth as a profound network and systems engineer. I achieved the target of the project completion time line and delivered the same within the stipulated time frame. The directors of my company were quite happy with the end results.

#### 4.3. Lessons Learned

#### In retrospect, what you might have done differently on this project?

As such nothing I recon since all the essential actions were taken prior to the start of the project and each step was taken after having discussions with the project team. We made the exchange server secure and the firewall played vital role against any malicious attacks.



# Project 2: Wireless Local Area Network

#### 5. Project Summary

5.1. Identification	
Client's Company	
Name	
Business Address	
Contact Numbers	
Web Address	
Email Address	
Nature of project	
Location of project	
Name of your	
employer	

#### 5.2. Duration

	From	То
Total project duration		
Your involvement		

# 5.3. Resources

	Number
Your team size	
Total project team size	

#### 5.4. Personal Involvement

#### Please list the phases of the project in which you were personally involved

Start	Completion	Phase Description
		Need gathering & analysis
		Project Scope & contract signing
		Work load distribution amid the team
		Logic design
		Layout plan for cables etc
		Execution & integration of the proposed Network
		Testing & Performance monitoring
		Project handover & support

# 5.5. Describe your role(s) and responsibilities in the project.



The companies head of the department assigned me this project and wanted me to take full responsibility of the entire project. I was allowed to choose the team and start project accordingly using my own skills and experience. Since I was leading the team of professionals, my roles & responsibilities were

- ➢ Having meet ups with the prime stake holder and our team members for getting the requirements they have in mind
- Requirement analysis and subsequently discussing it with the team
- > After requirement analysis finalizing the proper appropriate solution
- > Finalizing the opted solution in congregation with the company executives and the customer
- Contract drafting and sign up
- ➢ Finalizing the contract steps in concern with the stake holders to evade any future misconception's
- > Arranging & writing the overall flow chart of the project
- Assigning roles & responsibilities to the team members
- Logical network structure design
- Designing the physical cabling layout plan. Place allocation for routers and other network hardware
- Drafting of network installation manual for client
- Reviewing and finalizing the hardware required by the project scope
- > Interconnecting network equipment & executing network integration
- Network testing & post installation monitoring
- Handing over the system to the client
- > Technical support for the prime stake holder

#### 6. Business Opportunity or Problem

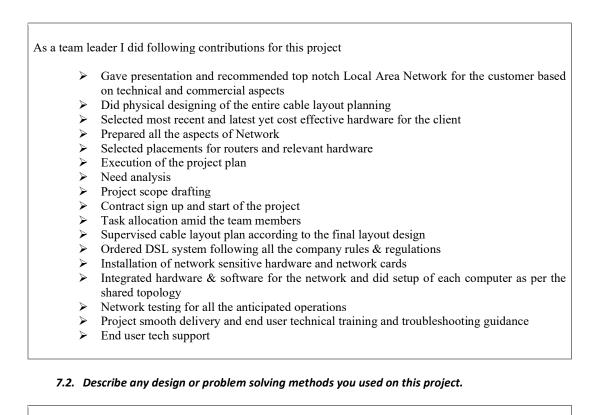
#### 6.1. Describe the business opportunity or problem(s) this project addressed.

Client company was a giant agriculture equipment manufacturer having recently constructed new office and operations building away from the factory but within the same city. The newly build construction was state of the art, so the client wanted state of the are Networking system for themselves. It was obligatory to have new network system secure and have possibility to extend in near future if needed. The client needed latest most advanced system for wireless network to serve the notebooks and handheld phones.

#### 7. Solution

7.1. Discuss your contribution to the solution, project or engagement.





I followed Top Down Network Design procedure in this very important project. I took this procedure further based on my experience. This procedure of network design focuses on the customers needs from the beginning of the project.

- The procedure focuses on end user anticipated requirements from the network and offered services.
- > The topology helps in upgrading the network in future if required
- Top down procedure is a concept and worldwide many network & system engineers opt for the same in critical projects
- The procedure analyses the client's requirements to be taken care of as priority and starts the system with these prime aspects in view

7.3. List the major deliverables of the project that you were responsible for or contributed to.



#### Major deliverables of the project for whom I was responsible were;

- Need analysis and lock down
- Scope of project understanding
- Signing of contract with client
- Resource allocation and duties assignment to the project members
- Design of network
- Cable layout plan and design
- > DSL routers and hardware placement finalization
- Network execution and testing
- Hardware selection and ordering
- > Hardware integration like IT equipment of all sorts i.e. printer, copiers and scanners
- Network monitoring
- End user training
- Trouble shooting guide drafting activity
- Technical support directives

#### 8. Results

# 8.1. Was your solution implemented? If so, describe the role, if any, you had in the implementation.

The network procedure I presented was passable executed with success. Network was setup and all the hardware were working properly and efficiently. There was no hardware malfunction. All the required IT equipment was well integrated and each computer on the network was properly optimized. I was responsible for the timely installation of the project.

# **8.2.** Assess the overall success or failure of the project.

Overall the project was a noteworthy success in my career. The company executives were very happy with my hard work and dedication. This project helped me in gaining excessive experience in hardware selection and integration.

#### 8.3. Lessons Learned

#### In retrospect, what you might have done differently on this project?

Everything went as planned. I learned how to tackle issues glitches and problems during network integration and handling. I also learnt IT system integration techniques and problem-solving activities. I will concentrate more on technical support in near future projects.,