

P-3005

EFFECTIVENESS OF HUMAN RESOURCE UTILIZATION

A STUDY AT CYBERNET SLASH SUPPORT

By

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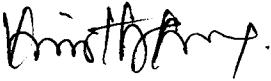
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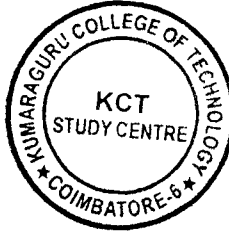
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ABSTRACT

In Global competitive edge of Information Technology services is concerned, identifying a value add to the customer is tough. The coverage time required for technology support and the cost spend on resources is the major factors that customers look for business off-shoring. Due to availability of plenty of talented human resources, Cybernet Slash Support acts as “Center for Excellence” which handles high end technology projects there by providing more coverage at lower billing. Increased Coverage time offers Cybernet Slash Support in production support projects which requires ‘24*7’ support and the 3 shift models reduces the cost on software (technology), infrastructure, maintenance and Human Resource. This focus has been central to for revenue growth and high customer satisfaction.

The study illustrates “how the human resources are utilized effectively and how it helps the organization for its growth”. This literature survey helps the organization to incorporate its operation in its centers across, as the efficiency of utilization of human resources will have the direct impact on business proposals.

TABLE OF CONTENTS

| | |
|--|-----------|
| CHAPTER 1 – INTRODUCTION | 1 |
| 1.1 Research Background - Description of IT industry | 2 |
| 1.1.1 Resource Utilization | 2 |
| 1.1.2 Background Study – CSS | 3 |
| 1.1.3. CSS Challenges | 4 |
| 1.1.4 CSS Delivery Model | 4 |
| 1.1.5. Business Benefits | 6 |
| 1.2 Problem Identified for the Study | 6 |
| 1.3 Need for the Study | 7 |
| 1.4 Objectives & Scope | 7 |
| 1.5 Deliverables | 7 |
| CHAPTER 2 – LITERATURE SURVEY | 8 |
| 2.1 Review Of Literature | 8 |
| 2.1.1 Case 1: PeopleSoft Enterprise for Effective resource Utilization at Oracle | 8 |
| 2.1.2 Case 2: Automated Resource Management at Infosys | 9 |
| 2.1.3 Case 3: Optimizing Resources at Chem-Intell Chemical Manufacturing Plants | 11 |
| 2.1.4 Case 4: Effective Resource Utilization at IBM | 12 |
| 2.1.5 Effective Utilization of Resource @ Cognizant | 14 |
| 2.2 Research Gap | 16 |
| CHAPTER 3 – METHODOLOGY | 17 |
| 3.1 Type of the Project | 17 |
| 3.2 Target Respondents | 17 |
| 3.3 Assumptions, Constraints and Limitations | 17 |
| 3.4 Census Method | 18 |
| 3.5 Data Collection | 18 |
| 3.5.1 Home Page | 18 |
| 3.5.2 Questionnaire Page | 19 |
| 3.6 Data Processing | 21 |
| 3.6.1 Percentage Analysis | 21 |
| 3.6.2 Chi-Square Test | 22 |
| 3.6 Package for Analysis | 23 |
| CHAPTER 4 – DATA ANALYSIS AND INTERPRETATION | 24 |
| 4.1 Analysis and Interpretation | 24 |
| 4.1.1 Designation | 24 |
| 4.1.2 Gender | 26 |
| 4.1.3 Age | 27 |
| 4.1.4 Marital Status | 28 |
| 4.1.5 Experience | 29 |
| 4.1.6 Employee Hiring | 30 |
| 4.1.7 Structured Jobs | 31 |
| 4.1.8 Employee Training | 32 |
| 4.1.9 Project Allocation | 33 |

| | |
|--|----|
| 4.1.10 Working in Different Technology | 34 |
| 4.1.11 Bench | 35 |
| 4.1.12 Training in Bench | 36 |
| 4.1.13 Late Night Works | 37 |
| 4.1.14 Shifts in Critical Projects | 38 |
| 4.1.15 Productivity in Late Nights | 39 |
| 4.1.16 Corporate To Shift Model | 40 |
| 4.1.17 Right Project | 41 |
| 4.1.18 Value Added Service | 42 |
| 4.1.19 Performance Appraisal | 43 |
| 4.1.20 Team Work | 44 |
| 4.1.21 Recognition | 45 |
| 4.1.23 Work Allocation | 47 |
| 4.1.24 Deputation | 48 |
| 4.1.25 Minimum Training Hours | 49 |
| 4.1.26 Shuttle Services | 50 |
| 4.1.27 Outing at Regular Intervals | 51 |
| 4.1.28 Supervisor | 52 |
| 4.1.29 Meeting with Co workers | 53 |
| 4.1.30 Job Appreciation | 54 |
| 4.1.31 Key Resource | 55 |
| 4.1.32 Facilities at the Organization | 56 |
| CHAPTER 5 - CONCLUSIONS | 57 |
| 5.1 Summary of Findings | 57 |
| 5.2 Suggestions and Recommendations | 58 |
| 5.3 Conclusion | 58 |
| 5.4 Directions for Future Research | 59 |
| APPENDIX | 60 |
| Copy of Questionnaire | 60 |
| REFERENCES | 63 |

LIST OF TABLES

| | |
|--|----|
| Table 4.1.1 Responses for Designation | 24 |
| Table 4.1.2 Responses for Gender | 26 |
| Table 4.1.3 Responses for Age | 27 |
| Table 4.1.4 Responses for Marital Status | 28 |
| Table 4.1.5 Responses for Experience | 29 |
| Table 4.1.6 Responses for Employee Hiring | 30 |
| Table 4.1.7 Responses for Structured Jobs | 31 |
| Table 4.1.8 Responses for Employee Training | 32 |
| Table 4.1.9 Responses for Project Allocation | 33 |
| Table 4.1.10 Responses for Technology Differentiation | 34 |
| Table 4.1.11 Responses for Employees in Bench | 35 |
| Table 4.1.12 Responses for Training in Bench | 36 |
| Table 4.1.13 Responses for Late Night Works | 37 |
| Table 4.1.14 Responses for shifts in Critical Projects | 38 |
| Table 4.1.15 Responses for Productivity in Late Nights | 39 |
| Table 4.1.16 Responses for Corporate To Shift Model | 40 |
| Table 4.1.17 Responses for Right Project | 41 |
| Table 4.1.18 Responses for Value Added Service | 42 |
| Table 4.1.19 Responses for Performance Appraisal | 43 |
| Table 4.1.20 Responses for Team Work | 44 |
| Table 4.1.21 Responses for Employee Recognition | 45 |
| Table 4.1.22 Responses for Effective Utilization of Skills | 46 |
| Table 4.1.23 Responses for Work Allocation | 47 |
| Table 4.1.24 Responses for Deputation | 48 |
| Table 4.1.25 Responses for Minimum Training Hours | 49 |
| Table 4.1.26 Responses for Employee Training | 50 |
| Table 4.1.27 Responses for Outing at regular Intervals | 51 |
| Table 4.1.28 Responses for Supervisor Support | 52 |
| Table 4.1.29 Responses for Co workers | 53 |
| Table 4.1.30 Responses for Job Appreciation | 54 |
| Table 4.1.31 Responses for Treating as Key Resource | 55 |
| Table 4.1.32 Responses for Employee Training | 56 |

LIST OF FIGURES

| | |
|---|----|
| Fig 1.1 CSS Delivery Model | 5 |
| Fig 3.1 Intranet Website Home page | 19 |
| Fig 3.2 Intranet Website Questionnaire page (View I) | 20 |
| Fig 3.3 Intranet Website Questionnaire page (View II) | 21 |

LIST OF ABBREVIATIONS

| | |
|------|--|
| CSS | Cybernet Slash Support |
| RU | Resource Utilization |
| ARMS | Automated Resource Management System |
| IMS | Information Management Systems |
| DSS | Decision Support Systems |
| RCM | Reliability Centered Maintenance |
| IT | Information Technology |
| SPSS | Software Package for Statistics and Simulation |
| COE | Center Of Excellence |
| KM | Knowledge Management |

CHAPTER 1 – INTRODUCTION

Employees working in the organization are considered as an important asset. The organizational chart of a company shows the scalability of the company in delivery and the target audience. The variety in which the company deals with to make better businesses from the existing scenario and for bringing better results to have the economy with advanced technology or to give a technological breakthrough.

Resource Utilization includes maximum utilization of on-board resources while leveraging specialized resources across multiple projects and delivering high quality at the lowest possible cost. Every employee represents an irreplaceable resource if managed effectively.

In order to utilize the resources effectively organization helps the employee to acquire or sharpen capabilities required to perform various tasks and functions associated with their present and expected future roles. Organization helps them to develop their general enabling capabilities as individuals so that they are able to discover and exploit their own inner potentials for their own and organizational development process.

As human resources are considered as valuable assets to the organization, organization develop a culture where superior subordinate relationship, team work and collaboration among different sub-units are strong and contribute to organizational health, dynamism and pride of employees. People make the difference between a good company and a great one.

1.1 Research Background - Description of IT industry

Resource Utilization is the process of finding the right person for the right job at right time. As the organization productive and its growth depend on the effective utilization of human resources, Cybernet Slash support found it as the key area as it helps for their business retention also.

1.1.1 Resource Utilization

Perhaps the first and most important area of excellence is with how well we improve utilization of our largest talent pool - developers and entry level trainees. Utilization is a multipronged initiative that aims to ensure accelerated growth opportunities to every associate. CSS is after all, filled with opportunities for the truly deserving and enthusiastic.

Excellence in utilization can only be attained by providing our associates optimal staffing opportunities in live projects and mentoring by senior resources, facilitating skill enrichment through rigorous cross-skilling programs and diversified exposure to other accounts and business units. These steps will improve their deployability and enhance onsite opportunities through better management of onsite rotation programs.

There are already several 'islands of excellence' within CSS that are achieving high utilization while retaining the famed quality. Through Utilization Excellence, we aim to standardize and streamline our practices across the organization.

1.1.2 Background Study – CSS

Cybernet Slash Support (CSS) is a global technology solutions provider to enterprises, consumers & technology companies. CSS follows a support-centric model to all its services that help its clients leverage IT to align business objectives. CSS manages four centers of excellence that create solutions for specific industry needs through a combination of its strategic assets - people, process and technology.

Using a proven and cost-effective global delivery model, CSS manages technology, infrastructure, platforms and applications for Fortune 2000 companies, and provides 24x7 support solutions for leading enterprise, consumer and technology vendors.

In today's dynamic marketplace, IT is the only tool for transformation. Collaborating with a 'RIGHT FIT' partner can ensure return on technology investments and strengthen the business for future challenges as well. The holistic and diverse solutions coupled with experienced talent force helps achieve.

Reduced OPEX for enterprises

Enhanced product quality for technology providers

Improved CSAT for consumers

Headquartered in San Jose, CA, CSS is backed by leading financial institutions including SAIF partners, Goldman Sachs and Sierra Ventures. The corporate mission of 100% reference-able customers translates into the operational goal of 100% reference-able transactions. As a result, the primary target is to help maximize customer satisfaction, software quality, availability and reliability while managing costs and risks for global clients. This relentless client focus and compelling value proposition ensures that all our customers willingly vouch for us.

1.1.3. CSS Challenges

Majority of support requests are of SOS emergency nature where the end – customer is on middle of a journey and struck with a problem. The swiftness of response, being “first time right” and care expressed during the support interaction are key elements in ensuring higher customer delight. This requires a combination of technical abilities and problem analysis skills. A technical Support Engineer should be able to understand the problem, isolate the caused by as minimal probing as possible, identify the key cause very swiftly and apply the support to client customers, handling 100% of the L1 call volumes – with very minimal L2 escalation to client.

1.1.4 CSS Delivery Model

The key mission of an enterprise technology support operation is to ensure high availability of business critical systems. But supporting customers of enterprise class technology providers involves many challenges, key amongst which are that customers are power users of technology, and systems exist in complex, heterogeneous environments. Technical support therefore requires a high level of technical competence and often involves multiple interactions, supported by a phased problem-solving approach.

CSS Technical Support services offer exceptional technical skills and mature technical support processes - we are a specialist provider of offshore technical support services, creating and delivering knowledge-centric support solutions aimed at improving the end-user experience.

A Specialist in Product Support

Our experience with technical support helps us understand the technology intricacies, which commonly arise in product deployments across heterogeneous,

distributed environments. Our high level of technical skills across various platforms, wide exposure to multiple deployment scenarios and creativity in problem solving help us improve the end-user experience.

In addition, our extensive access to qualified technology professionals, enable us to quickly train and ramp up expertise to meet consumer demands.

Transition and Delivery Model

Our mature support model, evolved over a seven-year period of offshore support experience, has enabled us to greatly mitigate the risks of outsourcing.

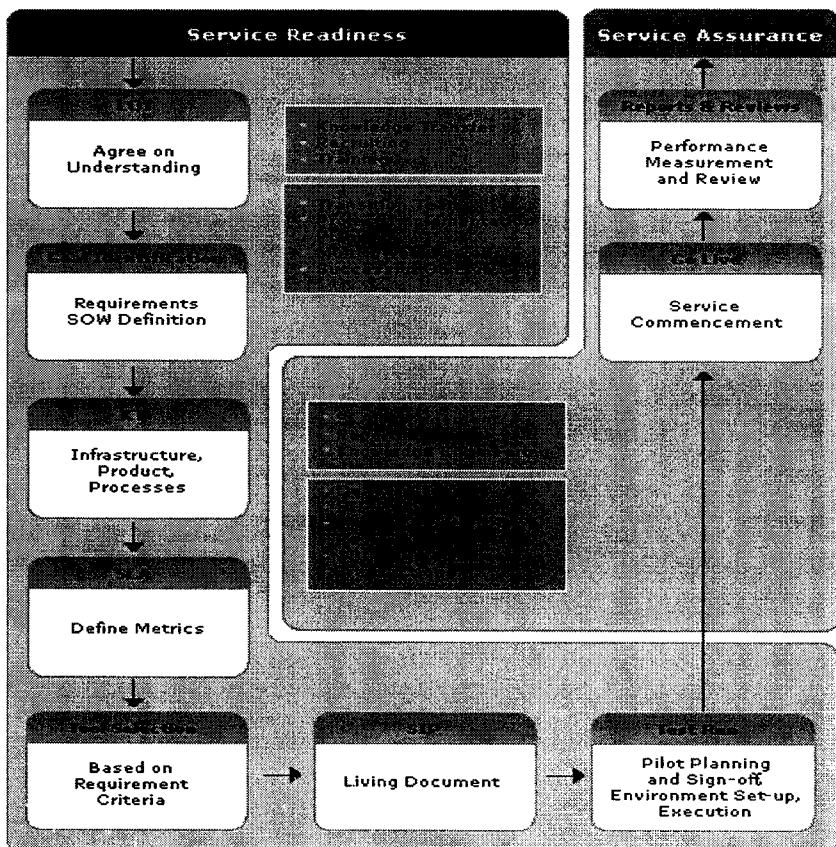


Fig 1.1 CSS Delivery Model

1.1.5. Business Benefits

CSS helps for enhancing product usage by end - customers. High quality support and proactive recommendations to address probable future support queries, results in customers using the products better and lowering number of “related support calls”.

Increase customer satisfaction scores. Enhancing CSAT scores by a combination of high FCR and proactive advice on how to use products better

CSS helped fine – tune client’s internal processes to increase overall quality of service provided to the end customers.

1.1.6 Awards & Accolades

- CSS Selected as APAC regional finalists for Contact Center World Awards
- CSS Named to Software Magazine's 25th Annual Software 500
- CSS bags the ‘Best in Customer Service’ award at Contact Center World Awards, 2007

1.2 Problem Identified for the Study

Resource Utilization includes software's/Hardware's, logistics resources, human resources, and financial. The objective is to utilize these assets or resources efficiently so as to maximize customer service levels, minimize the cost, and optimize inventory levels. Hence, the problem that I have identified for the study is to research on how human Resources are being effectively utilized at Cybernet – Slash Support, (CSS) Coimbatore.

1.3 Need for the Study

With the rapidly increasing performance of information technologies, a new capability is being developed that holds the clear promise of greatly increased exploration possibilities, along with dramatically reduced design, development, and operating costs. One of the most promising applications of these new information technologies is to the area of in-situ resource utilization. Besides improving IT investment decision making, many organizations need to significantly improve project and resource management efficiencies.

1.4 Objectives & Scope

1. To study how effectively human resources are utilization at Cybernet Slash Support.
2. To propose the effective human resource utilization technique for CSS

1.5 Deliverables

- The effectiveness of the human resource utilization at Cybernet Slash Support.
- Techniques that can be implemented for improving the performance and productivity of the resources for their effective utilization

CHAPTER 2 – LITERATURE SURVEY

2.1 Review of Literature

2.1.1 Case 1: PeopleSoft Enterprise for Effective resource Utilization at Oracle

Year: 2007

Author: Ratnesh Sharma

Success in delivering projects with a limited pool of resources depends on finding the right resources for the job, balancing resource supply with demand, and empowering employees. Oracle's PeopleSoft Enterprise Resource Management helps you identify and deploy resources in the most effective way. Optimization tools ensure that you have the right people working on the right projects. Data analysis capabilities give you insight into resource supply and demand. And resource skills-tracking functions ensure that you make sourcing decisions that fit your needs and those of your employees.

PeopleSoft Resource Management provides complete visibility into your most important resource—your people—from workforce profiling to resource scheduling and usage analysis. PeopleSoft Resource Management takes matching resources to a new level by going beyond traditional sourcing models that only fulfill one resource request at a time. The functionality provided in PeopleSoft Resource Management enables you to quickly assess supply and demand across your organization and build a resource plan that supports your corporate objectives. This helps you maximize resource usage, minimize cost, and maximize profitability.

- Leverage the Resource Optimization Process to match resource supply with project demand. The process evaluates demand for all project resources against supply across the enterprise and then generates the optimal solution to meet both project and corporate objectives.

- Score resources for each engagement based on competencies, preferences and availability to get a list of qualified candidates.

- Use the Staffing Workbench match-fit scores to find key resources that will maximize revenue, improve performance, and reduce project costs.
- Use Express Search to search and assign resources quickly for targeted resource needs.
- Create and maintain resource pools with their corresponding pool managers for efficient resource management and analysis.
- Reserve resource pool capacity without specifying a specific resource to highlight need and assure availability.
- Link your system to that of contingent workforce suppliers to locate, assign, and manage external talent—just as you would internal employees.
- Perform ad hoc skills searches by using resumes and job histories.
- Track service orders to specify key requirements for a particular role on a project, including start and end date, required skills, required experience, and customer or department.
- Combine similar service requests into one multiple service order for more efficient scheduling.

2.1.2 Case 2: Automated Resource Management at Infosys

Year: 2004

Author: Bruno Calver

This Case Study deals with implementation Automated resource management system for effectively utilizing and managing Resources at Infosys. BT and Infosys Technologies Ltd (NASDAQ:INFY), a global IT company, today announced that they have signed a licensing and advanced development deal that will provide BT with a novel automated resource management system (ARMS) and enable Infosys to provide its clients with advanced and effective field force resource management technology and solutions.

This deal involves joint development of BT's ARMS product and the non-exclusive licensing of BT's ARMS intellectual property rights to Infosys. An ARM, developed by BT Exact, BT's research, technology and IT operations business, enable organizations to manage their field force resource management efficiently, and ensures that they send the right person with the right skills to the right place at the right time. This optimal use of resources can result in cost savings of up to 50 per cent and increased productivity of 30 per cent.

Infosys will carry out development work over the next three years to productize ARMS for BT. In addition, Infosys will develop its own suite of ARMS - related offerings that it can provide to its customers as well as license to other companies providing workforce management solutions.

ARMS are an automated, integrated and end - to - end resource management platform based on artificial intelligence (AI) and operations research technologies. It performs large - scale computer - based decision - making using advanced forecasting, planning, optimization, collaboration and distribution technologies.

Accurate resource management is critical to a company's performance and profitability as it impacts directly on customer satisfaction and quality of service. Resource management is a complex process, usually involving the analysis of large amounts of information. The complexity increases when more than one objective is being evaluated and the number of variables to consider is huge. BT started developing ARMS in 2000, incorporating four patents making it more powerful and user friendly than rival products. ARMS use complex AI technology to take a holistic view of the resource management problem and automate each step in the process by using automated decision - making techniques. It boosts a company's productivity by accurately forecasting and optimally planning and positioning a large field workforce to changing work demands.

Kris Gopalakrishnan, chief operating officer, Infosys Technologies Ltd, said, "BT Exact has an international reputation for creating the technology that underpins

some of the world's most pioneering commercial applications of information and communications technology. We are delighted to work with BT on developing products that will help companies increase productivity and efficiencies. We aim to further develop the ARMS technology platform to develop resource management solutions for other verticals using the intellectual property from BT. The ARMS technology will also enable us to assist our clients in industries with dependencies on optimal management of resources, both human and non - human.”

2.1.3 Case 3: Optimizing Resources at Chem-Intell Chemical Manufacturing

Plants

Year: 2000

Author: Doug Johnson

This case study illustrates the effective optimization of physical assets in Chem- Intell Chemical Manufacturing Plant. Resource optimization has been widely practiced in the chemical industry as a means of cutting costs. However, the ability to use resources effectively, coupled with optimizing the associated processes, is a relatively new approach. By addressing four key reliability processes — maintenance strategy, work identification, work control and work execution — chemical industry senior management and operations personnel can effectively use a plant's resources for greater equipment productivity, efficiency and cost savings (see figure). Information management systems (IMS), which include automated diagnostics and decision support systems (DSS), push the information to plant personnel (e.g., operators, maintenance personnel and plant management). Maintenance strategy — the maintenance strategy process identifies the right tasks to be performed at the right time on the right equipment and includes a proper mix of reactive/corrective, preventive, predictive and proactive tasks. In one industrial application, a combination of diagnostic testing, root-cause failure analysis and proactive measures applied to a solvent recovery system is saving a Northeast U.S. chemical plant \$80,000 per year. At the core of the maintenance strategy lies reliability-centered maintenance (RCM). This is a discipline that helps plant management align

maintenance tasks with business objectives, and can turn a plant's reliability processes into a living program for continuous improvement. RCM often uses a DSS to update system behavior and conduct equipment analyses. The DSS obtains the data on the health of physical plant assets from an online computerized monitoring system, incorporates design criteria and historical operating changes, and sends a message to the problem-solving personnel in a usable format so corrective action can be taken.

2.1.4 Case 4: Effective Resource Utilization at IBM

Year: 2005

Author: Richard Bassemir

The study "Effective resource utilization" at IBM, how the IBM eServer zSeries is uniquely positioned to address these business needs. Ever since the first computer landed in the business world some forty-odd years ago, there have been many competing visions of what enterprise computing would be and ultimately would mean to the businesses. Some saw it strictly as a financial services solution; others viewed it as a research and development tool, albeit an expensive one. For most, the computer was ultimately regarded as a tool that could help automate business processes.

Over the years, the perception of what constitutes an Enterprise Application has changed, often directly in response to the evolving power and capabilities of computing technologies. As a result, there are numerous applications developed both in-house and by high-end software vendors that are executing in contemporary enterprises. Unfortunately, while these applications offer potentially the highest leverage of any IT resource, they often go underutilized given enterprises' historic propensity to create discrete vertical application solutions. For example, an accounting system does not necessarily share information with the payroll, inventory control, manufacturing, or other enterprise applications. Interconnecting these systems has been a daunting, if not impractical undertaking. In fact, much of the promise of renewed vigor and business advantages in delivering enterprise

applications via Web Services and other middleware seeks to overcome this lack of intra-application communication and information sharing.

In order to cost-effectively address future enterprise computing and business needs, it is imperative that a new approach be found to the existing high-maintenance and high-cost approaches deployed to date. One such approach is the notion of shared servers, i.e., the deployment of virtual server environments that mimic the current distributed architecture of client/server and Web-based applications within a single physical server. Fewer systems maintenance personnel would be required to maintain a given set of applications, and freed IT resources and personnel could be better allocated to focus on value-added activities such as developing and deploying new applications. Through the shared server approach, enterprises can drive toward a common view of the customer, while providing the high volume message rates implicit in an organization-wide customer relationship solution. Deploying shared servers allows enterprises to make available additional resources at significantly lower administrative overhead, due in large part to the sharing of CPUs, storage, management software, etcetera. These shared resources can be dynamically prioritized and allocated to meet the business needs of the enterprise, thus increasing the overall resource capacity for all applications compared with traditional IT solutions. As a result, there is less aggregate spare or idle capacity within the enterprise. Furthermore, as peak demands occur, the usability of spare capacity is higher given its concentration in a single IT resource. Overall, this shared server approach leads to improved IT efficiency and decreased IT operational costs. At first glance, some might react negatively to shared servers under the mistaken notion that applications and data are being freely shared throughout the system; however, this is not the case. Application security is of paramount concern to any enterprise and must be achieved to ensure the isolation, integrity, and credibility of Enterprise Applications. Through the logical partitioning of resources, only the hardware is shared, not the application or data, as each application is executing in its own logically isolated and secure environment. This discrete integrity of applications and

data is especially prudent in environments where there is a high degree of IT integration with external partners and customers.

The mainframe has always had a special place in enterprise computing infrastructures. Historically this meant glass house computing environments, but this is hardly the eServer zSeries of today. The computational capabilities of the eServer zSeries provide the high volume implicit in enterprise-wide customer relationship solutions. Simply stated, as enterprises are more successful and grow their customer bases, the number of customer interactions should also soar. As enterprises deploy Web services, and integrate existing applications and information repositories in the quest of creating a common view of the customer, the demand for computing power will grow geometrically. Through its Logical Partitions (LPAR) and other virtualization abilities, eServer zSeries allows enterprises to deploy additional resources with a significantly lower administrative overhead, due in large part to the sharing of CPUs, storage, management software, etcetera. As a result, average utilization factors of as high as 70%, with peak loads often exceeding 90% are not uncommon in eServer zSeries installations. This compares favorably with the typical 15% average utilization of RISC-based UNIX servers, and even more favorably with the approximately 5% average utilization of Intel-based server solutions. From a purely business perspective, maximizing resource utilization creates competitive advantage. From a technological perspective, reducing complexity, and hence the opportunity for operator error, is always a welcome achievement.

2.1.5 Effective Utilization of Resource @ Cognizant

Year: 2008

Author: Richard Holubkov

Cognizant Technology Solutions has increased its employee strength in software testing practice by ten times to around 9,000 people in the last four years. Nearly 75 per cent of the testing staff is sited in India and the rest at various locations, including Europe and Latin America.

Software testing practice is one of the fastest growing businesses for the US-based software company with offshore centers in India. While software testing is still considered a 'secondary' choice among students, Cognizant takes nearly 50 per cent of students from non-engineering disciplines and trains them for six weeks on the testing practice. These employees move quickly to the second level and are on par with any other software professional.

Cognizant does functional testing (for example performance of an ATM); specialized testing (test the performance on security, load and automation) and consultancy (help clients on testing). The company has more than 200 business analysts recruited from premier business schools in India who bring in the required domain expertise on testing engagement; she told newsmen at the newly built Siruseri campus that has a dedicated testing centre.

Cognizant has launched its platform, IZONE that will foster innovation and enable the company to deliver greater value in the area of testing. The platform will facilitate "ideation, catalyst knowledge sharing and showcase testing innovations that help reduce testing effort, time and cost, while improving quality.

Technological innovation in energy-efficient computing and data storage systems as well as devices by hardware manufacturers such as IBM, HP, and Intel have helped in the greening of IT worldwide. Right-sizing the IT infrastructure can enable greater effectiveness with less consumption of resources. For example, multiple application and database servers can be squeezed into a fewer number of systems, creating a virtual multi-server scenario while consuming less resources.

Leveraging shared infrastructure: Organizations can leverage shared infrastructure for their IT thereby requiring less resources for operational effectiveness. Software models like SaaS (Software as a Service) require less equipment and energy. A SaaS data center combines many companies, drives efficiencies, directly reduces the amount of carbon dioxide emissions.

By working in shifts, organizations can reduce the need supply chain and/or improve the utilization of infrastructure such as floor space and the number of desktops, resulting in reduced resources and decreased usage of natural resources to support the information technology workforce.

2.2 Research Gap

A number of studies and research has been conducted regarding the employees working conditions and environment in this division. Also a number of studies have been made relating to the troubles faced by the Management and employees. Different studies have concentrated and analyzed on various problems like determining the stress undergone by the employees, the company's trend compared in the market, the conflicts and the issues faced that can happen for the management in customers satisfaction. The management focuses for delivery of the services with the temperament of the clients.

Such studies and researches imply that the management should seek for the higher customer satisfaction level. The managers should get the feedback from the client managers quarterly and improvise the project and employees.

So far, the research has suggested that the management should consider the employee productivity and help them in knowing the additional business and learn new technology. In certain cases the company should change its climate with the respective client and management should take proper steps for making the client business stronger or better.

CHAPTER 3 – METHODOLOGY

3.1 Type of the Project

The project falls under the type of “Exploratory Type” where in the existing procedures followed are being explored and validated.

3.2 Target Respondents

The target respondents are the employees of the organization. The employees are split into lower level employees, middle level employees (leads) and the higher level employees (managers) since they are the ones servicing the clients. Questionnaires are designed for each level and the answers from the employees are obtained and analyzed. The domains (verticals) involved in the survey are

- Retail, Hospitality, Manufacturing and Logistics
- Healthcare
- Insurance
- Testing
- Academy
- Global Resource Management Group
- Human Resource

3.3 Assumptions, Constraints and Limitations

- The employees have disclosed all the information honestly and correctly without any bias.
- The company was not able to divulge certain confidential information's like the exact figures of the costs involved in any project of each business unit.
- The staff might not disclose all the details as they may be afraid of their superiors.

3.4 Census Method

A total of 120 employees are working at CSS, Coimbatore centre; everyone is considered to be a sample and is reached out. Hence, Census method is used for data collection.

3.5 Data Collection

The study is based on both primary data and secondary data. The primary data was collected by means of questionnaire there by launching a web portal at CSS. Questionnaire prepared keeping in mind the objective of the study. Secondary data was collected with the help of company reports, brochures and company websites.

The questionnaire was constructed based on various factors that support the study of the survey. The Pilot Study was also conducted for a very small sample size to identify the feasibility of the survey at the large size. The data was collected and analyzed to check if they are sufficient and provide relevant data that would support the study.

The questionnaire consisted of close ended questions and appropriate scales were used to measure the opinion of the respondents. For this, five-point and two-point Likert type scale was used to set the opinions for the questions.

The primary data collection is through questionnaire. An Intranet website is created for the sole purpose of data collection at CSS. It consists of two pages:

- Home page
- Questionnaire page

3.5.1 Home Page

Home page briefs about CSS and what this site is for. Also, it briefs about “Resource Utilization” with a short description. By clicking on the button “Click here

to take up the Survey” at the bottom of the page, the user will be redirected to questionnaire page, where he/she can take up the survey.

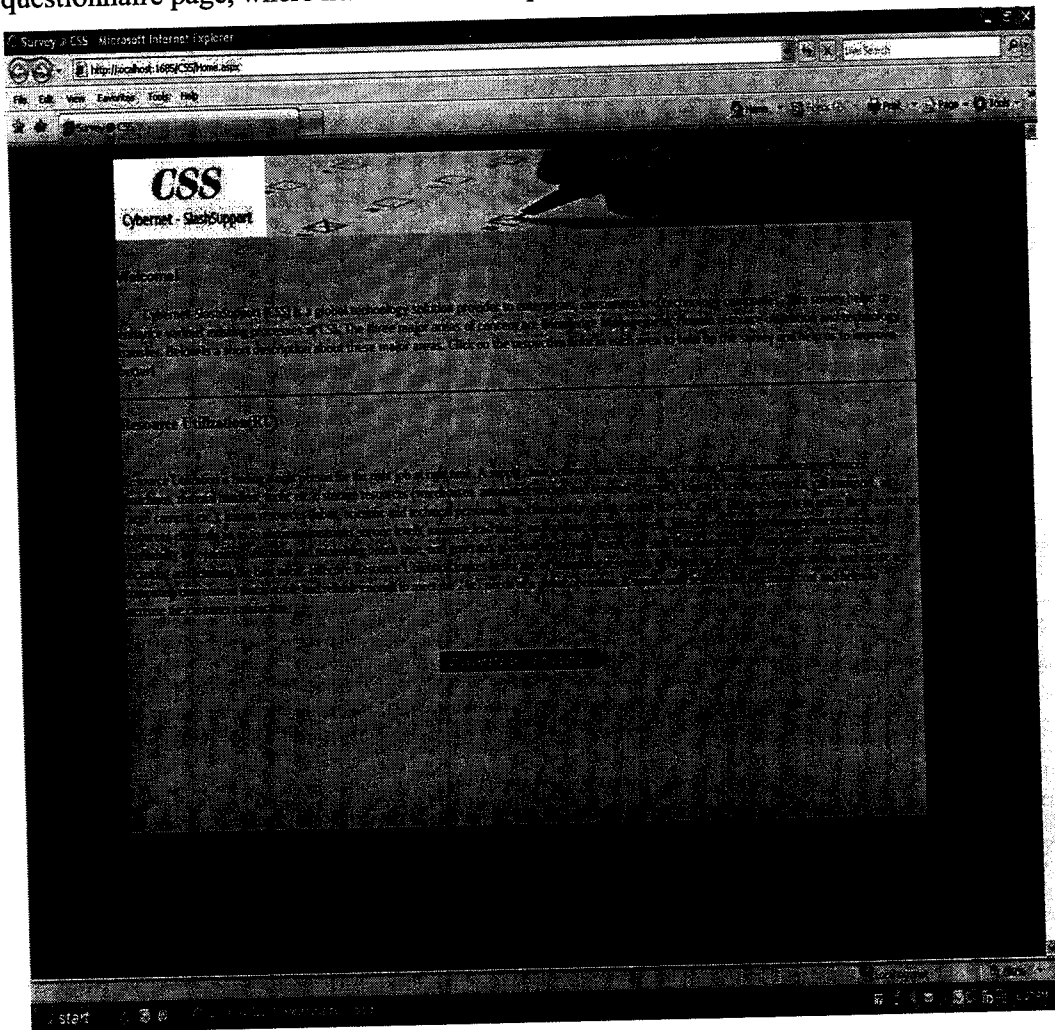


Fig 3.1 Intranet Website Home page

3.5.2 Questionnaire Page

The questionnaire page will look like the one shown below. This page is designed in an elegant and easy way such that the user feels at ease in taking up the survey. By just with a mouse click, he can take up the questions right at his desktop.

The questions being presented are focused to the problem and are organized in such a way that might not be misleading the user.

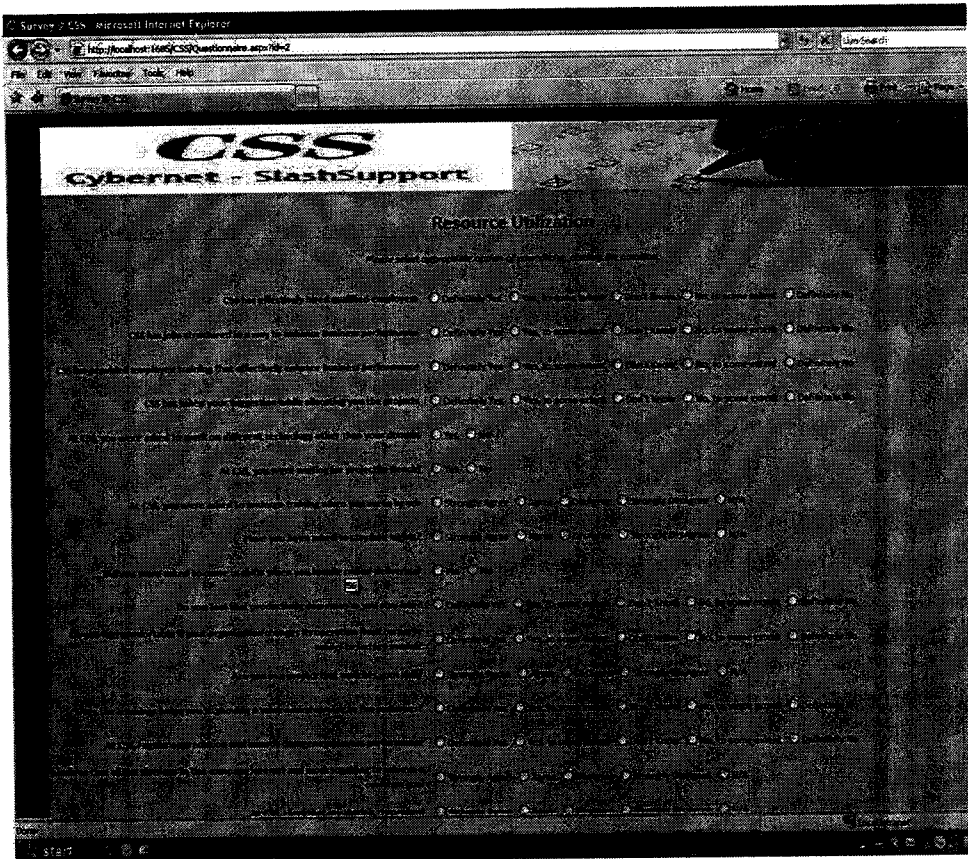


Fig 3.2 Intranet Website Questionnaire page (View 1)

Once, the respondent is done with answering the questions, he/she can click at the button “Submit the Response” at the bottom of the page. Once clicked, the responses are stored in a database and he/she will be redirected to the home page. In case if any of the questions are left blank / unanswered, upon clicking the button, the corresponding questions will be highlighted in RED with a message stating, “Questions highlighted in red are unanswered. Please complete them before submitting the response.” The user has to fill up the missed out questions and resubmit the answers.

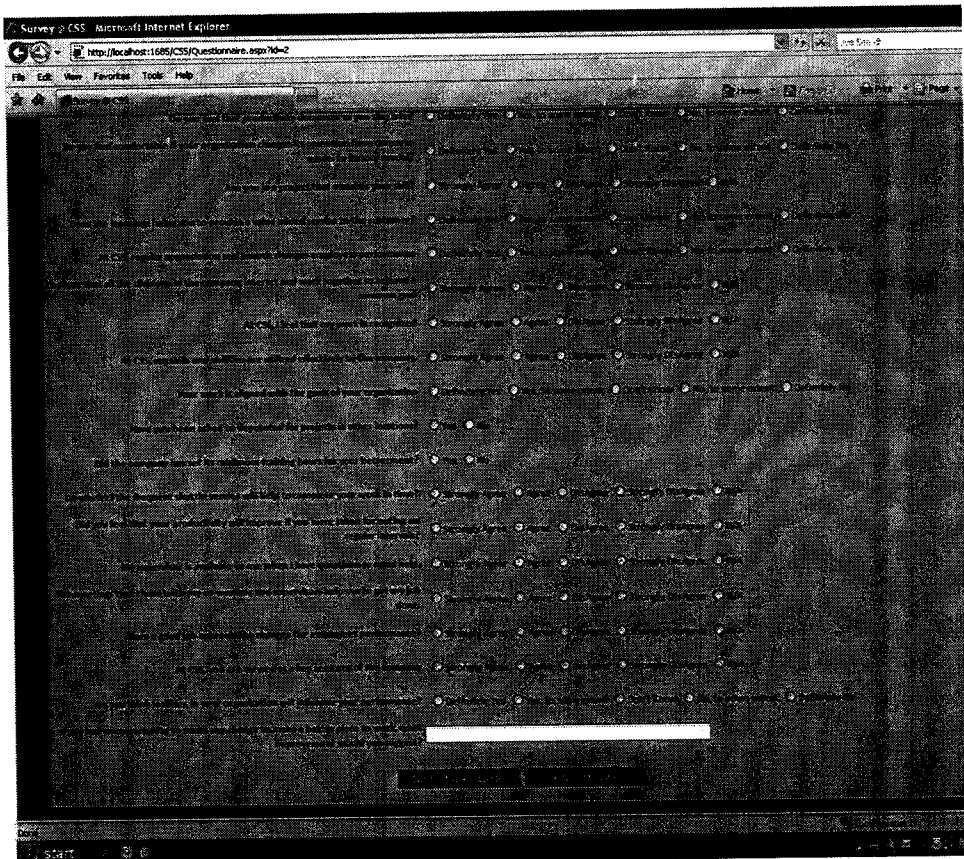


Fig 3.3 Intranet Website Questionnaire page (View II)

3.6 Data Processing

The data gathered were summarized and analyzed using percentage analysis with the help of SPSS. SPSS is used for the analysis and the processing of the data. The data was interpreted in the following formats:

3.6.1 Percentage Analysis

Percentage Analysis is the easiest and the best method to analyze the data and it can be calculated using.

$$\text{Percentage Calculation} = \text{No of response} / \text{Sample size} * 100$$

3.6.2 Chi-Square Test

The Chi-Square test is one of the simplest and most widely used non-parametric tests in statistical work. The quantity Chi-square describes the magnitude of the discrepancy between theory and observation. The Chi-square test require following steps,

1. State the null hypothesis and calculate the number in each category if the null hypothesis is correct
2. Determine the level of significance that is how much risk, the type of error the researcher is prepared to take. In this research, the researcher has selected 5% level of significance.

O – Refers to observed frequency

E – Refers to expected frequency

3. Determine the number of degree of freedom. For the specified level of significance and the degree of freedom find the criteria or theoretical value of

$$\text{Degree of freedom} = (R-1) (C-1)$$

Where,

R=Number of rows

C=Number of columns

4. Compare the calculated value with the theoretical value and determine.
5. If calculated value is less than tabulated value H_0 will be accepted else H_1 will be rejected and vice-versa.

3.6 Package for Analysis

SPSS

SPSS 16.0 is a comprehensive system for analyzing data. SPSS can take data from almost any type of file and use them to generate tabulated reports, charts, and plots of distributions and trends, descriptive statistics, and complex statistical analyses. SPSS makes statistical analysis more accessible for the beginner and more convenient for the experienced user. Simple menus and dialog box selections make it possible to perform complex analyses without typing a single line of command syntax. The Data Editor offers a simple and efficient spreadsheet-like facility for entering data and browsing the working data file.

CHAPTER 4 – DATA ANALYSIS AND INTERPRETATION

4.1 Analysis and Interpretation

4.1.1 Designation

Data

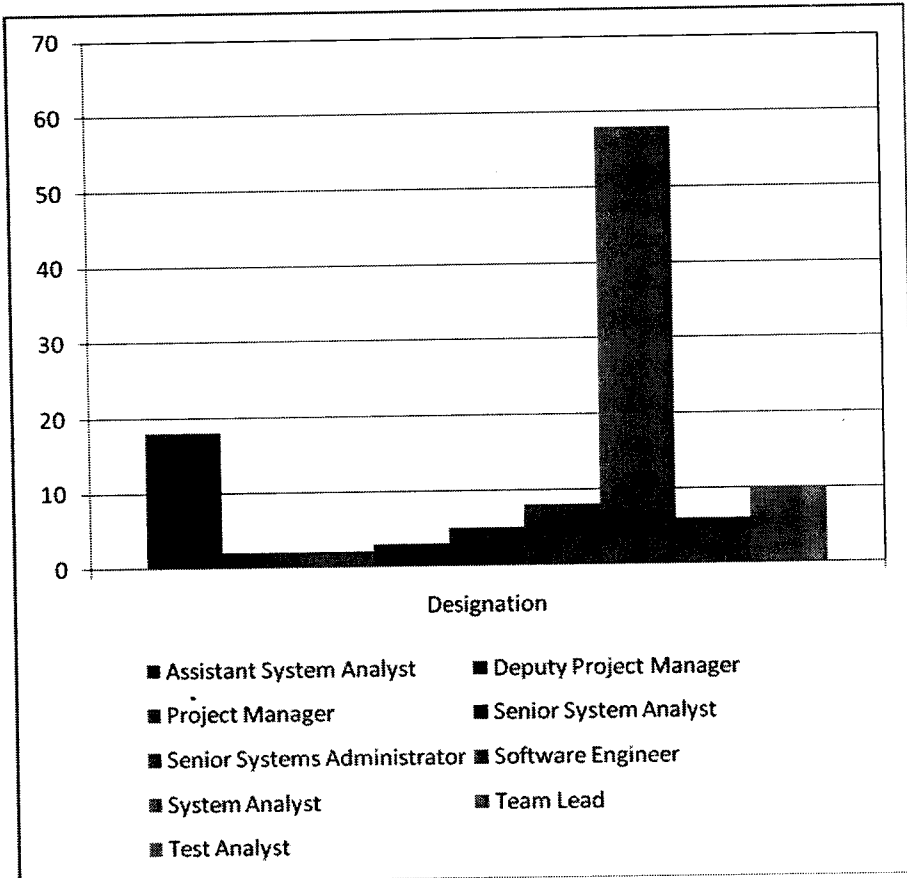
| Designation | Number of Respondents | Percentage |
|------------------------------|------------------------------|-------------------|
| Assistant System Analyst | 18 | 15 |
| Deputy Project Manager | 2 | 1.67 |
| Project Manager | 2 | 1.67 |
| Senior System Analyst | 3 | 2.5 |
| Senior Systems Administrator | 5 | 4.17 |
| Software Engineer | 8 | 6.67 |
| System Analyst | 58 | 48.33 |
| Team Lead | 6 | 5 |
| Test Analyst | 10 | 8.33 |
| Trainee | 8 | 6.67 |
| Total | 120 | 100 |

Table 4.1.1 Responses for Designation

Inference

Out of 120 Associates, 15% are Assistant System Analyst, 1.67% are Deputy Project Manager, 1.67% are Project Manager, 2.5% are Senior System Analyst, 4.17% are Senior Systems Administrator, 6.67% are Software Engineer, 48.33% are System Analyst and 5% are Team Lead, 8.33% are Test Analyst and 6.67%.

Bar Chart



4.1.2 Gender

Data

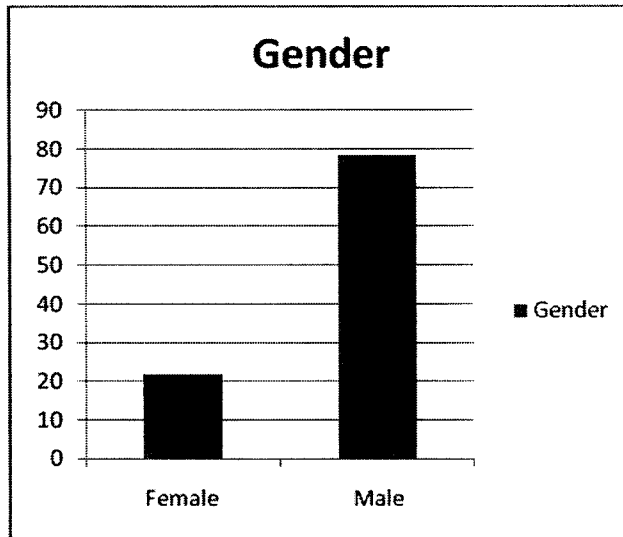
| Gender | Number of Respondents | Percentage |
|--------------|-----------------------|------------|
| Female | 26 | 21.67 |
| Male | 94 | 78.33 |
| Total | 120 | 100 |

Table 4.1.2 Responses for Gender

Inference

Out of 120 Associates, 21.67% are Female and 78.33% are Male.

Bar Chart

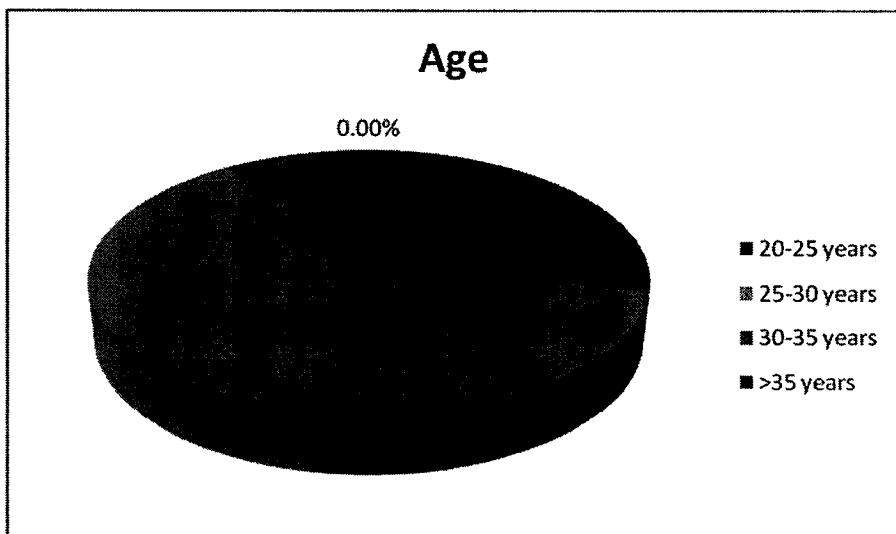


4.1.3 Age**Data**

| Age | Number of Respondents | Percentage |
|--------------|-----------------------|------------|
| 20-25 years | 35 | 19.17 |
| 25-30 years | 73 | 80.33 |
| 30-35 years | 12 | 10 |
| >35 years | 0 | 0 |
| Total | 120 | 100 |

*Table 4.1.3 Responses for Age***Inference**

Out of 120 Associates, 19.17% are in age between 20 to 25 years and 78.33% of Male.

Bar Chart

4.1.4 Marital Status

Data

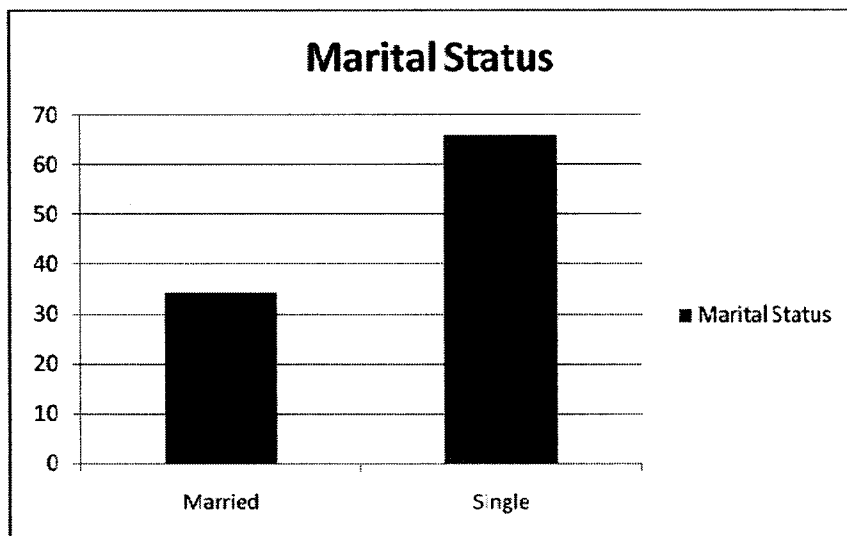
| Marital Status | Number of Respondents | Percentage |
|-----------------------|------------------------------|-------------------|
| Married | 41 | 34.17 |
| Single | 79 | 65.83 |
| Total | 120 | 100 |

Table 4.1.4 Responses for Marital Status

Inference

Out of 120 Associates, 34.17% are married and 65.83% are single.

Bar Chart



4.1.5 Experience

Data

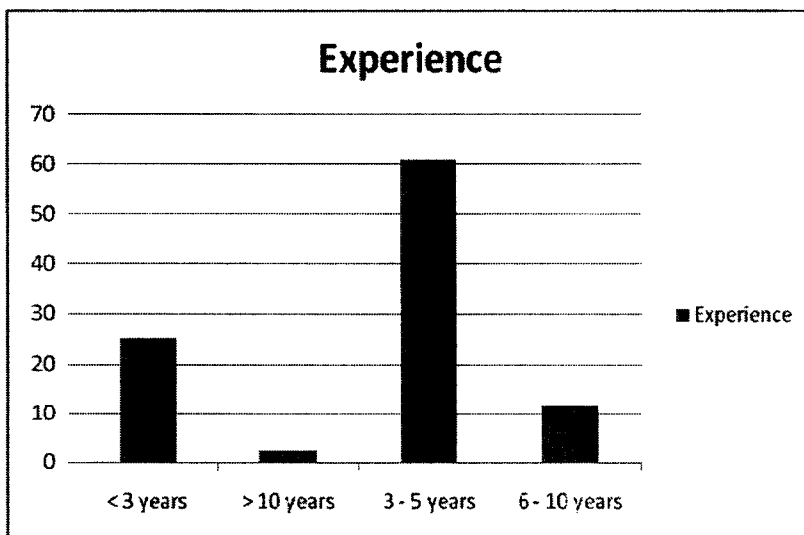
| Experience | Number of Respondents | Percentage |
|-------------------|------------------------------|-------------------|
| < 3 years | 30 | 25 |
| > 10 years | 3 | 2.5 |
| 3 - 5 years | 73 | 60.83 |
| 6 - 10 years | 14 | 11.67 |
| Total | 120 | 100 |

Table 4.1.5 Responses for Experience

Inference

Out of 120 Associates 25% are less than 3 Years, 2.5% are greater than 10 Years, 60.83% are between 3 to 5 Years and 11.67% are with 6 to 10 Years.

Bar Chart



4.1.6 Employee Hiring

Data

| Employee Hiring | Number of Respondents |
|------------------------|------------------------------|
| Definitely Yes | 81 |
| Yes, to some extent | 36 |
| Don't Know | 0 |
| No, to some extent | 3 |
| Definitely No | 0 |
| Total | 120 |

Table 4.1.6 Responses for Employee Hiring

Chi – Square Analysis

Null – Hypothesis

CSS has not effectively hired qualified employees.

Alternate Hypothesis

CSS has effectively hired qualified employees.

SPSS Output

| Feedback | | | |
|---------------------|-------------------|-------------------|-----------------|
| | Observed N | Expected N | Residual |
| Definitely Yes | 81 | 40.0 | 41.0 |
| No, to some extent | 3 | 40.0 | -37.0 |
| Yes, to some extent | 36 | 40.0 | -4.0 |
| Total | 120 | | |

Test Statistics

| | Feedback |
|-------------|---------------------|
| Chi-Square | 76.650 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.7 Structured Jobs

Data

| Structured Jobs | Number of Respondents |
|------------------------|------------------------------|
| Definitely Yes | 66 |
| Yes, to some extent | 39 |
| Don't Know | 9 |
| No, to some extent | 6 |
| Definitely No | 0 |
| Total | 120 |

Table 4.1.7 Responses for Structured Jobs

Chi – Square Analysis

Null – Hypothesis

CSS has jobs not structured in a way to enhance business performance.

Alternate Hypothesis

CSS has jobs structured to enhance business performance.

SPSS Output:

Feedback

| | Observed N | Expected N | Residual |
|---------------------|-------------------|-------------------|-----------------|
| Definitely Yes | 66 | 30.0 | 36.0 |
| Don't Know | 9 | 30.0 | -21.0 |
| No, to some extend | 6 | 30.0 | -24.0 |
| Yes, to some extend | 39 | 30.0 | 9.0 |
| Total | 120 | | |

Test Statistics

| | Feedback |
|-------------|---------------------|
| Chi-Square | 79.800 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.8 Employee Training

Data

| Employee Training | Number of Respondents |
|---------------------|-----------------------|
| Definitely Yes | 47 |
| Yes, to some extent | 36 |
| Don't Know | 22 |
| No, to some extent | 15 |
| Definitely No | 0 |
| Total | 120 |

Table 4.1.8 Responses for Employee Training

Chi – Square Analysis

Null – Hypothesis

CSS has not provided training for their employees effectively.

Alternate Hypothesis

CSS has provided employee training that effectively.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|---------------------|------------|------------|----------|
| Definitely Yes | 47 | 30.0 | 17.0 |
| Don't Know | 22 | 30.0 | -8.0 |
| No, to some extent | 15 | 30.0 | -15.0 |
| Yes, to some extent | 36 | 30.0 | 6.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 20.467 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.9 Project Allocation

Data

| Project Allocation | Number of Respondents |
|---------------------|-----------------------|
| Definitely Yes | 43 |
| Yes, to some extent | 59 |
| Don't Know | 6 |
| No, to some extent | 6 |
| Definitely No | 6 |
| Total | 120 |

Table 4.1.9 Responses for Project Allocation

Chi – Square Analysis

Null – Hypothesis

CSS has not taken your suggestion while allocating you the projects.

Alternate Hypothesis

CSS has taken your suggestion while allocating you the projects.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|---------------------|------------|------------|----------|
| Definitely No | 6 | 24.0 | -18.0 |
| Definitely Yes | 43 | 24.0 | 19.0 |
| Don't Know | 6 | 24.0 | -18.0 |
| No, to some extend | 6 | 24.0 | -18.0 |
| Yes, to some extent | 59 | 24.0 | 35.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|----------------------|
| Chi-Square | 106.583 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.10 Working in Different Technology

Data

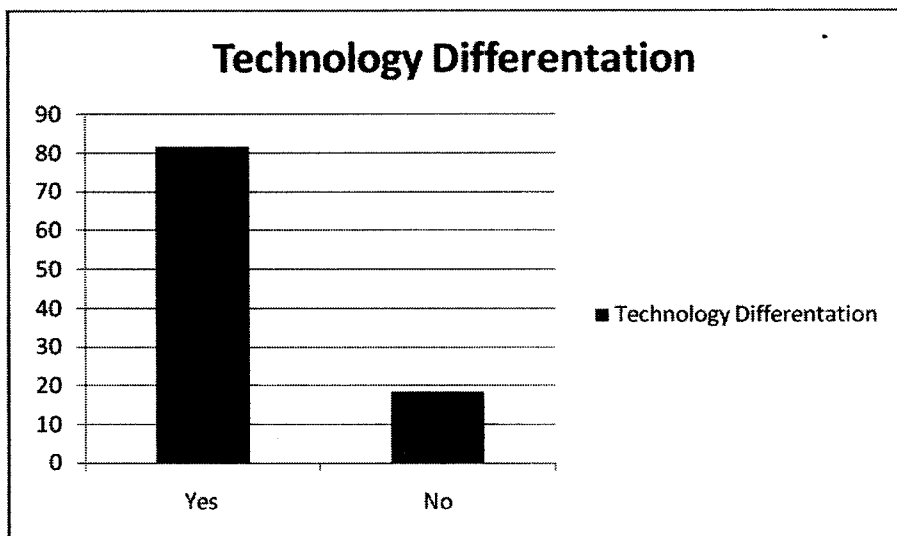
| Technology Differentiation | Number of Respondents | Percentage |
|----------------------------|-----------------------|------------|
| Yes | 98 | 81.67 |
| No | 22 | 18.33 |
| Total | 120 | 100 |

Table 4.1.10 Responses for Technology Differentiation

Inference

Out of 120 Associates, 81.67% are asked to change their technology and 18.33% are not asked not to change their technology from their basic domain.

Bar Chart



4.1.11 Bench**Data**

| Bench | Number of Respondents |
|--------------|------------------------------|
| Yes | 42 |
| No | 78 |
| Total | 120 |

Table 4.1.11 Responses for Employees in Bench

Chi – Square Analysis**Null – Hypothesis**

Employees have waited for their project (In Bench).

Alternate Hypothesis

Employees have not waited for project (In Bench).

SPSS Output**FeedBack**

| | Observed N | Expected N | Residual |
|-------|-------------------|-------------------|-----------------|
| No | 78 | 60.0 | 18.0 |
| Yes | 42 | 60.0 | -18.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 10.800 ^a |
| df | 1 |
| Asymp. Sig. | .001 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 60.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.12 Training in Bench

Data

| Training in Bench | Number of Respondents |
|-------------------|-----------------------|
| Strongly Agree | 52 |
| Agree | 42 |
| Disagree | 14 |
| Strongly Disagree | 4 |
| Not Applicable | 8 |
| Total | 120 |

Table 4.1.12 Responses for Training in Bench

Chi – Square Analysis

Null – Hypothesis

Employees were not asked to undergo training when they are in bench.

Alternate Hypothesis

Employees were asked to undergo training when they are in bench.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|-------------------|------------|------------|----------|
| Agree | 42 | 24.0 | 18.0 |
| Disagree | 14 | 24.0 | -10.0 |
| Not Applicable | 8 | 24.0 | -16.0 |
| Strongly Agree | 52 | 24.0 | 28.0 |
| Strongly Disagree | 4 | 24.0 | -20.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 77.667 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.13 Late Night Works

Data

| Late Night Works | Number of Respondents |
|-------------------|-----------------------|
| Strongly Agree | 35 |
| Agree | 47 |
| Disagree | 24 |
| Strongly Disagree | 5 |
| Not Applicable | 9 |
| Total | 120 |

Table 4.1.13 Responses for Late Night Works

Chi – Square Analysis

Null – Hypothesis

I was not asked to stay late nights when I handle critical projects.

Alternate Hypothesis

I was asked to stay late nights when I handle critical projects.

SPSS Output

| FeedBack | | | |
|-------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Agree | 47 | 24.0 | 23.0 |
| Disagree | 24 | 24.0 | .0 |
| Not Applicable | 9 | 24.0 | -15.0 |
| Strongly Agree | 35 | 24.0 | 11.0 |
| Strongly Disagree | 5 | 24.0 | -19.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 51.500 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.14 Shifts in Critical Projects

Data

| Shifts in Critical Projects | Number of Respondents |
|-----------------------------|-----------------------|
| Yes | 75 |
| No | 45 |
| Total | 120 |

Table 4.1.14 Responses for shifts in Critical Projects

Chi – Square Analysis

Null – Hypothesis

I was not asked to come in shifts when you handle critical projects.

Alternate Hypothesis

I was asked to come in shifts when you handle critical projects.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|-------|------------|------------|----------|
| No | 45 | 60.0 | -15.0 |
| Yes | 75 | 60.0 | 15.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|--------------------|
| Chi-Square | 7.500 ^a |
| df | 1 |
| Asymp. Sig. | .006 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 60.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.15 Productivity in Late Nights

Data

| Productivity in Late Nights | Number of Respondents |
|-----------------------------|-----------------------|
| Definitely Yes | 44 |
| Yes, to some extent | 44 |
| Don't Know | 7 |
| No, to some extent | 5 |
| Definitely No | 20 |
| Total | 120 |

Table 4.1.15 Responses for Productivity in Late Nights

Chi – Square Analysis

Null – Hypothesis

Productivity does not decrease as you stay late.

Alternate Hypothesis

Productivity decreases as you stay late.

SPSS Output

| FeedBack | | | |
|---------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Definitely No | 20 | 24.0 | -4.0 |
| Definitely Yes | 44 | 24.0 | 20.0 |
| Don't Know | 7 | 24.0 | -17.0 |
| No, to some extend | 5 | 24.0 | -19.0 |
| Yes, to some extend | 44 | 24.0 | 20.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 61.083 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.16 Corporate To Shift Model

Data

| Corporate To Shift Model | Number of Respondents |
|--------------------------|-----------------------|
| Definitely Yes | 5 |
| Yes, to some extent | 33 |
| Don't Know | 55 |
| No, to some extent | 7 |
| Definitely No | 20 |
| Total | 120 |

Table 4.1.16 Responses for Corporate To Shift Model

Chi – Square Analysis

Null – Hypothesis

I feel uncomfortable when CSS changes its operation from corporate model to factory model.

Alternate Hypothesis

I feel comfortable when CSS changes its operation from corporate model to factory model.

SPSS Output

| FeedBack | | | |
|---------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Definitely No | 20 | 24.0 | -4.0 |
| Definitely Yes | 5 | 24.0 | -19.0 |
| Don't Know | 55 | 24.0 | 31.0 |
| No, to some extend | 7 | 24.0 | -17.0 |
| Yes, to some extend | 33 | 24.0 | 9.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 71.167 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.17 Right Project

Data

| Right Project matches my Skill | Number of Respondents |
|---------------------------------------|------------------------------|
| Strongly Agree | 67 |
| Agree | 43 |
| Disagree | 10 |
| Strongly Disagree | 0 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.17 Responses for Right Project

Chi – Square Analysis

Null – Hypothesis

I am not in a right project that matches my skill.

Alternate Hypothesis

I am in a right project that matches my skill.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|----------------|-------------------|-------------------|-----------------|
| Agree | 43 | 40.0 | 3.0 |
| Disagree | 10 | 40.0 | -30.0 |
| Strongly Agree | 67 | 40.0 | 27.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 40.950 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.18 Value Added Service

Data

| Value Added Service | Number of Respondents |
|---------------------|-----------------------|
| Definitely Yes | 44 |
| Yes, to some extent | 70 |
| Don't Know | 6 |
| No, to some extent | 0 |
| Definitely No | 0 |
| Total | 120 |

Table 4.1.18 Responses for Value Added Service

Chi – Square Analysis

Null – Hypothesis

Learning's does not provide value added service to the customer.

Alternate Hypothesis

Learning's provide a value added service to the customer.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|---------------------|------------|------------|----------|
| Definitely Yes | 44 | 40.0 | 4.0 |
| Don't Know | 6 | 40.0 | -34.0 |
| Yes, to some extent | 70 | 40.0 | 30.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 51.800 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.19 Performance Appraisal

Data

| Performance Appraisal | Number of Respondents |
|-----------------------|-----------------------|
| Definitely Yes | 50 |
| Yes, to some extent | 30 |
| Don't Know | 20 |
| No, to some extent | 10 |
| Definitely No | 10 |
| Total | 120 |

Table 4.1.19 Responses for Performance Appraisal

Chi – Square Analysis

Null – Hypothesis

Regular appreciation and awards changes employees' performance.

Alternate Hypothesis

Regular appreciation and awards will not influence employees' performance.

SPSS Output

| FeedBack | | | |
|---------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Definitely No | 10 | 24.0 | -14.0 |
| Definitely Yes | 50 | 24.0 | 26.0 |
| Don't Know | 20 | 24.0 | -4.0 |
| No, to some extend | 10 | 24.0 | -14.0 |
| Yes, to some extend | 30 | 24.0 | 6.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 46.667 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.20 Team Work

Data

| Team Work | Number of Respondents |
|-------------------|-----------------------|
| Strongly Agree | 52 |
| Agree | 60 |
| Disagree | 4 |
| Strongly Disagree | 4 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.20 Responses for Team Work

Chi – Square Analysis

Null – Hypothesis

Employees believe that all the divisions in the company does not interact and work together to achieve a common goal.

Alternate Hypothesis

Employees believe that all the divisions in the company interact and work together to achieve a common goal.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|-------------------|------------|------------|----------|
| Agree | 60 | 30.0 | 30.0 |
| Disagree | 4 | 30.0 | -26.0 |
| Strongly Agree | 52 | 30.0 | 22.0 |
| Strongly Disagree | 4 | 30.0 | -26.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 91.200 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis

4.1.21 Recognition

Data

| Recognition | Number of Respondents |
|-------------------|-----------------------|
| Strongly Agree | 43 |
| Agree | 65 |
| Disagree | 4 |
| Strongly Disagree | 4 |
| Not Applicable | 4 |
| Total | 120 |

Table 4.1.21 Responses for Employee Recognition

Chi – Square Analysis

Null – Hypothesis

Employees feel that they are not recognized at work.

Alternate Hypothesis

Employees feel that they are recognized at work.

SPSS Output

| FeedBack | | | |
|-------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Agree | 65 | 24.0 | 41.0 |
| Disagree | 4 | 24.0 | -20.0 |
| Not Applicable | 4 | 24.0 | -20.0 |
| Strongly Agree | 43 | 24.0 | 19.0 |
| Strongly Disagree | 4 | 24.0 | -20.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|----------------------|
| Chi-Square | 135.083 ^a |
| df | 4 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 24.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.22 Effective Utilization of Skills

Data

| Effective Utilization of Skills | Number of Respondents |
|--|------------------------------|
| Strongly Agree | 56 |
| Agree | 61 |
| Disagree | 3 |
| Strongly Disagree | 0 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.22 Responses for Effective Utilization of Skills

Chi – Square Analysis

Null – Hypothesis

At CSS, my skills and abilities are not utilized effectively by the company.

Alternate Hypothesis

At CSS, my skills and abilities are utilized effectively by the company.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|----------------|------------|------------|----------|
| Agree | 61 | 40.0 | 21.0 |
| Disagree | 3 | 40.0 | -37.0 |
| Strongly Agree | 56 | 40.0 | 16.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 51.650 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.23 Work Allocation

Data

| Work Allocation | Number of Respondents |
|---------------------|-----------------------|
| Definitely Yes | 66 |
| Yes, to some extent | 46 |
| Don't Know | 4 |
| No, to some extent | 4 |
| Definitely No | 0 |
| Total | 120 |

Table 4.1.23 Responses for Work Allocation

Chi – Square Analysis

Null – Hypothesis

Work is not aligned with the goals of your organization.

Alternate Hypothesis

Work is aligned with the goals of your organization.

SPSS Output

| FeedBack | | | |
|---------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Definitely Yes | 66 | 30.0 | 36.0 |
| Don't Know | 4 | 30.0 | -26.0 |
| No, to some extend | 4 | 30.0 | -26.0 |
| Yes, to some extend | 46 | 30.0 | 16.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 96.800 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.24 Deputation

Data

| Deputation | Number of Respondents |
|-------------------|------------------------------|
| Yes | 50 |
| No | 70 |
| Total | 120 |

Table 4.1.24 Responses for Deputation

Chi – Square Analysis

Null – Hypothesis

Employees are not deputed for projects to other locations

Alternate Hypothesis

Employees are deputed for projects to other locations

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|--------------|-------------------|-------------------|-----------------|
| No | 70 | 60.0 | 10.0 |
| Yes | 50 | 60.0 | -10.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|--------------------|
| Chi-Square | 3.333 ^a |
| df | 1 |
| Asymp. Sig. | .068 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 60.0.

Inference

As asymptotic significance is greater than 0.05, we accept null hypothesis.

4.1.25 Minimum Training Hours

Data

| Deputation | Number of Respondents |
|--------------|-----------------------|
| Yes | 58 |
| No | 62 |
| Total | 120 |

Table 4.1.25 Responses for Minimum Training Hours

Chi – Square Analysis

Null – Hypothesis

Company has not set its minimum training hours for your betterment

Alternate Hypothesis

Company has not set its minimum training hours for your betterment

SPSS Output

| FeedBack | | | |
|----------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| No | 62 | 60.0 | 2.0 |
| Yes | 58 | 60.0 | -2.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|-------------------|
| Chi-Square | .133 ^a |
| df | 1 |
| Asymp. Sig. | .715 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 60.0.

Inference

As asymptotic significance is greater than 0.05, we accept null hypothesis.

4.1.26 Shuttle Services

Data

| Shuttle Services | Number of Respondents |
|-------------------|-----------------------|
| Strongly Agree | 42 |
| Agree | 42 |
| Disagree | 0 |
| Strongly Disagree | 26 |
| Not Applicable | 10 |
| Total | 120 |

Table 4.1.26 Responses for Employee Training

Chi – Square Analysis

Null – Hypothesis

Frequent shuttle services will not help to complete your work in time.

Alternate Hypothesis

Frequent shuttle services will help to complete your work in time.

SPSS Output

| FeedBack | | | |
|-------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Agree | 42 | 30.0 | 12.0 |
| Not Applicable | 10 | 30.0 | -20.0 |
| Strongly Agree | 42 | 30.0 | 12.0 |
| Strongly Disagree | 26 | 30.0 | -4.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 23.467 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.27 Outing at Regular Intervals

Data

| Outing at Regular Intervals | Number of Respondents |
|------------------------------------|------------------------------|
| Strongly Agree | 52 |
| Agree | 52 |
| Disagree | 10 |
| Strongly Disagree | 6 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.27 Responses for Outing at regular Intervals

Chi – Square Analysis

Null – Hypothesis

Productivity will not improve if taken for outing on regular intervals.

Alternate Hypothesis

Productivity will improve if taken for outing on regular intervals.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|-------------------|------------|------------|----------|
| Agree | 52 | 30.0 | 22.0 |
| Disagree | 10 | 30.0 | -20.0 |
| Strongly Agree | 52 | 30.0 | 22.0 |
| Strongly Disagree | 6 | 30.0 | -24.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 64.800 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.28 Supervisor

Data

| Supervisor | Number of Respondents |
|-------------------|------------------------------|
| Strongly Agree | 50 |
| Agree | 65 |
| Disagree | 5 |
| Strongly Disagree | 0 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.28 Responses for Supervisor Support

Chi – Square Analysis

Null – Hypothesis

My supervisor is not available to me when I have questions or need help.

Alternate Hypothesis

My supervisor is available to me when I have questions or need help.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|----------------|-------------------|-------------------|-----------------|
| Agree | 65 | 40.0 | 25.0 |
| Disagree | 5 | 40.0 | -35.0 |
| Strongly Agree | 50 | 40.0 | 10.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 48.750 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.29 Meeting with Co workers

Data

| Meeting with Co workers | Number of Respondents |
|--------------------------------|------------------------------|
| Strongly Agree | 37 |
| Agree | 79 |
| Disagree | 4 |
| Strongly Disagree | 0 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.29 Responses for Co workers

Chi – Square Analysis

Null – Hypothesis

The meeting that I have with my co-workers and supervisors does not help me to get my job done.

Alternate Hypothesis

The meeting that I have with my co-workers and supervisors helps me to get my job done.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|----------------|-------------------|-------------------|-----------------|
| Agree | 79 | 40.0 | 39.0 |
| Disagree | 4 | 40.0 | -36.0 |
| Strongly Agree | 37 | 40.0 | -3.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 70.650 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.30 Job Appreciation

Data

| Job Appreciation | Number of Respondents |
|-------------------------|------------------------------|
| Strongly Agree | 72 |
| Agree | 42 |
| Disagree | 6 |
| Strongly Disagree | 0 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.30 Responses for Job Appreciation

Chi – Square Analysis

Null – Hypothesis

Good job appreciation does not change the employee's performance.

Alternate Hypothesis

Good job appreciation changes the employee's performance.

SPSS Output

FeebBack

| | Observed N | Expected N | Residual |
|----------------|-------------------|-------------------|-----------------|
| Agree | 42 | 40.0 | 2.0 |
| Disagree | 6 | 40.0 | -34.0 |
| Strongly Agree | 72 | 40.0 | 32.0 |
| Total | 120 | | |

Test Statistics

| | FeebBack |
|-------------|---------------------|
| Chi-Square | 54.600 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.31 Key Resource

Data

| Key Resource | Number of Respondents |
|-------------------|-----------------------|
| Strongly Agree | 46 |
| Agree | 61 |
| Disagree | 9 |
| Strongly Disagree | 4 |
| Not Applicable | 0 |
| Total | 120 |

Table 4.1.31 Responses for Treating as Key Resource

Chi – Square Analysis

Null – Hypothesis

Employees are not viewed as a key resource for the company.

Alternate Hypothesis

Employees are viewed as a key resource for the company.

SPSS Output

FeedBack

| | Observed N | Expected N | Residual |
|-------------------|------------|------------|----------|
| Agree | 61 | 30.0 | 31.0 |
| Disagree | 9 | 30.0 | -21.0 |
| Strongly Agree | 46 | 30.0 | 16.0 |
| Strongly Disagree | 4 | 30.0 | -26.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 77.800 ^a |
| df | 3 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 30.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

4.1.32 Facilities at the Organization

Data

| Facilities at the Organization | Number of Respondents |
|--------------------------------|-----------------------|
| Definitely Yes | 18 |
| Yes, to some extent | 86 |
| Don't Know | 16 |
| No, to some extent | 0 |
| Definitely No | 0 |
| Total | 120 |

Table 4.1.32 Responses for Employee Training

Chi – Square Analysis

Null – Hypothesis

Facilities like COE, KM portals in the organization do not influence the performance.

Alternate Hypothesis

Facilities like COE, KM portals in the organization have influence the performance.

SPSS Output

| FeedBack | | | |
|---------------------|------------|------------|----------|
| | Observed N | Expected N | Residual |
| Definitely Yes | 18 | 40.0 | -22.0 |
| Don't Know | 16 | 40.0 | -24.0 |
| Yes, to some extend | 86 | 40.0 | 46.0 |
| Total | 120 | | |

Test Statistics

| | FeedBack |
|-------------|---------------------|
| Chi-Square | 79.400 ^a |
| df | 2 |
| Asymp. Sig. | .000 |

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 40.0.

Inference

As asymptotic significance is less than 0.05, we reject null hypothesis.

CHAPTER 5 - CONCLUSIONS

5.1 Summary of Findings

The responses of different professionals from different levels were collected from Cybernet Slash support, Coimbatore using the questionnaire with the help of web portal. The data was collected from 120 associates from different domains working in different projects. On recording, summarizing and interpreting the collected data, the following findings were made:

1. CSS has hired qualified professionals and structured the jobs with proper training for employees best fit.
2. The suggestion was taken from the employees and they were assigned to the right project.
3. Most of the employees were occupied in the project, even if were in bench they were provided with proper trainings for their betterment and for the betterment of the company.
4. Based on the criticality of the projects, the employees were asked to work in shifts but they feel that the productivity decreases as they stay late.
5. They can acquire help from their supervisors as when and where required.
6. Employees feel the facilities like late night drops, COE, KM portals helps to deliver the project at right time.
7. Regular appreciations and outing helped them to concentrate and improve their work.
8. The organization does not have minimum training hours for their employees which may affect the long term growth of the organization.
9. About 98% of the employees feel that they are utilized effectively by the organization there by deploying them in the right project that matches their skill.

10. Around 59% of the employees were not deputed for the projects across the locations as it may lead to unavailability of scarce resources for the right project at other locations.

5.2 Suggestions and Recommendations

1. The organization can set the minimum training hours for the long term betterment of their employees
2. Employees can be deputed to the other locations across, as it may reduce the bench time which will increase the utilization ratio of the resources.
3. Organization has to plan the resources to avoid staying late for the projects as it leads to decrease in productivity and quality of the deliverable.

5.3 Conclusion

The study reveals that the “Human Resource Utilization” is really effective and directed towards the objectives. Emphasis is given to the employees at various levels. The employees were focused as the key asset of the organization and they were assigned in a right project that matches their skill. As productivity deals directly with the employees satisfaction in the work that is been done, Cybernet Slash Support provides value added service to the client with the effective and efficient utilization of resources their by considering the betterment of the employees as well. Employees feel that the organization pays a way for their betterment and they feel the service delivered by them is provides a value add to the clients and for the organization.

5.4 Directions for Future Research

Future researches in these areas can be focused on the following aspects which were not deeply analyzed or covered in this study

1. Productive improvement and utilization ratio when they were deputed for projects to other locations
2. Effective resource management when the organization changes its corporate model to factory model.
3. The impact of work stress in the productivity of the resources.
4. The intervention of higher level professionals in motivating and delivering the project at right time.
5. Impact of economic crises in utilization of human resources.

APPENDIX

Copy of Questionnaire

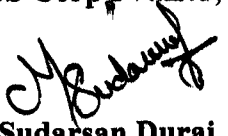
| I have returned to the table and answer against the question below. | | | | | | |
|---|---|---------------------|----------------|--------------|-------------------|--------------------|
| 1.1 | Name(Optional) | | | | | |
| 1.2 | Designation | | | | | |
| 1.3 | Gender | M | F | | | |
| 1.4 | Age | 20-25 years | 25-30 years | 30-35 years | > 35 years | |
| 1.5 | Marital Status | Married | Unmarried | | | |
| 1.6 | Total Experience | < 3 years | 3 - 5 years | 6 - 10 years | > 10 years | |
| I have employed to the scale and answer against the question below. | | | | | | |
| 2.1 | Has firm effectively hire qualified employees | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.2 | Structure jobs and work in a way that enhance business performance | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.3 | Has firm provide employee training that effectively enhance business performance. | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.4 | Has your suggestion been taken while allocating the projects? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.5 | Have you been asked to change your technology? | Yes | No | | | |
| 2.6 | Have you been ever into bench? | Yes | No | | | |
| 2.7 | Have you been asked to undergo training when you are in bench? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.8 | Have you been asked to stay late nights? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.9 | Did you were asked to come in shifts when you handle critical projects? | Yes | No | | | |
| 2.10 | Do you feel that you are productive if you stay late nights? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |

| | | | | | | |
|------|---|---------------------|----------------|------------|-------------------|--------------------|
| 2.11 | Do you feel comfortable if your organization changes its operation from corporate model to factory model? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.12 | Did you get a right project that matches your skill? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.13 | Does the learning's helps you to provide a value added service to the customer? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.14 | Does the firm's performance management and appraisal system effectively reward employee behaviors that are consistent with the firm's competitive strategy? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.15 | I believe that all the divisions in the company interact and work together to achieve a common goal. | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.16 | I feel I am valued at work | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.17 | My skills and abilities are utilized effectively by the company | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.18 | Did you meet the goals set by the organization? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 2.19 | Have you been asked to depute for projects in other locations? | Yes | No | | | |
| 2.20 | Did the company have set its minimum training hours for your betterment? | Yes | No | | | |
| 2.21 | Do you feel the frequent shuttle services will help to complete your work in time? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.22 | Did you feel that your productivity will improve if you were taken out for outing? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.23 | My supervisor is available to me when I have questions or need help | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.24 | Does a good job performed helps to improve customer service? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |

| | | | | | | |
|------|---|---------------------|----------------|------------|-------------------|--------------------|
| 2.25 | The meetings that I have with my co-workers and supervisors help me to get my job done | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.26 | Does a good job appreciation changes the employee's performance? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.27 | Employees are viewed as a key resource of the company? | Strongly Agree | Agree | Disagree | Strongly Disagree | N/a |
| 2.28 | Do the organization facilities like COE; KM portals will have an impact in your performance? | Yes, to some extent | Definitely Yes | Don't Know | Definitely No | No, to some extent |
| 3.1 | If you had an opportunity to make any change to make a better place to work, what one improvement would you make? | | | | | |

Certified that the above questionnaire is valid for data collection at CSS.

For CSS Corp Pvt.Ltd,


M. Sudarsan Durai,
Senior Executive - HR,
Coimbatore.

REFERENCES

Books

1. Donald R. Cooper (2000) *Business Research Methods*, New Delhi, Tata McGraw Hill Publishing Company Limited.
2. Ian Cooke & Paul Mayes (1996) *Introduction to Resource Utilization*, New Delhi, Tata McGraw Hill Publishing Company Limited.
3. Phyllis L. Speser (2006) *Research Techniques*, New Delhi, Pearson Edition.
4. Ranjit Kumar (1999), *Research Methodology*, New Delhi, Sage Publication London.
5. Roger L. Geiger and Creso M. Sá (2009), *Universities and the Promise of Economic Growth*, Simon & Schuster, New York, NY.

Journals

1. M.T. and Ferguson, R. (2005), "Loyalty trends for the twenty-first century", *Journal of Resource Optimization*, Vol. 22 No. 2, pp. 72-80.
2. Calabrese, F.A. (2005), "The early pathways: theory to practice – a continuum", *Creating the Discipline of Resource Management*, pp. 15-20.
3. Georgievski, M. and Sharda, N (2002), "Impact of Human Resource in organization growth", *Journal of Chinese Resource Utilization*, Vol. 20 No. 1, pp. 51-83.
4. Smith, A. (2008), "Human Resource Performance Appraisal System", *Journal of Chinese Resource Utilization*, Vol. 20 No. 1, pp. 51-80.
5. Harvard, F.A. (1994), "Management of Resources", *Growth and Utilization*, Elsevier, pp. 18-45.

Websites

1. <http://www.csscorp.com>
2. www.essaytown.com/
3. www.isis-innovation.com/
4. <http://www.squareloop.com/>
5. www.apctt.org/