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#### PROBLEMS FACED BY WORKING WOMEN IN NATIONALISED BANKS IN KALABURAGI CITY

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#### ABSTRACT

Changes in the family system, dual-earner couples in the family, advancement in the technology, competitive environment among the companies, changes in the working condition etc. has made difficult for employees especially to a working woman to manage their work and non-work aspects. Traditionally, women role restricted to household activities such as cooking; children care, eldercare, etc., but now their role is not confined to the domestic tasks but also undertake paid work. Working women face several problems at home and in the workplace. This research study aims to enlighten the problems of women working in the banking sector in Kalaburagi City. For the study, primary data collected from respondents through the structured dichotomous questions by simple random sampling method, and give some valuable suggestions to overcome from the problems.

#### **KEYWORDS**

family responsibilities, gender discrimination, work-life balance.

**JEL CODES** J10, J16, J19.

#### INTRODUCTION

The consumer of the family. The attitude towards the rural or urban, upper class, middle class or lower-class, capable or incapable women remained the same, i.e. Inferior to the men with no independence.

Raja Ram Mohan Roy, Jyotirao Phule, Savitribai Phule, Tarabai Shinde, Pandita Ramabai, Kamini Roy and many great personalities of India fought for the injustice and inequality against the women. Mahatma Gandhi, a man of foresight, saw patience, endurance, the courage to sacrifice and sufferings qualities in women. The women moved out of the four walls of the house and were encouraged to fight for freedom against the British Raj. Independence brought a new era for women. The legal and judicial Rights in the constitution provided the equal status for women with the men, i.e., Prohibition of child marriage, sathi, protection of women from domestic violence, equal rights for education etc.

The study aims to know the difficulties faced by the working women in nationalised banks, problems at home and to give some valuable suggestion to resolve the problem.

#### WOMEN EMPLOYMENT

Education a significant indicator of the national growth majorly changed the condition of women in all spheres of life and schemes provided by the central and the state government such as Mahilasamridhi yojana, Indira Mahila yojana, training of rural youth for self-employment, hostels for working women, swa shakti group, integrated child protection scheme, Bhagya Laxmi scheme, Beti Bacho Beti padhao etc., boosted the status of women.

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	Year	<b>Rural Female</b>	Urban Female			
	1951	4.87	22.33			
	1961	10.10	40.50			
	1971	15.50	48.80			
	1981	21.70	56.30			
	1991	30.17	64.05			
	2001	46.70	73.20			
	2011	57.93	79.11			

#### TABLE 1: TRENDS OF LITERACY RATE IN INDIA

#### Source: Ministry of Statistics and Programme Implementation (Women and Men in India)

Increase in the rate of literacy could not break the stereotype in the initial year of post-independence. Women taking up the job, using her income were not accepted by the in-laws or the parents, which affected the male ego and family prestige. However, now the attitude of in-laws and parents towards women has changed. Women earning is necessary to live a good life. Due to an increase in the family expense, i.e. rate of house, medicine price, good education to children, a utility bill etc. is not possible only by the primary breadwinner. Women willing or unwilling join the workforce to meet the needs of self, family and others as a support system of the family. The minds set towards the women have not changed, i.e. primary responsibility of the family and household activities lies on the shoulder of the wife. The Liberalization, Privatization and Globalization (LPG) in India brought changes in the function of domestic tasks viz performing domestic chores with the help of modern appliances. Working women play many roles and need to balance work and life. The problems of working women differ from married and unmarried women, joint family, extended family and nuclear family, orthodox and unorthodox family, working in the agricultural sector, industrial area or service sector. According to the World Bank 2019 data, the female employment in the primary sector is 57 %, secondary sector 19% and tertiary sector 25

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%. Complexity and lack of availability of skilled labour in the service sector have constituted a lower rate of employment. However, employment in the service sector is low as compared to agriculture and industry sector, but the service sector constitutes 68.8 % in the Gross Domestic Product (GDP) as the highest contributor.

#### TABLE 2: REAL GROSS VALUE ADDED (GVA) GROWTH

Components of the service sector	GVA		
	Contribution to growth (percentag		
	2011-14	2014-19	
Construction	9.0	6.5	
Trade, hotels, transport, communication, and services related to broadcasting	24.0	21.4	
Financial, real estate and professional services	28.8	25.7	
Public administration, defense and other services	11.7	15.2	

Source: RBI Annual report 2018-19

Finance the highest contributor in Gross Domestic Product (GDP) in the service sector. Finance means the provision of money as, and when required, The Indian financial system consists of financial institutions, financial markets, financial instruments and financial services. In the financial system, banks are the oldest financial Intermediaries. The banking sector is the lifeline of the modern economy. It is one of the essential financial pillars of the financial system, which plays a vital role in the success or failure of the economy. Banks mobilise the deposits and disbursement of credit to various sectors of the economy. A country with a well-developed banking system grows at a faster rate than that of the weaker ones. The strength of the economy of the country hinges on the strength and efficiency of the financial system, which in turn depends on the sound and solvent banking system. A sound banking system efficiently deploys mobilised savings in productive sectors and a solvent banking system ensures the bank is capable of meeting the obligation to the depositors. The banking system is dominant in India as it accounts for more than half the assets of the financial sector.

In 1969, the government of India nationalised 14 banks to improve the credit flow of banks not only to industry but also to the rural areas. In 1980, another six banks were nationalised with a deposit of Rs 200 crore and above with the objective of adequate credit to agriculture, small scale units, encouraging new class of entrepreneurs and balanced economic growth.

TABLE 3: GROWTH OF BANKING IN INDIA	OF SCHEDULED COMMERCIAI	BANKS SINCE NATIONALISATION

	YEAR					
INDICATORS	1969	1991	2005	2009	2013	
No. of commercial banks	73	272	284	166	151	
No of branches	8262	60570	70373	82897	109811	
Population per branch	64000	14000	16000	15000	12000	
Per capita deposit	Rs 88	Rs 2368	Rs 16281	Rs 33919	Rs56380	
Per capita credit	Rs 68	Rs 1434	Rs 10752	Rs 24617	Rs 44028	

The banking sector is growing steadily. The banking services are provided in remote and rural areas to meet the needs of the customer. Secured family life, attractive salary, working conditions, stability in the work attracted women participation in the banks. Working women perform work roles and non-work roles with some difficulties.

Year	Officers	Clerks	Subordinates	Total
2009-10	50,507 (32.93)	86,351 (56.30)	16,525 (10.77)	153,383 (100.00)
2010-11	67,958 (36.38)	100,999 (54.07)	17,827 (9.54)	186,784 (100.00)
2011-12	84,375 (39.10)	107,826 (50.08)	23,1134 (10.73)	215,314 (100.00)
2012-13	95,507 (40.96)	115,233 (49.42)	22,436 (9.62)	233,716 (100.00)
2013-14	129,345 (46.56)	125,795 (45.28)	22,652 (8.15)	277,792 (100.00)
2014-15	157017 (56.10)	98505 (35.19)	24377 (8.71)	279,898 (100.00)

Source: Basic Statistical Returns of Scheduled commercial banks in India 2009-2015.

#### **OBJECTIVES OF THE PAPER**

- 1. To know the problems faced by working women at the workplace
- 2. To understand the issues faced at home by a working women
- 3. To suggest to overcome the problems.

#### **RESEARCH METHODOLOGY**

The data collected randomly from the employees working in several positions of Canara Bank, SBI, Syndicate Bank, Corporation Bank, Vijay Bank, Indian Overseas Bank, Bank of Baroda and Andhra Bank. Data collected from 50 willing respondents by filling the dichotomous questions. The primary data results analysed by percentage method and as a secondary source referred to various articles from websites, journals, newspaper.

#### DATA ANALYSIS

TABLE 5: WOR	K DOMAIN OF	WORKING	WOMEN
TADLE J. WON		WORKING.	VUOIVILIN

Variables	No. of res	Percentage			
Salary	Yes	19	38		
	No	31	62		
Gender Discrimination	Yes	4	8		
	No	46	92		
Comfortable working with male colleagues	Yes	50	100		
	No	0	0		
Promotion and Transfer	Yes	28	56		
	No	22	44		
Sufficient Leave	Yes	39	78		
	No	11	22		
Work-Life Balance	Yes	37	74		
	No	13	26		



According to table 5, 38 % of the respondents think salary is provided up to work whereas 62% of the respondents do not feel their salary is up to work, i.e. more work is performed by them, and less salary is provided. 8% of the respondents faced gender discrimination at their workplace, and the remaining 92% of the respondents do not feel there is an existence of gender discrimination at the workplace. All the respondents are comfortable working with their male colleagues. 56 % of the respondents are flexible with the promotion and transfer policy and 44 % of the respondents are not flexible with the policy. 78 % of the respondents feel that the leave facility provided by the banks is sufficient to meet their personal requirements, whereas 22 % of the respondents do not meet their personal requirements. 74 % of the respondents can balance their work and life and 26 % of the respondents do not have a good work-life balance due to the initial stage of career, the new motherhood role and workload at the workplace.

TABLE 6: NON- WORK DOMAIN OF WORKING WOMEN

Variables	No. of responden		Percentage
Family Responsibility	Yes	45	90
	No	5	10
Criticised by the family members for not meeting family duties	Yes	20	40
	No	30	60
Restriction from the family members to go alone	Yes	29	58
	No	21	42
Salary Management	Yourself	41	82
	Family	9	18



According to table 6, 90% of the respondent's family shares their family responsibility with the working women, and the remaining 10 % of family members do not share the family responsibility with her. 40 % of the respondent's family criticised for not meeting family responsibilities, whereas 60 % of the respondents family members do not criticise for not fulfilling family responsibilities. 58 % respondent's family restrict to go alone except workplace and 42% of the respondents family members do not constraint to go alone. 82 % of the respondents manage the salary by themselves and do not hand over their salary to family members. They manage their salary for personal use and meet household expenses, whereas 18% of the respondent's salary is managed by their family, which is a sign of non-economic independence.

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TABLE 7: ALLOCATION OF TIME OF WORKING WOMEN					
Variables No. of respondents Percer			Percentage		
Marital Status	Married	37	74		
	Unmarried	13	26		
Earn more than husband	Yes	15	41		
	No	22	59		
Spend Sufficient time with the children	Yes	25	68		
	No	12	32		
Irritation and frustration to meet dual responsibility	Always	4	8		
	Sometimes	40	80		
	Never	6	12		
Self-time	Yes	32	64		
	No	18	36		



According to table 7, 74% of the respondents are married, and 26% of the respondents are unmarried. 41 % of the respondents earn more than their husband, and 59 % of the respondent's salary is less than their husband. 68 % of working mothers have much time to concentrate on the children and their education, which makes a good bond, whereas 32 % of the respondents do not have enough time to meet the children requirements. 8 % of the respondents always feel frustrated and irritated because of multiple responsibilities, 80 % of the respondents feel irritated and frustrated sometimes due to responsibilities at work, and home and 12 % of the respondents never feel irritated and frustrated of their dual duties. 64 % of the respondents spend time with themselves, but whereas 36 % of the respondents do not have enough time to spend with self.

#### FINDINGS

The present study found that women working in the nationalised banks in Kalaburgi City face a difficult situation in work and non-work aspects. Gender discrimination means inequality of rights, opportunities and obligations based on gender; women contribution is recognised by their fellow worker by comforting her in discharging the work duties. On average women spends more than working hours in performing abundance of paid work for a non-satisfactory salary. Engaging the work activities far away from the native place hurdles to carry out the family responsibilities, less engagement with the children. A seesaw between the work tasks and family tasks is a cause for frustration and irritation; involves less time for self which is a sign of work-life imbalance.

#### SUGGESTIONS

Based on the research study findings and researcher observation, researcher offer some of the suggestion to resolve the working women problems in banking sector.

- A Supportive husband and family members to undertake work and other duties smoothly.
- Recruiting the more number of workers in the bank reduces their work burden, finish the work on time and spend time with children and other activities.
- Familiarising the working environment, women roles and responsibility at work and home to the family members.
- By empowering the women leads to the development of self (women), family and country.
- Transfer the employees by considering the accessibility to the domicile.
- Engaging in recreational activities help to fight against irritation and frustration.
- Engage the employee and family members in a work-life programme organised by the banks

#### CONCLUSION

A woman plays a vital role in this dynamic world; she has to play many roles in her life. Working women have a responsibility towards her profession and personal life; she has to manage her work and life. Empower the women in justifying her roles and her contribution in an organisation as well as in the family; there is a need to change the attitude of a family member and also the organisation to discharge her duties successfully.

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## A REVIEW OF CERTIFICATION AS A TOOL FOR EMPLOYEE DEVELOPMENT

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#### ABSTRACT

The telecom technology has evolved significantly over the last decade. In fact, over the last few years several path breaking innovations have changed the face and architecture of the telecommunication industry. In an age of unprecedented business and economic turmoil an organization's ability to sustain and consolidate will depend on creating a harmony among its intellectual and capital assets. The telecom environment calls for increased agility of its manpower to rapidly adapt to the changing technological landscape. In this scenario, certification of employees has renewed importance and demonstrates expertise within job roles. Certification process helps in identifying the knowledge gaps and provides an objective validation of an individual's competencies. It enables individuals to move step up their productivity, move up the corporate ladder faster while positively impacting network performance and quality. This paper empirically links the certification process to enhanced competency development of the employees through primary research data garnered over a period of two years localized to the telecom industry.

#### **KEYWORDS**

KSA, competency development, organizational learning, employee certification, knowledge gaps.

## JEL CODE

M53

#### **1.0 INTRODUCTION**

Ibbalization of the telecommunications industry is driving the need for set of quality requirements synonymous with reduced costs, improved performance and enhanced customer satisfaction. This study is based on the data garnered from a leading Indian integrated Telecom Company with over 160 million subscribers and a Pan-India, high-capacity, integrated (wireless and wireline), convergent (voice, data and video) digital network offering services spanning the entire communication value chain.

The modern day telecom network is a convergence ready broadband network, spread over large geographical area through terrestrial, submarine and satellite links, with a scalable and restorable global NGN footprint, MPLS enabled CORE data network, certified MEN network, integrated BSS-OSS to support complex suite of services with end-to-end connectivity provided over fiber.

The network group is responsible with planning, deployment, monitoring and maintenance of overall telecom network. The primary network functions include Planning & Engineering, Installation & Commissioning, Provisioning & Fault Management, Operation, Maintenance, Performance & Administration (OMAP), Quality and other Support functions. The Learning Center (LC), an ISO 9001:2008 certified entity was established in the year 2002. Over the past ten years, LC has trained & certified more than 56,000 employees through instructor led trainings as well as distance learning programs. In addition, over 61,000 employees were certified using proprietary self-learning methodologies. The LC portfolio comprises of over 220 Instructor Led Training (ILT) courses and 92 Self Learning Modules (SLM) on cutting edge telecom equipment, technologies and services covering all telecom layers. The LC lead trainers (Subject Matter Experts – SME) are functionally aligned to the domain experts. Learning & Development function ensures the readiness of the organizational manpower to quickly adapt to the technological advancements and maintaining high quality standards as per the business requirements.

#### **2.0 RESEARCH PROBLEM**

As networks continue to evolve, the demand for professionals who have the skills and training needed to manage and maintain converged technologies continues to grow. As a result, matching the right talent with the right jobs will be more important than ever and increasingly more difficult.

The Shortage of talent in the telecom domain is one of the main impediments for further growth and development in this sector. The Indian economy grew more than 8% on average over the past 5 years, including the year of the unprecedented financial crisis in 2009. The quantitative expansion is widely perceived to have led to an average decline in the quality engineers, the challenge is to create an internal knowledge pool through certification.

The Indian telecom sector is witnessing great competition among public sector enterprises like MTNL and BSNL and private sector players including Airtel, Aircel, Idea, MTS, Reliance, Tata, Vodafone Videocon and Uninor. With more and more players entering the industry, the competition in the industry in terms of attracting and retaining the talent is also increasing. The key problems that form the basis of this research study can be summarized as under:

- The telecom sector has a huge demand for certified engineers
- With Attrition rates of 25 to 30 percent, the biggest challenge for organizations is to create a competent technical manpower pool to take care of the current
  and future network requirements

#### **3.0 LITERATURE SURVEY**

The literature survey focuses on works relevant to organizational learning. The major works listed in this section are the ones that have influenced the LC training and certification model. The research work titled 'How Much Do High-Performance Work Practices Matter? A Meta-Analysis of their Effects on Organizational Performance' includes data from a survey of more than 19,000 organizations and establishes the linkage between organizational learning and organizational performance. The impact of vertical alignment of HR practices and their support to strategic business objectives and work context were enumerated as a part of the study. The employee (especially fresh recruits) engagement activities, like mentoring, initiated by the LC are in consonance with the above studies (Combs, 2006).

#### SKILL SHORTAGE IN FRESH ENGINEERING GRADUATES

Skill shortage remains one of the major constraints to continued growth of the Indian economy. This employer survey seeks to address this knowledge-gap by answering three questions (Blom Andreas, Saeki Hiroshi, 2011)

- Which skills do employers consider important when hiring new engineering graduates?
- How satisfied are employers with the skills of engineering graduates?
- In which important skills are the engineers falling short?

The results confirm the widespread dissatisfaction with the current engineering graduates—64 percent of employers not satisfied with the quality of the new hires. The factor analysis of the data collected reveals that employers perceive Soft Skills (Core Employability Skills and Communication Skills) to be very important. Skill gaps are particularly severe in the higher-order thinking skills ranked according to Bloom's taxonomy. In contrast, communication in English has the smallest skill gap, but remains one of the most in-demand skills by the employers. Although employers across India require the same set of soft skills, the demand for professional skills differ greatly based on economic sectors, geographic regions and organizational size. The key recommendations of the survey for engineering education institutions are as listed below:

#### Improve technology skill sets of graduate engineers

- Provide soft skill training to students
- Refocus the assessments, teaching-learning process, and curricula away from lower-order thinking skills, such as remembering and understanding, toward higher-order skills, such as analyzing and solving engineering problems, as well as creativity
- Interact more with employers to understand the particular demand for skills in that region and sector

Providing the future engineers with a comprehensive set of industry recognized skill sets would improve their employability and ultimately the development of the nation. Large economic sectors, such as IT, infrastructure, power and water, rely critically upon engineering skills and technologies. This survey provides new insights on specific skills that are important for employers and highlights areas where the graduates currently fall short. The three main considerations with respect to the education of budding engineering graduates include:

- The quality improvements in education lie squarely within the scope of pedagogy, education policy and education management
- The engineers evaluated by employers should be seen as the end product of the entire education system, not just engineering education. The engineering colleges receive graduates from the secondary education system with a set of skills upon which they add. In particular, the Soft Skills are influenced by a prior schooling and the family setting

#### Learning Theories (Chetley and Vincent, 2003)

There are usually three models of learning described in the literature – acquisitive, constructivist and experiential. The acquisitive model describes a process of acquiring knowledge and skills, to add to existing knowledge in order to achieve a goal. This model emphasizes the achievement of desired outputs, with little attention to the role of the learner. The constructivist model explores the process of developing one's existing structure of knowledge. Its primary focus is on learning as changing one's understanding and is seen as a product of the relationship between what the learner already knows and can do, what the learner thinks the topic is about and what it will take to learn it, and what the trainers, teachers or facilitators do, the learning tasks they set and how these are interpreted by the learners. The experiential model sees learning as a process – one through which any experience is transformed and where learning is seen as the production of knowledge through the reflection upon and transformation of experience. There is considerable support for the use of the experiential model as the most effective approach to use with adult learners.

Learning theories, focusing on the process, can in general be classified in to four different orientations – the behaviorist, the cognitive, the humanistic and the social/situational.

#### **ORGANIZATIONAL LEARNING THEORIES**

The intimate relationship between learning and working life is one that does not easily lend itself to analysis partly, because it is embedded in the dynamics of our human engagement with the challenges of living and working. No one single perspective in current learning theory is sufficient to capture fully the multiple connections and possibilities that learning creates and from which it emerges (Antonacopoulou, 2006). Argyris and Schön in their important book in 1978 made the distinction between organizations with and without the capacity to engage insignificant learning (Easterby-Smith and Lyles, 2003). Numerous theories are proposed by authors, each one focusing on a precise element of the phenomenon: the learning object (information, knowledge, competencies), the learning subject (individual, organization), the learning trigger (error, innovation, environment change) or on the process itself (socialization, codification) (Fillol, 2006). **ORGANIZATIONAL LEARNING** 

Hau (2005) recognized that the term Organizational Learning has been defined from three different views. The first view emphasizes organizational learning as a process. Authors of this group view learning as cognition or information processing. They offer definitions such as: organizational learning is the development of insights, knowledge and associations between past actions, the effectiveness of those actions, and the future actions. In contrast, the second group emphasizes the outcomes of organizational learning i.e. change of behavior, improvement of organizational effectiveness. For example, organizational learning was defined as increasing an organization's capacity to take effective action and as a change in the behavior of individuals or groups within an organization, leading to changes in the behavior of the organization itself. The third group integrates both views by offering definitions that link the learning process and it outcomes. Tsang (1999) noted that "at the moment definitions are as many as there are writers on the subject".

#### KOLB LEARNING CYCLE

In 1984 David Kolb developed a four stage model of how individuals learn from experience which involves doing, reflecting, connecting and testing in a continuous cycle (see Figure 2.2). In this model, learning starts by taking action, then reflecting on the outcomes of the action, making connections with what we already know and understand and then testing those connections and new ideas through further action. The doing and reflecting stages of the cycle belong more to the concrete real world whereas connecting and testing are more abstract. The doing and testing stages are more action oriented whereas the reflecting and connecting stages are more reflective in nature. The learning cycle model underpins the concept of individual 'learning styles': the idea that each person has preferences for one or more stages in the learning cycle.



#### FIGURE 1: KOLB LEARNING CYCLE

## Source: Adapted from Britton, 2002

#### INTERACTION Vs. INFORMATION PERSPECTIVE

Seen from an Information Perspective the organization consists of information systems and decision-making systems and has roots back to the so-called behavioral theories of the 1960s. In other words, the organization is seen as a system with its own principles and regulation mechanisms. The individual only constitutes a small part because it is systems, structures and procedures that are in focus. It is the organization's formal system or frames for learning that is in focus, while the Interaction Perspective is more concerned with the organization's informal system or learning environment and a certain kind of behavior. Both these approaches

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are necessary to explain the Learning Organization. A Learning Organization embodies both frames for learning in the organization's formal system (structure, IT and management systems) and a culture and behavior in the organization's informal system (a learning environment characterized by reflection and knowledge sharing (Thomsen and Hoest, 1999).

#### Pedler et al's MODEL OF THE LEARNING ORGANISATION

The model proposed by Pedler et al in 1991 has the following elements of management incorporated to support learning (Birdthistle, 2006): (1) A learning approach to strategy (2) Participative Policy Making (3) Informating (4) Formative accounting and control (5) Internal exchange (6) Reward Flexibility (7) Enabling structures (8) Boundary workers as environmental scanners (9) Inter-company learning (10) Learning climate and (11) Self-development opportunities for all. This model of Learning Organization as presented in figure 2.11 provides comprehensive aspects of learning at all organizational levels.

#### INDIVIDUALS AS LEARNING ENTITY IN AN ORGANIZATION

The concept that organizational learning as the sum of learning of individuals is suggested by some authors as pointed out by Huys & Hootegem (2001). Pralahad, for instance, felt that much of corporate downsizing represents a lost opportunity in that what the older employees have learned disappears. But an organization that is so heavily dependent on what its individuals have learned is typically characteristic of a lack of learning at the organizational level (Huys & Hootegem, 2001). According to Simon (1991) "All learning takes place inside individual human heads".

#### **4.0 CERTIFICATION METHODS**

Certifications are globally accepted means of establishing as well as assessing the essential set of credentials required for a job. They provide organizations with compelling evidence of the competence of its employees to perform the tasks assigned (or could be assigned in future). They also provide the management with an internationally accepted benchmark against which both current and prospective employees can be assessed.

In order to foster a culture of continuous learning through a series of learning initiatives, the employees depending upon their band, role, function and sub-function are required to attend a set of pre-determined Certification Programs. In addition, employees also have to do self-learning – both voluntary and mandatory by taking up self-learning modules and getting themselves certified through objective validation tests administered online through pre-determined windows. Employees are provided with e-certificates after successfully passing the validation exams. Credits obtained through voluntary self-learning are also considered when an employee wishes a role change (once in 2 years). The certification process is illustrated in the figure 2.



#### **4.1 CERTIFICATION OF FRESH ENGINEERS**

The certification program is conducted by LC trainers to provide the recruits with insights to design, develop and maintain modern day telecom networks. The eight week Certification program presents an opportunity to imbibe skills required for their job function and prepares them for new role by providing training, tools and knowledge required to successfully integrate with the job and organizations. The certification program helps in developing:

- Technology, Concepts & its practical application within the Network
- Understanding of the modern day telecom network architecture, products and their functionalities
- Trainings on soft skills to enhance communication skills, time management skills, team building & interpersonal skills
- Exposure to integrated technology labs for equipment and management systems hands-on practice
- Troubleshooting & problem solving skills on live network
- Network Provisioning and O&M skills for Fault surveillance and performance management of live telecom networks
- Understanding ground realities through field visits

On successful completion they are certified to be placed on the Network roles with clear-cut KRA's and deliverables with further certifications timeline. 4.2 CERTIFICATION PROCESS

- The certification process is mandatory for all fresh graduates irrespective of their function and location
- The certification exams would be administered online
- There are total of 12 certification exams to be completed by fresh graduates
- Six certification exams will be administered during the course of the induction Program
- The balance six certification exams have to be completed within six months of joining the organization as per pre-notified certification windows
- Employees securing 80% and above in the exam are issued e-certificates
- The maximum number of attempts per certification exam is limited to three

#### 4.3 SLM BASED CERTIFICATION

Self Learning Modules (SLMs) are learning solutions designed for participants to facilitate anywhere, anytime and on demand learning. SLMs are animated audiovideo presentations that offer a flexible learning option to employees. SLM duration is typically between 30 minutes to 60 minutes and are based on generic topics ranging from technology or product overview to specialized topics including Operation & Maintenance of telecom equipments, demonstration of maintenance activities etc. An advanced version of an SLM, Interactive SLM (i.SLM) simulates live scenarios thereby offering real time experience to the learners. These modules help an employee optimize their time spent in learning and contribute to improved productivity and operating efficiency.

SLMs were introduced in the year 2008 to provide fast track learning opportunities and 100% certification of engineers working in the field. A set of authoring tools were used to introduce required animations, relevant video clips and other documents into the presentations. Concepts and information are conveyed using simple audio visual explanation and even using vernacular languages. The benefits of these innovations were further extended to various other groups of employees of the network.

- "Must know technical know-how" is passed on as a set of procedure to follow
- It is available to participants before he/she attends formal training
- It can be referred any time after the training
- Faster deployment as compared to conventional classroom training, which has limited seats to accommodate at given point of time
- Provides the ability to control the learning pace to suit the convenience and capabilities of the learners
- Interactive SLMs (*i*SLM) help simulate the on-field network conditions
- Improved understanding of core concepts and the consequent positive impact on network performance
- It reduces queue time (conventional classroom) for learning

SLMs improve the understanding of core concepts while simplifying the efforts to assimilate complex topics. Self-Learning can be done by an employee at their convenience. It helps them prepare for subsequent in-class discussions, improves understanding and retention. The benefit summary is as enumerated below: LC prepares SLMs nearly on all telecom domains. On one hand, these SLMs serves as a pre-requisite material or a supplement to the main course, whereas, on the other hand SLMs are complete learning capsules in itself. Employees undergo training on SLM to draw level with the advancements in technology and equipment. SLMs can be played repetitively to learn the subject thoroughly, which sometime is not possible in conventional classroom training (Sreenivasam Ram; Sudhir Warier; L.R.K Krishnan, 2012)

#### **5.0 RESEARCH METHODOLOGY**

This section outlines the methodology adopted for this research.

#### **5.1 RESEARCH OBJECTIVES**

- 1. The primary objective of this research is to validate the efficacy of the Certification model in the telecom service industry
- 2. To evaluate the impact of certifications on employee productivity and performance

#### **5.2 HYPOTHESIS**

H1: The certification model has a positive impact on employee performance and productivity

H2: The certification process has enhanced the knowledge & skills of the engineers and contributed to the competency development of the technical manpower in the Network function

#### **5.3 SAMPLING DESIGN**

A stratified random sampling technique was adopted for the purpose of this study. The study included the analysis of the recruitment of graduate engineers during the period 2009-2011. The performance of the recruits during the period 2009-2011 was also collected to analyze the efficacy of the Certification model. A sample size of 52 was used for this study.

#### **5.4 DATA COLLECTION**

This paper is based on primary research data collected. The paper analyzes the performance of 52 engineers who were certified in the year 2010-2012. The employee performance was captured from the online Employee Performance Management System (PMS) and validation scores were obtained from the LC MIS. **5.5 DATA ANALYSIS, INTERPRETATION AND HYPOTHESIS TESTING** 

Data analysis has multiple facets and approaches, encompassing diverse techniques various domains including business, science and social sciences. Initially a missing data analysis was performed on the data collected.

TABLE 1. MISSING DATA ANALISIS									
	Ν	Mean	Std. Deviation	Missing		Missing N		No. of E	xtremes <sup>a</sup>
				Count	Percent	Low	High		
F1	50	72.20	14.076	0	.0	0	0		
F2	50	97.62	5.959	0	.0				
F3	32	66.87	14.013	18	36.0	0	0		
F4	41	67.80	17.820	9	18.0	0	0		

TABLE 1: MISSING DATA ANALYSIS

Interpretation: Missing analysis test was performed on the tabulated data. The missing performance data was automatically imputed using the SPSS algorithm in order to increase the statistical validity, as indicated in table 2.

TABLE 2: MISSING DATA DISCOVERY AND COMPUTATION

	RESULT VARIABLES											
	Result Variable	N of Replaced Missing Values	Case Number of N	on-Missing Values	N of Valid Cases	<b>Creating Function</b>						
			First	Last								
1	F1_1	0	1	50	50	SMEAN (F1)						
2	F2_1	0	1	50	50	SMEAN (F2)						
3	F3_1	18	1	50	50	SMEAN (F3)						
4	F4_1	9	1	50	50	SMEAN (F4)						

The descriptive data for the new values are provided in table 3.

	Ν	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
SMEAN(F1)	50	56.0	44.0	100.0	72.200	14.0756	198.122	474	.337	348	.662
SMEAN(F2)	50	17.0	83.0	100.0	97.620	5.9587	35.506	-2.140	.337	2.684	.662
SMEAN(F3)	50	60.0	40.0	100.0	66.875	11.1461	124.235	.738	.337	2.428	.662
SMEAN(F4)	50	60.0	40.0	100.0	67.805	16.1007	259.233	.505	.337	.141	.662
Valid N (listwise)	50										

TABLE 3. DESCRIPTIVE STATISTICS

Interpretation: Descriptive statistics provides summaries about the sample and about the observations that have been made including measures of central tendency (mean, median, and mode), measures of dispersion (range, standard deviation, variance, minimum and maximum), measures of kurtosis and skewness. Analysis of above data shows that the distribution is asymmetrical and hence non gaussian. This is verified by the running the KS Normality tests as indicated in Table 4.

			Statistic	Std. Error
	Mean		72.200	1.9906
	05% Confidence Interval for Mean	Lower Bound	68.200	
	55% confidence interval for Mean	Upper Bound	76.200	
	5% Trimmed Mean		72.489	
	Median		75.000	
	Variance		198.122	
Validation	Std. Deviation		14.0756	
	Minimum		44.0	
	Maximum		100.0	
	Range		56.0	
	Interquartile Range		17.0	
	Skewness		474	.337
Kurtosis				.662
	Mean		97.620	.8427
	OF% Confidence Interval for Mean	Lower Bound	95.927	
	95% Confidence Interval for Mean	Upper Bound	99.313	
	5% Trimmed Mean		98.300	
	Median		100.000	
	Variance		35.506	
Feedback	Std. Deviation	5.9587		
	Minimum	83.0		
	Maximum	100.0		
	Range	17.0		
	Interquartile Range	.0		
	Skewness	-2.140	.337	
	Kurtosis		2.684	.662
	Mean		66.8750	.08015
	OF% Confidence Interval for Mean	Lower Bound	66.7139	
	95% Confidence interval for Mean	Upper Bound	67.0361	
	5% Trimmed Mean		66.9335	
	Median		66.8750	
	Variance		.321	
PMS	Std. Deviation	.56675		
	Minimum	65.38		
	Maximum	67.32		
	Range		1.95	
	Interquartile Range		.52	
	Skewness		-1.759	.337
	Kurtosis		2.656	.662

#### TABLE 4: KS NORMALITY TEST

TESTS OF NORMALITY										
	Kolmogor	Shapiro-Wilk								
	Statistic	df	Sig.	Statistic	df	Sig.				
Validation	.123	50	.058	.951	50	.039				
Feedback	.515	50	.000	.412	50	.000				
PMS	.257	50	.000	.701	50	.000				

a. Lilliefors Significance Correction

The normality test for the data collected (Table 4), whose graphical interpretation is provided in figures 2,3 & 4, confirm that the distribution is non Gaussian. Non parametric test is employed for hypothesis testing.

FIGURE 3: NORMAL Q-Q PLOT OF VALIDATION



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FIGURE 4: NORMAL Q-Q PLOT OF FEEDBACK



Co-relational analysis was performed in order to understand the relationship between the primary research variables. The Spearman's co-relation coefficient is computed since the distribution is non Gaussian. The Co-efficient matrix for the certification, PMS and training feedback data is provided in table 5.

TABLE 5: THE SPEARMAN'S CO-RELATION MATRIX -CORRELATIONS										
	Correlations									
	Validation Feedback PMS									
		<b>Correlation Coefficient</b>	1.000	.102	.142					
	Validation	Sig. (2-tailed)		.480	.325					
		Ν	50	50	50					
	ho Feedback	<b>Correlation Coefficient</b>	.102	1.000	230					
Spearman's rho		Sig. (2-tailed)	.480		.108					
		Ν	50	50	50					
		<b>Correlation Coefficient</b>	.142	230	1.000					
	PMS	Sig. (2-tailed)	.325	.108						
		Ν	50	50	50					

It is evident from table 5 that there is a positive co-relation between organizational learning, employee certification and On-the-job improvement. It can thus be inferred that employee certification improves organizational learning and contributes to the competency development of its employees.

#### HYPOTHESIS TESTING

#### HYPOTHESIS - 1

The hypothesis testing was done using Wilcoxon Signed Ranks Test. The Wilcoxon signed-rank test is a non-parametric statistical hypothesis test used when comparing two related samples, matched samples, or repeated measurements on a single sample to assess whether their populations mean ranks differ. The result of the test is provided in table 6. It may be noted that the p value for PMS – Validation is < 0.05. This rejects the null hypothesis.

The current market conditions dictate that organizations provide the highest level of quality across all aspects of their businesses. Certification leads to increase in product and service quality and standardization, competitive advantage in the market along with employee growth and satisfaction. It also leads to employee growth and development, standardization of product and services, increase service quality, customer satisfaction and sustainable competitive advantage. Research studies have proven that s employees who receive customized on- the- job-training make fewer errors in the workplace. Countless studies show organizations that invest in "human capital development" have much more favorable business results than those that do not (Combs, 2006).

It can thus be conclusively established that the Certification Model has a positive impact on employee performance and productivity.

#### **HYPOTHESIS - 2**

It is evident from the results in table 5 that there is a positive co-relation between organizational learning, employee certification and On-the-job improvement. Hypothesis testing was done using Wicoxon Signed Ranks Test. The value of p (PMS-Feedback) is < 0.05. The null hypothesis is thus rejected. **Employee certification improves organizational learning and contributes to the competency development of its employees**.

TABLE 6. WILCONON SIGNED RANKS TEST								
Ranks								
		Ν	Mean Rank	Sum of Ranks				
	Negative Ranks	37ª	24.73	915.00				
DMC Validation	Positive Ranks	13 <sup>b</sup>	27.69	360.00				
PIVIS - Validation	Ties	0 <sup>c</sup>						
	Total	50						
	Negative Ranks	50 <sup>d</sup>	25.50	1275.00				
DMS Foodback	Positive Ranks	0 <sup>e</sup>	.00	.00				
PIVIS - PEEUDACK	Ties	0 <sup>f</sup>						
	Total	50						

#### TABLE 6: WILCOXON SIGNED RANKS TEST

#### TABLE 7: WILCOXON SIGNED RANKS TEST

Test Statistics <sup>a</sup>							
PMS - Validation PMS - Feedbac							
Z	-2.679 <sup>b</sup>	-6.188 <sup>b</sup>					
Asymp. Sig. (2-tailed)	.007	.000					

#### CONCLUSION

Certifications are globally accepted means of establishing as well as assessing the essential set of credentials required for a job. They provide organizations with compelling evidence of the competence of its employees to perform the tasks assigned (or could be assigned in future). They also provide the management with an internationally accepted benchmark against which both current and prospective employees can be assessed.

Certification leads to enhanced productivity and enables employees to move up the corporate ladder faster. Additionally, in a telecom environment certification results in competency development of employees which in turn leads to enhanced network performance due to reduced downtime & mean time to repair (MTTR) and enhanced network and customer quality. An internal certification culture will enable the creation of a pool of competent employees within the organization, reduced dependencies on external support and hence lower recruitment costs. The LC Certification Framework has enhanced competency development of the employees within the network group and positively impacted network performance.

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## A STUDY ON THE EFFECTIVENESS OF VIRTUAL TEACHING-LEARNING PRACTICE AMONG ENGINEERING STUDENTS

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#### ABSTRACT

Virtual learning is a learning experience that is enhanced by using computers and the internet both outside and inside the facilities of the educational organization. The main objective of the study is to identify the virtual teaching-learning dimensions and its impact on students' satisfaction. The researchers used reliability analysis, multiple regressions and factor analysis for data analysis. The scope of the study is confined only to the students' perception about online teaching learning process exercised by faculty members during the lock down period owing to the wake of COVID 19 across the country. This study was conducted from the end of March 2020 to April 2020. This study identified five dimensions of virtual teaching learning practices. They were: Course Delivery, Course Content, Fairness in Evaluation, Faculty-Student Interaction and Responsiveness. This study found that Course Delivery, Course Content, Faculty-Student Interaction and Responsiveness have significant influence on students' satisfaction. This study finding would help the policy makers to formulate suitable policies relating to Virtual teaching learning practices.

#### **KEYWORDS**

virtual teaching, virtual learning, course delivery, students' satisfaction.

JEL CODES

D83, I20.

#### INTRODUCTION

The rapid development of Information Technology, Internet and Web resources have brought significant changes in the quality of teaching and teaching learning process. Virtual learning is a learning experience that is enhanced by using computers and the internet both outside and inside the facilities of the educational organization. The teaching activities are carried out online whereby the teacher and learners are physically separated. Further, this method enables the faculty and students' flexibility in terms of choosing convenient time and place. Most of the educational institutions have started to engage their students through virtual learning methods with the support of their faculty members during the lock down period owing to the wake of COVID 19 across the country. This virtual learning method is not something new for many academic institutions especially in foreign countries. However, these virtual teaching methods were analysed and highly criticised by several researchers. It generally lacks the direct interaction between the teacher and the students. Technology plays an influential part in our everyday lives (Contact North, 2012), transforming various aspects of human life including the way that we learn. (Prensky, 2010). Several studies have been conducted with regard to students' satisfaction in different countries like Australia, the UK, Ireland, Italy, Malyasia, Portugal, Romania, Spain and UAE. (Alves and Raposot 2007; Campana et.al., 2016; Fernandes et.al., 2013; Lai et.al., 2015). Several studies have examined factors that affect student satisfaction in Colleges. (Arambewela et.al., 2005; Forrester, 2006; Mai 2005; Mavondo et.al., 2004). As many studies were conducted only in foreign countries, the researchers intended to conduct the study in Indian context.



#### **OBJECTIVES OF THE STUDY**

- Based on the proposed research model, the objectives of the study are confined:
- 1. To identify the virtual teaching learning dimensions
- 2. To investigate the effect of virtual teaching learning on student's satisfaction as perceived by students

#### **RESEARCH METHODOLOGY**

This study is a cross-sectional research. The scope of the study is confined only to the students' perception about virtual teaching learning process exercised by faculty members during the lock down period owing to the wake of COVID 19 across the country. This study was conducted from the end of March 2020 to April 2020. The researchers identified 300 Engineering students and collected the data by sending the questionnaire through Google forms. The questionnaire consists of three parts. The first part deals with demographic profile of the students, second and third part deals with independent and dependent variables. The researchers adopted convenience sampling method. Even though researchers sent 300 questionnaires they received only 150 valid responses. Therefore, the response rate of the study is 50 percent.

#### **PROPOSED HYPOTHESES**

H01: Course delivery will have no significant impact on student's satisfaction in virtual teaching learning.

- H02: Course Content will have no significant impact on student's satisfaction in virtual teaching learning.
- H0<sub>3</sub>: Fairness in Evaluation will have no significant impact on student's satisfaction in virtual teaching learning.
- H04: Faculty-Student Interaction will have no significant impact on student's satisfaction in virtual teaching learning.
- H05: Responsiveness will have no significant impact on student's satisfaction in virtual teaching learning.

#### DATA ANALYSIS

#### DEMOGRAPHIC PROFILE OF THE STUDENTS

A total of 150 respondents were considered for the study in which 60 percent of the students were male students and 40 percent were female students. 80 percent of the students were between 18 to 22 years old. With reference to students' domain, 85 percent of the respondents were B.E. students and 15 percent were B.Tech. students. Out of this study, 40 percent of the respondents were hostellers and 60 percent of the students were day-scholars.

Before analysing the data, the researchers examined the reliability of the data by administering Cronbach Alpha. This data has adequate reliability (Cronbach Alpha 0.864). The Kaiser-meyer olkin (KMO=0.866) was used to determine the appropriateness of applying factor analysis, values above 0.5 for the factor matrix were appropriated (Hair et.al., 1988). Table 1 reveals the structure of the factors. They are: Course Delivery, Course Content, Fairness in Evaluation, Faculty-Student Interaction and Responsiveness.

The Bartlett test of sphericity was 1736.623 significant at P<0.000 which revealed significant correlation among the factors. The first factor labelled as Course Delivery consists of 5 variables. This factor accounted for 21.420 percent of the variance. Factor two is Course Content and it also consists of 5 variables. Factor three is named as Fairness in Evaluation which consists of 4 variables. The fourth and fifth factors are Faculty-Student Interaction and Responsiveness, respectively. All the five factors were explained 66.916 percent of the variance.

TABLE 1. VIRTUAL TEACHING LEARNING DIMENSIONS

SI. No.	Virtual teaching learning Factors	No. of variables included	Eigen Value	Percentage of variance explained	Cumulative percentage of variance				
1	Course Delivery	5	11.484	21.420	21.420				
2	Course Content	5	2.854	18.687	40.107				
3	Fairness in Evaluation	4	1.568	10.146	50.252				
4	Faculty Student Interaction	4	1.121	8.936	59.188				
5	Responsiveness	4	1.041	7.729	66.916				
	KMO measures of sampling Adeq	uacy = 866		Bartlett's Test of sphericity = 1736	623				

The scree test (Cattell, 1966) which plots the eigen values against a number of components. This is shown in Figure 2.

FIGURE 2



#### Scree Plot

#### IMPACT OF VIRTUAL TEACHING-LEARNING ON STUDENTS' SATISFACTION

In order to find the impact of virtual teaching learning on students' satisfaction, multiple regression analysis was used. This study considers Course Delivery, Course Content, Fairness in Evaluation, Faculty-Student Interaction and Responsiveness as independent variables, students' satisfaction as dependent variable. Table - 2 shows the results of regression analysis of online teaching.

IAE	TABLE 2: IMPACT OF VIRTUAL TEACHING LEARNING ON STUDENTS' SATISFACTION							
S. No.	Independent variables	Standardised Coefficients Beta	t	Sig				
1	Constant	-	3.154	.002				
2	Course Delivery	.274	4.974	.000*				
3	Course Content	.225	4.515	.000*				
4	Fairness in Evaluation	.032	.676	.501				
5	Faculty-Student Interaction	.302	5.213	.000*				
6	Responsiveness	.254	4.966	.000*				
R squar	e			.811				
Adjuste	Adjusted R square							
F statis	tics			180.614				
Signific	ance			.000				

#### LINEARITY BETWEEN THE VARIABLE

The following figure exhibits the linearity between the variables.

#### FIGURE 3

\*- significant at 1 percent level

#### Normal P-P Plot of Regression Standardized Residual



#### NORMALITY OF THE DATA

The following figure reveals the normality of the data.

FIGURE 4

Histogram





The results for virtual teaching learning indicate that R<sup>2</sup> is equal to 0.811. This reveals that 81.1 percent of variance in students' satisfaction is explained by all independent variables. F statistics is 180.614 which is significant at 1 percent level. The results show that Faculty-Student Interaction has a positive impact on students' satisfaction. ( $\beta$  = 0.302, t=5.213), p<0.01, followed by ( $\beta$  = 0.274,t=4.974, p<0.01), Responsiveness ( $\beta$  = 0.254,t=4.966, p<0.01) Course Content ( $\beta$  = 0.225, t=4.515, p<0.01). This study found that Fairness in Evaluation does not have any influence on students' satisfaction. Therefore, this study rejects all the hypotheses, except Fairness in Evaluation.

#### CONCLUSION

The main objective of the study is to identify the virtual teaching learning dimensions and its influence on students' satisfaction. The researchers used reliability analysis, multiple regression and factor analysis for data analysis. This study identified five dimensions of virtual teaching learning. They were: Course Delivery, Course Content, Fairness in Evaluation, Faculty-Student Interaction and Responsiveness. This study found that Course Delivery, Course Content, Faculty-Student Interaction and Responsiveness have significant influence on students' satisfaction. This study finding would help the policy makers to formulate suitable policies relating to virtual teaching learning. This study has been carried out in Tamil Nadu State. Therefore, it opens doors to open similar studies in other states.

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## FACTORS INFLUENCING WOMEN'S REPRESENTATION IN LEADERSHIP POSITIONS: IN CASE OF ENSARO WOREDA PUBLIC SERVICE SECTORS, AMHARA REGION, ETHIOPIA

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#### ABSTRACT

The issue of women on management position is gaining attention globally. Governments signed major human right treaties including the most important women's conventions to improve women's participation in management positions. Even though the government's effort to provide equal opportunities for women and design non-discriminatory policies, the existences of glass ceiling practices undermine their progress. The objective of the study was examining factors influencing women representation in leadership positions in Ensaro Woreda public sectors. To achieve the objective of the study 203 representative samples have taken trough proportionate stratified sampling method. And a series of statistical analysis have done. Descriptive statistics were used to describe the existing situation of women's representation of leadership in the public sectors, whereas, inferential statistics were used to investigate the association of women's representation with the set of predictor variables. Binary logistic regression result shows that cultural belief and attitude, insufficient capacity building, lack of professional training, inflexible working hours, inadequate experience, family commitments, inadequate job knowledge, inadequate academic qualification, lack of motivation and interests, limited access of advanced education and overall organizational culture have a significant effect on the under representation of women's leadership in public sectors. The study finding revealed that organizational and personal factors seem to have major contributors as compared to societal factors that hindered women representation in leadership position in public sectors. Finally, it is recommended that; awareness creation and counselling service should have given about gender equality, public sectors should be committed to encouraging women's to have a leadership positions, capacity building and special training should be given for women to increase the number of women leaders.

#### **KEYWORDS**

Ensaro Woreda public sectors, participation of women in leadership, societal factor, organizational factor, personal factor.

#### JEL CODES

J10, J16, J45.

#### **1. INTRODUCTION**

Join principle, public administration is guided by principles of fairness, accountability, justice, equality and non-discrimination, and serves as a model of governance for society which includes the promotion of gender equality and women's empowerment in the civil service workforce. However, globally; this is not yet the reality. Instead of being a driving force behind the implementation of internationally-agreed goals on gender equality and human rights standards and principles, in many developed and developing countries, public administration often remains a patriarchal institution, perpetuating gender biased traditions, attitudes and practices women do not yet participate equally in public administration, especially in leadership and decision-making (UNDP, 2014).

The United Nations development program report 2014 further stated that the target of a minimum of 30 percent of women in leadership positions, originally endorsed by the United Nations Economic and Social Council (ECOSOC) in 1990 and reaffirmed in the Beijing Platform for Action in 1995, is being approached in many public administrations and even surpassed in some. Nevertheless, while progress is being made in terms of total numbers of women in public administration, both glass ceilings and glass walls continue to present challenges to women's equal participation in decision-making positions (UNDP, 2014).

The Ethiopian Government has ratified the Convention on the Political Rights of Women (CPRW) and the Convention on Elimination of All Forms of Discrimination against Women (CEDAW). Ethiopia also adopted the principles of the 1995 Beijing Platform for Action (BPA) long before it adopted the Millennium Development Goals by 2000. Since issuing the National Policy on Women, Ethiopia has also put in place institutions aimed specifically at ensuring that the rights of women are respected, protected and fulfilled. Examples are Proclamations 471/2005 and 691/2010 that established Ministry of Women's Affairs (MOWA) and Ministry of Women, Children and Youth (MOWCYA), respectively (UNFPA, 2008).

Likewise, the Federal Democratic Ethiopia government committed to increase the participation of women in power and decision making. The national development plan (GTP) in 2010/11, has set the target of 30% women's representation in education & training for women higher leadership positions and 50% in medium leadership positions in the civil service by 2015; (Federal Democratic Republic of Ethiopia(FDRE) Report, 2015).

Despite the government's efforts to provide equal opportunities for women and design non-discriminatory policies, the existences of deep-seated discriminatory practices thwarted their progress, yet Ethiopian women are economically, socially, culturally and politically disadvantaged in the enjoyment of equal rights, in accessing opportunities, decision making processes, and basic resources. In other words, although a number of policies are emerging that support and encourage women's participation in development, women's access to and control of productive resources, information, training and education, employment and in decision-making are limited (Ogato, 2013).

In Ethiopia, as several of the empirical studies illustrate, such as (Endale, 2014;Yasin 2013; and Gelashe 2015;) the main barriers hindering women from public leadership and decision-making positions include Socio-cultural attitudes, lack of assertiveness and lack of acquisition of the necessary experience for taking part in public decision-making, Over burden of domestic responsibilities continuation of the negative attitudes regarding women's ability to lead and govern, lack of role models of women leaders for young women and girls, and the like can be stated.

In the case of the study area Ensaro District Amhara regional Civil service women's representation & participation in the local political activities and decision making roles are very low (Ensaro District public service, Report,2017). According to the report, almost all 26 public sectors permanent Employees, almost all are dominated by male leaders/ managers. Due to this reason, the permanent Employed women are still limited in subordinate's positions.

Despite the fact that there is progress being made in terms of total numbers of employed women in the woreda, segregation of women in management positions or disparity between men and women in terms of woreda decision making positions continue to exist which resulted in challenges to women to equal participation in decision-making positions. Women are also still underrepresented in local Government political position (Woreda Report, 2017).

Therefore, underrepresentation and poor political participation has a global problem. Hence, this research examined the factors that affect women to participate in leadership/ management position in case of Public sector employees in Ensaro District, North Shoa Zone, and Amhara region.

#### 2. STATEMENT OF THE PROBLEM/RATIONALE

In today's world, more women than ever are entering the labour force, but the majority of top management positions in almost all countries are primarily held by men managers generally women tend to be concentrated in lower management positions and have less authority than men. And in the same time women are still concentrated in traditionally "female" functional areas of companies such as; human resources, corporate communications, community and governmental relations marketing and finance (Akpinar-Sposito, 2012).

Despite efforts made to ensure that female representation is achieved at all levels of governance, due to patriarchal; stereotyping; organizational structure system African women are still underrepresented in many governments and nongovernment organizations particularly in positions of power and leadership (Kimba, 2008). The Africa Gender equality index also measured gender equality across three separate dimensions' equality in economic opportunities, equality in human development, and equality in law and institutions. According to this study among 52 African countries Ethiopian overall ranks was 31<sup>th</sup> by (51%) it is too far from the first country ranks (74.5%) which is South Africa (AFDB Report, 2015).

In the study area the gender imbalance or disparity of women in leadership /management position is becoming worst. For instance, according to Ensaro Woreda North Shoa Zone Amhara Region Civil Service annual report 2016/17 there were 430 men and women employees working in the 26 public sectors office. Out of the total permanent employees, 46 of them have political position and among 46 political leaders, only 9 or (19.6%) were females. Among 92 processes owner and others different management position only 12 or (13%) were females showing a very low coverage. In general, from the total 138 political and process owner positions, only 21 or (15.2%) were taken by females (Woreda public service Report, 2017).

Therefore, this study attempted to examine the existing gap and the factors affecting participation of Women in leadership/ management position in the case of Ensaro Woreda public sectors. To identify the gap of the study, the researcher raised the following questions.

- > What is the existing situation of representation of women's in leadership positions in Ensaro woreda public sectors?
- > To what extent is societal factors contributes to the under representation of women's leadership in public sectors?
- > To what extent is the organization's factors contributes to the under representation of women's leadership in public sectors?
- > To what extent is the personal factors contributes to the under representation of women's leadership in public sectors?

#### **3. OBJECTIVES**

The general objective of the study is to examine factors influencing to the under representation of women in leadership positions in the Ensaro Woreda Amhara region public sectors. Specific objectives of the study includes: to assess the existing situation of women's representation in leadership positions in Ensaro Woreda public sectors; to determine the societal, organizational and personal factors that influence on Women's representation in leadership positions in public sectors.

#### 4. RESEARCH METHODS

For the purpose of this study both descriptive and inferential research designs have been used. Descriptive statistics were used to assess the existing situation of women's representation in leadership positions in public sectors, whereas inferential statistics was used to examine the association between women's representation in leadership and the set of predictor variables. The target population were Civil servants who have been working in Ensaro Woreda North Shoa Zone Amhara Region. There are 430 Civil servants who have been working in the Woreda. All the 430 respondents have been working at Woreda level and those have different educational status, political and managerial positions were proportionally included in the study.

In order to select the relevant sample probability sampling design was used. Samples were selected from each sector by using the proportionate stratified sampling technique.

The sample size calculated using Taro Yamane's (1973) formula S=N/ (1+Ne<sup>2</sup>) from the given 430 population by taking into accounts 0.05 (5%) standard error or significant level.

Where

S= sample size

N= total number of male and females working at that public sectors

e= significance level or error

Using the above formula the relevant sampling size 203 male and female permanent employees were selected. Thus, the resultant sample proportionally stratified to each sector showed (Table 1).

	TABLE 1: PROPORTIONAL SAMPLE TAKEN FROM THE TOTAL POPULATION						
No.	Name of Organization	Total population (total	Percentage share from the total sam-	Total sample taken			
		number of Employees)	ple (Total number/Total sample*100)	(203)*% share)			
1	Revenue office	16	16/430*100=3.7%	8			
2	Trade office	10	10/430*100=2.3%	5			
3	Communication office	11	11/450*100=2.4%	5			
4	Youth and sport office	15	15/430 *100=3.7%	8			
5	Finance & economic development office	40	40/430*100=9%	19			
6	Education office	39	39/430*100= 4.8%	18			
7	Health office	35	35/430*100=8%	17			
8	Civil service office	21	21/430*100=4.8%	12			
9	Agricultural office	34	34/430*100=8%	15			
10	Environmental protection and land administration office	14	14/430*100=3.2%	7			
11	Water resource office	7	7/430*100=1.6%	3			
12	Community co-operative association office	9	9/430*100=2	4			
13	Culture & truism office	6	6/430*100=1.3%	3			
14	Administrative office	26	26/430*100=6%	11			
15	Repeal office	5	5/430*100=1.16%	2			
16	Women & children affairs office	11	11/430*100=2.5%	5			
17	Woreda council office	5	5/430*100=1.1%	3			
18	Administrative & security office	7	7/430*100= 1.6%	3			
19	Technique & development and enterprise office	19	19/430*100= 4.4%	9			
20	Justice office	9	9/430*100=2%	4			
21	Police office	21	21/430*100=4.8%	9			
22	Militia office	9	9/430*100 =2%	5			
23	Road & transport office	10	10/430*100=2.3%	5			
24	Woreda Municipality	11	11/430*100=2.6%	5			
25	Animal resource development office	9	9/430*100=2%	4			
26	Court office	31	31/430*100=7.2%	14			
Tota	l	430	100%	203			

Source: Own Survey Data, 2019

#### 4.1. RELIABILITY AND VALIDITY TEST

In order to improve their validity and reliability of research instruments, a pilot test was done. According to Cronbach's, 1951 as cited by Alem Shumi (2007) Cronbach's it is a common miss conception that is Alpha is low; it must be a bad test. This is because the test may measure several attribution/dimensions rather than one and thus the Cronbach's Alpha is deflated. By Convention, lenient cut off 0.60 is common in explanatory study and some research require a cut of 0.80 for a good scale as a general rule of thumb (Shoukri and Edge, 1996), a reliability coefficient Alpha is excellent if Alpha is greater than 0.75; better if Alpha is between 0.40 and 0.74 and poor if Alpha is less than 0.40. Thus, the study Cronbach's Alpha test result showed (Table 2).

TABLE 2	RELIABILITY	AND V	TEST 1	TABLE
		/		

NO	Factors name	Description	No of items	No. Of respondents	Cronbach's Alpha test
1	Societal factors	Explanatory variable	8	29	89.8
2	Organizational factors	Explanatory variable	11	29	88.8
3	Personal factors	Explanatory variable	7	29	85.1
4	Women representation in leadership position	Outcome variable	8	29	76

#### 5. METHODS OF STATISTICAL ANALYSIS

#### 5.1. LOGISTIC REGRESSION

Logistic regression analysis extends the techniques of multiple regression analysis to research situations in which the outcome variable is categorical. Logistic regression allows one to predict a discrete outcome, such as group membership, from a set of predictor variables that may be continuous, discrete, dichotomous, or a mix of any of these. Generally, the dependent or response variable is dichotomous (binary), such as presence or absence / success or failure/. Logistic regression has a peculiar property of easiness to estimate logit differences for data collected both retrospectively and prospectively (Mc Cullagh and Nelder, 1983). There are two main uses of logistic regression: primarily, it uses to predict the group membership. Since logistic regression calculates the probability of success over the probability of failure, the results of the analysis are in the form of an odds ratio (explanatory variable individual exposure). It also provides knowledge of the relationships and strengths among the variables.

#### 5.2. LOGISTIC REGRESSION MODEL DESCRIPTION

The basic aim of modelling is to derive a mathematical representation of the relationship between an observed response variable and a number of explanatory variables, together with a measure of the inherent uncertainty of any such relationship. Statistical models constructed for response variables are the best an approximation to the manner in which an observable variable depends on other variables. No statistical model can be claimed to represent truth and, by the same token, no one model can be termed the correct model. Some models will be more appropriate than others, but typically, for any set of data, there will be a number of models, which are equally well suited to the purpose in hand, and the basis for choosing a single model from amongst them will not rest on statistical grounds alone. Statistical models are essentially descriptive and, in as much as they are based on experimental or observational data, may be described as empirical data (Collet, 1991).

The dependent variable in logistic regression is usually dichotomous, that is, the dependent variable can take the value 1 with a probability of success P<sub>i</sub>, or the value 0 with a probability of failure 1- P<sub>i</sub>. This type of variable is called a Bernoulli (or binary) variable.

Logistic regression makes no assumption about the distribution of the independent variables. They do not have to be normally distributed, linearly related or have equal variance within each group. The model for logistic regression analysis assumes that the outcome variable Y is categorical. When we assume that Y is dichotomous, taking on values of 1 (that is, positive outcome, or success) and 0 (that is, negative outcome, or failure). Then the conditional probability that the women are not participate on leadership given the X set of predictor variables is denoted by Probability ( $Y_i = 1 | X$ ) = $P_i$ . The expression  $P_i$  has the form:

$$P_{i} = \frac{e^{(\beta_{0}+\beta_{1}x_{1i}+\beta_{2}x_{2i}+\cdots+\beta_{r}x_{ri})}}{1+e^{(\beta_{0}+\beta_{1}x_{1i}+\beta_{2i}+\cdots+\beta_{r}x_{ri})}} = \frac{e^{X'\beta}}{1+e^{X'\beta}}\cdots\cdots\cdots\cdots\cdots\cdots$$

P<sub>i</sub> = the probability of women are not participate in leadership

 $\mathbf{Y}_i$  = the observed participation status of women in leadership

B=is a vector of unknown coefficients.

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The above model is logistic regression, in which the relationship between the predictor and response variables is not a linear function in logistic regression; instead, the logarithmic transformation of equation yields the linear relationship between the predictor and response variables. The logit transformation of Pi given as follows:

$$logit[P_i] = log\left(\frac{P_i}{1-P_i}\right) = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_r x_r \dots \dots \dots \dots \dots$$

#### 5.3. FITTING LOGISTIC REGRESSION MODEL

The general method of estimation that leads to the least squares function under the linear regression model (when the error terms are normally distributed) is called maximum likelihood. It is this method that provides the foundation for our approach to estimation with the logistic regression model. In a very general sense the method of maximum likelihood yields values for the unknown parameters which maximize the probability of obtaining the observed set of data. In order to apply this, it is must to construct a function called likelihood function. The maximum likelihood estimators of these parameters are chosen to be those values which maximize this function. Thus, the resulting estimators are those which agree most closely with the observed data.

The maximum likelihood and non-iterative weighted least squares are the two most computing estimation methods used in fitting logistic regression model (Hosmer Lemeshow, 1989; Greene, 1991; Collet, 1991). When the assumption of normality of the predictors does not hold, the non- iterative weighted least squares method is less efficient (Maddala, 1997).

In contrast, the maximum likelihood estimation method is appropriate for estimating the logistic model parameters due to this less restrictive nature of the underlying assumptions (Hosmer Lemeshow, 1989). Hence, in this study the maximum likelihood estimation technique was applied to estimate parameters of the model. Consider the logistic model  $P_i = \frac{e^{x'\beta}}{1+e^{x'\beta}}$ , since observed values of Y say,  $y_i$ 's (i=1, 2, 3..., n) are independently distributed as binomial with parameter  $P_i$ , the maximum likelihood function of Y is given by:

 $\beta' = (\hat{\beta}_0, \hat{\beta}, ..., \hat{\beta}_r)$  of  $\beta$  which maximizes the likelihood function is to get an estimator  $\hat{\beta} = (\hat{\beta}_0, \hat{\beta}, ..., \hat{\beta}_r)$  of  $\beta$  which maximizes the likelihood function expressed in equation (3.4). Since the likelihood equations are non-linear in the parameters, the Newton-Raphson iterative maximum likelihood estima-

tion method that expresses  $\hat{\beta}_{u+1} = (X'\hat{V}^{u}X)^{1}XR_{u}$ , Where u=0,1,2,3, ...and is a diagonal matrix with its

diag | pi(1-pi) | = cov(y)

 $\hat{V=diag}\left[pi(\hat{1-pi})\right] = cov(y)$ diagonal elements Xi=1), 1991: Greene, 1991). Newton's method usually converges to the maximum of the log – likelihood in just a few iteration unless the data are especially badly

conditioned (Greene, 1991). All the parameters  $\hat{\beta}_o, \hat{\beta}_1, \dots, \hat{\beta}_r$  and estimates of Probability (y=1/X) for each subject was computed using the SPSS soft ware's.

#### 6. RESULTS AND DISCUSSIONS

6.1 DESCRIPTIVE RESULTS

6.1.1. GENERAL DEMOGRAPHICS COMPARISON OF WOMEN AND MEN

#### TABLE 3: BIVARIATE ASSOCIATION BETWEEN WOMEN REPRESENTATION IN LEADERSHIP AND DIFFERENT EXPLANATORY VARIABLES

Variable	Category	%	Respondents position		Chi square Pearson correlation
			leaders	Non leaders	
Sex	Male	52.8	103 (83.%1)	0 (0.0%)	125 (.000)
	Female	47.2	21 (16.9%)	71 (77.2%)	
Respondent age	18-25	15.8	4 (3.2%)	27 (38%)	44.1 (.000)
	26-35	61	84 (67.7%)	35 (49.3%)	
	36—45	18.4	27 (21.8%)	9(12.7%)	
	46-55	4.1	8 (6.5%)	0 (0.0%)	
	≥56	0.5	1(0.8%)	0	
Respondent marital status	Single	56.9	83(66.9%)	28(39.4%)	16.3 (.000)
	Married	42.1	41(33.1%)	41(57.7%)	
	Divorced	1.0	0(0.0%)	2(2.8%)	
Number of children	0	54.3	61(49.%)	45(63.4%)	33.99(.000)
	1-2	42.1	58(46.8%)	24(33.8%)	
	3-4	2.5	3(2.4%)	2(2.8%)	
	5-6	1	2(1.6)	0(0.0%)	
Respondent education	Certificate	4.1	5(4.0%)	3(4.2%)	33.99 (.000)
	diploma	47.6	40(32.3%)	53(74.6%)	
	Bachelor degree	48.2	79(63.7%)	15(21.1%)	
Respondents experience	<3	19.4	10(8.1%)	28(39.4%)	53.23 (.000)
	3-5	16.9	12(9.7%)	21(29.6%)	
	6-10	28.7	45(36.3%)	11(15.5%0	
	11-15	25.6	41(33.1%)	9(12.7%)	
	16-20	1.5	2(1.6%)	1(1.4%)	
	≥21	7.6	14(11.3%)	1(1.4%)	

Source: Own Survey Data, 2019

The descriptive statistics on all demographic variables reveal some differences between women and men. However, the final logistic regression result showed that (Table 3). Not all demographic back ground results are statistically significant effect. While the gender difference in terms of respondent's age, number of children and marital status not significant. In this study differed on education qualification and working experience as well as respondent's positions are found to be statistically significant.

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According to the demographic background descriptive result the majority of women and men respondents (61%), who participated in the study, are aged between 26 and 35 years Respondents with age below 25 and above 45 years are relatively low. With regard to respondents marital status (Table 3), (56.9%) of the respondents are single 42.1% of respondents are married and about 1% of the respondents are divorced. Most of the respondents (54.3%) do not have children. While, 82 (42.1%) of respondents have 1-2 children the rest 7(3.6%) respondents have 3-6 children.

In terms of education the majority of male and female respondents 94 (48.2%) of them have a bachelor's degree while 93 (47.6%) of respondents have diploma and the rest 8 (4.1%) respondents have certificate. In terms of women academic qualification out of a total 92 women (31.5%) of them have bachelor's degree from the total of 21 leaders 14 (66.6%) have a bachelor's degree 6 (28.6%) of them have diploma the rest 1(4.7%) woman leader has a certificate. In general, out of 92 women leaders, and non-leaders civil servants 29 (31.5%) have bachelor's degree 59 (30.7%) of them have diploma and the rest 4(4.3%) women's have a certificate. Regarding men respondents education qualification among 103 men leaders 65 (63.1%) have bachelor's degree 34 (33%) of them have diploma and the rest 4(4.3%) have certificate. In terms of male and female respondents' educational achievement comparison more men (63.1%) have achieved than women (31.5%) hold bachelor degree. According to the respondents educational background ground men have well developed academic background compare to women. In terms of respondents work experience the majority of men and women respondents 106 (54.3%) have 6-15 years of experience 18 (9.2%) have between 6-21 years of experience 33 (16.9%) have 3-5 years of experience and the rest 38 (19.5%) of them have less than three years of experience. Regarding respondent experience Out of 21 women leaders 18 (85.7%) have 6-21 working experience and the rest 53 (57.6%) have less than 3 years of service. From the total of 92 leaders and non-leaders women only 39 (42.3%) have 6-21 years of service and the rest 53 (57.6%) have less than six years of service. Whereas, from the total 103 men leaders respondents 84 (81.5%) have 6-21 working experience and the rest 19 (18.4%% have under 6 years working experience. As indicated in the table, respondents working experience demographic background data the majority of female and male leaders gained their leadership status after 6 years working experience and above.

In terms of female and male respondents work experience comparison data more men 84 (81.5%) than women 39 (42.3%) respondents have between 6-21 years of service. Therefore, the work experience demographic statistical data reveal that working experience in public sectors may have significant value to attain a political position and low level management position in public sectors.

In terms of leadership, demographic comparison out of total 195 women and men respondents 103 (52.8%) of men have leadership positions. 21(10.7%) of women only have political and different managerial positions (Figure 4.1).

6.1.2 ASSOCIATION BETWEEN OUTCOME VARIABLE AND EXPLANATORY VARIABLES

No	Description of Variables	value	Pearson correlation
1	Cultural beliefs and attitudes towards women role and leaders ability	19.21	.000
2	Gender stereo type	10.47	.001
3	Mother hood	16.68	.000
4	Lack of support from family	8.06	.005
5	patriarchal attitude (ideology)	8.5	.004
6	fewer opportunities for women education	16.57	.000
7	house hold responsibilities	57.12	.000
8	Conflicts between personal and work life	9.39	.002
9	Over all public sectors internal culture	89.94	.000
10	Government recruitment and selection practices	17.2	.000
11	Government Promotion practices	10.12	.001
12	Limited accesses to advanced education for women	19.79	.000
13	Limited accesses to professional training for women	12.22	.000
14	In sufficient leadership capacity building for women	47.5	.000
15	Absence of formal mentoring and women networking programs	6.59	0.37
16	The difficulty of balancing works and personal lives	47.62	.000
17	The existence of Few numbers of female leaders in public sectors	.727	.394
18	Lack of support from supervisors	7.85	.005
19	Un attractive working environment	9.62	.001
20	Inflexible working hours influence	23.49	.000
21	Lack of confidence, among women	39.6	.000
22	Lack of family commitments	8.31	.004
23	Women's marital status	9.12	.003
24	Women have been lack of motivation and interests	9.79	.002
25	In adequate job knowledge (capability)	12.93	.000
26	In adequate academic qualification	12.49	.000
27	In adequate professional (working) experience	79.36	.002
28	Differences in leadership styles of women	88.5	.004

#### TABLE 4: PEARSON CORRELATION

Source: Own Survey Data, 2019

Model-building strategies begin with a careful descriptive analysis of each variable. The preliminary analysis has been done to understand which of the explanatory variables appears to have a strong association with response variable. For each one of the independent variables, a test of association was carried out using the Pearson Chi-Square at 5% level of significance. High values of Pearson chi-square for a given independent variable indicate that there is a strong association between each of the given independent variables and response variables keeping the effect of the other factors constant. The bivariate association of societal, organizational and personal factors with that of representation of women in leadership shows that there is a strong correlation which is indicated by Pearson correlation (Table 4).

TABLE 5: PARAMETER ESTIMATES, VARIABLES STANDARD ERROR AND ODDS RATIO FOR THE FINAL LOGISTIC REGRESSION OF PARTICIPATION OF WOMEN

		AND	OTHER PR	EDICTOR	(S			
No	Description of Variables	categories	В	S.E.	Wald	df	Sig.	Exp(B) or Odds Ratio at 95% C.I
1	Cultural belief and attitude	Negative	1.59	.680	5.472	1	.019	4.910
		Positive (ref)						
2	Insufficient capacity building	Yes	2.70	.723	14.005	1	.000	14.939
		No (ref)						
3	Lack of professional training	Yes	1.95	.706	7.694	1	.006	7.096
		No (ref)						
4	Inflexible working hours	Yes	2.65	.716	13.743	1	.000	14.209
		No (ref)						
5	In adequate experience	Yes	2.56	.696	13.625	1	.000	13.047
		No (ref)						
6	Family commitments	Yes	-1.23	.658	3.534	1	.060	.290
		No (ref)						
7	In adequate job knowledge	Yes	1.261	.627	4.049	1	.044	3.530
		No (ref)						
8	Inadequate academic qualification	Yes	1.594	.668	5.698	1	.017	4.925
		No (ref)						
9	Lack of motivation And interests	Yes	1.753	.706	6.169	1	.013	5.774
		No (ref)						
10	Limited access of advanced education	Yes	-1.616	.660	6.001	1	.014	.199
		No (ref)						
11	Over all organisational culture	Yes	-1.450	.657	4.876	1	.027	.234
		No(ref)						
	Constant		-8.200	1.583	26.818	1	.000	.000

#### Source: Own Survey Data, 2019

#### 6.2. RESULT AND DISCUSSION FOR BINARY LOGISTIC REGRESSION ANALYSIS

The main problem with any univariate approach is that it ignores the possibility that a collection of variables, each of which is weakly associated with the outcome, can become an important predictor of the outcome when taken together (Hosmer and Lemeshow, 2000). Hence, multivariate logistic regression filters the nominated variables for the second time to differentiate variables with good potential that have a significant effect on the response variable.

From the total variables entered for multiple covariate logistic regression, about 11 of them pass the filtration of forward LR of logistic regression (Table 5). Namely, cultural belief and attitude, insufficient capacity building, lack of professional training, inflexible working hours, inadequate experience, family commitments, inadequate job knowledge, inadequate academic qualification, lack of motivation and interests, limited access to advanced education and overall organizational culture have a significant effect on the participation of women in leadership at the 5% level of significance.

Table 5 shows the multiple logistic regressions between the position of women and the other predictor variables. The table shows that cultural belief and attitude towards women is significantly affect the participation of women in leadership position. It shows that respondents who have negative cultural attitude towards women role and leadership are 4.91 times exposed for the non- managerial position than respondents with positive attitude. The insufficient Capacity building has also its own effect on the position of women in their public sectors the result indicates that women having insufficient capacity building are 14.94 times exposed to the subordinate position than women having sufficient capacity building. The odds of non- managerial position for women having less than three years of work experience is 13.05 times with that of women having more than three years of work experience. Women with an in adequate academic qualification are 4.93 times exposed to non- managerial position than that of women with adequate academic qualification. Lack of motivation and interests has also its own effect on the representation of women in leadership. The result below indicates that women with lack of motivation and interest to be manager are 5.77 times exposed for the non -managerial position than that of women having motivation and interest for the managerial position. The detailed result of other predictor variables is given in the (Table 5).

The result of the interviewees equally supports the above inferential results. The detailed questionnaires result listed as follows.

With regard to societal factors to support the questionnaire ten women leaders were targeted for interview out of 10 leaders 9 (90%) of them were participating in the interview. To identify specific societal factors which contribute the underrepresentation of women in the woreda public sectors the interviewed respondents were asked similar semi structured interview questions about societal factors which are affected women in leadership positions in public sectors. The majority of interviewees' women leaders' regarding societal factors said:

"Indeed societal attitude and cultural beliefs towards women's leadership, not only leadership, but also regarding women's education in the Woreda context as we have seen the awareness of society significantly has improved for the last two and a half decade. Majority of study area society, belief and attitudes towards women's education and leadership has been changed. The society gradually understood the adverse effect of harmful traditional practice and for the equal enjoyment of rights by women's, where parents start to send their girls to school in all directions. However, the deep social, cultural practices and trends still played their own role for women's career advancements. Due to strict societal rules the majority of women still limited in house hold activities while men perform activities outside the home specially women in the woreda rural areas are heavily burdened in house hold activities. According to the interviewed suggestion women public servants specially have been faced another serious challenge after completing their higher education and hired in the public sectors which is long working hours in the office compounds, many women's due to lack of family support women mainly could not balance their home and work responsibilities". Thus, due to culturally prescribed roles of women still yet, women did not balance their household work and office work. Therefore, this may have adverse effect for women's career advancements in public sectors.

With regard to organizational factors to support the questionnaires and to identify the Woreda public sectors over all internal cultures particularly regarding in service training and women's leadership capacity building trends the Ensaro Woreda civil service office employee recruitment and selection process owner was interviewed and in this regard the process owner said:

"At the time of employee recruitment and selection, public sectors women's civil servant employees have given affirmative action and more treated differently than men still the Ethiopian civil service proclamation and policies more favoured women than men. However, due to the absence of targeted allocated budget still now there is no annual target plan to promote women to different management position in all Woreda public sectors to narrow the gender gap. Further, still now there is no allocated budget for women's employees in service training and leadership capacity building purpose to upgrade women to different leadership position." Thus, the absence of women leadership capacity building and on service training may have adverse effects for women's career advancements in public sectors.

With regard to personal factors to support the questionnaires and to examine the degree of personal factors that affects women leadership in public sectors the women leaders were also interviewed. And in this regard the majority of interviewed leaders said:

"Although at the country's level, Regional and Zonal, as well as Woreda level women have still faced negative cultural beliefs and attitudes towards women's leadership and unsupportive public sectors or internal culture continued as a barrier of women in leadership position. However, women themselves due to the absence of their own efforts, commitments, and the Woreda public sectors women acquire less education qualification and work experience comparable to men employees." Therefore, women did not fulfil the minimum requirement needed by public sectors to leadership position compared to men employees. According

to interviewed respondent the Woreda women's civil servants due to lack of relevant qualification and work experience women still under represented in leadership positions in public sectors.

#### 7. CONCLUSIONS AND RECOMMENDATIONS

#### 7.1. CONCLUSIONS

The descriptive result of this study shows that from the total sampled respondent only 11% of them are women having the managerial position others have non managerial/subordinate position. And about 59% of the respondents have the negative cultural attitude towards women's leadership in public sectors, so, that its effect has shown in the descriptive part of this study. From the inferential result, it is evident that cultural belief and attitude, insufficient capacity building, lack of professional training, inflexible working hours, inadequate experience, family commitments, inadequate job knowledge, inadequate academic qualification, lack of motivation and interests, limited access to advanced education and overall organizational culture have a significant effect on the under representation of women's leadership in public sectors.

Women having a lower educational level (diploma and below), less than three years of service, negative cultural attitude, negative organizational culture, insufficient capacity building, lack of professional training, lack of family commitments, inflexible working hours, less motivation and interest of women and limited access of advanced education leads or exposed women for non-managerial positions on their public sectors. Thus, it is concluded that women's career advancements in public sectors are not affected by one factor alone, but a combination of Societal, Organizational and Personal factors are the major factors to contribute under the representation of women in public sectors. However, according to Inferential statistics analysis result, organizational and personal factors seem to have major contributors as compared to societal factors that hindered women's representation in leadership positions in public sectors.

#### 7.2. RECOMMENDATIONS

Based on the result of the study and the conclusion above the following recommendations have been forwarded to the Amhara Regional state and other concerned public sectors in the region:

- To minimize the gender disparity, the Amhara Regional Government should have established minimum gender quota for women professional development, capacity building and in-service training at regional as well as zonal and woreda level.
- Deep cultural change such as, developing information campaigns and creating awareness programs about gender stereotypes, inequitable division of household /family care, conscious and un-conscious biases and the social and economic benefits of gender equality are the necessary measure to enhance women's leadership in public sectors.
- The Woreda administration and Woreda Public sectors should be committed to encouraging women to have a leadership position.
- In order to reduce the negative cultural and organizational impacts on female leaders, there should be a culture of encouraging women leaders at grassroots levels as in Woreda, Kebele and school settings of leadership by organizing monthly, quarterly and yearly events of star female leaders.

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### A STUDY ON ELECTRONIC SERVICE QUALITY OF ONLINE SHOPPING SITES

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#### ABSTRACT

Online shopping is trend in present day market. The website service quality is very essential to run a business through the online. The purpose of this investigation as to examine the website service quality of the online shopping websites. This research to identify the service quality dimensions that could enhance the level of service by variety of carriers and rank them accordingly. In this study we used E-S-QUAL model designed by Parasuraman, Zeithaml, and Malhotra. The E-S-QUAL consists of 22 items and four dimensions: efficiency, fulfilment, system availability and privacy. The second scale E-RecS-QUAL, having 11 items in three dimensions: responsiveness, compensation, and contact. Data was collected by using various sampling techniques. The collected data was analysed by Ridit analysis, and Henrey garret ranking techniques.

#### **KEYWORDS**

E-S-QUAL, Ridit, service quality.

JEL CODE

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## INTRODUCTION

The rapid growth of the E-commerce has a great way on a growth of business. Companies such as Amazon, Flipkart distributes the products through web channels. All companies use web channels to distributes their products (Retailers such as D-Mart, Bigbaazar, approaches to expand services, and way to capture time conscious and upscale consumers (online banking). If these channels are to be viable, they must be perceived by consumers as effective and efficient.

To deliver the superior quality, managers of companies with web presences must first understand how consumers perceive and evaluate online customer service. Although there may be different sites, but in this article focuses only on online shopping sites. This article does not deal with other internet sites like – online newspapers, job sites such as freshers world, first Naukri, free download sites etc. The purpose of this article is to describe the development, refinement, psychometric evaluation, properties, and potential applications of a multiple-item scale of measuring e-service quality(e-SQ) of sites on which customers shop online.

#### **REVIEW OF LITERATURE**

Munshi (2018) studied e-service quality of snapdeal.com, he applied gap analysis to analyse the data. The study found that trust is the best dimension of e-service quality of snapdeal customers followed by factors website design, responsiveness and reliability.

Churchill 1979, Gerbing and Anderson 1988 described the process for scale development with the scale involved in sequence of steps consistent with conventional guidelines. Steps include Definition, develop a preliminary scale, sample design and data collection, data analysis and scale reduction, reliability and validity assessment, and additional assessment of the refined scales.

Irma Buntantan & G. David Garson, 2004, Muhammad Rais & Nazariah, 2003 are explained that E-Service is a highly generic term, usually referring to the provision of services via internet. Thus e-service may also include e-commerce, although it may also include non-commercial services, which is usually provided by the government.

Jeong, 2007 stated E-service constitutes the online services available on the internet, whereby a valid transaction of buying and selling, procurement is possible, as opposed to the traditional websites, whereby only descriptive information are available, and no online transaction is made possible.

Kaynama & Black (2000), Zeithaml (2002), Janda et al. (2002), Aawattegama & Wattegama (2008) these are the scholars uses the attributes like reliability, responsiveness, assurance, tangibles, and empathy to measure the service quality.

Gronlund et al (2007), state for a simple e-service the needs of knowledge and skills, content and procedures are considerably less. In complicated services there are needed to change some prevailed skills like, replacing verbal skills with skill in searching for information online.

Ting, M.S.M. Zakuan (2016) et al., explained that e-SQ of online shoppers e-loyalty is affected by the e- satisfaction. And they state that there is an association between other services like internet banking, hotel, telecommunication and higher education. e-SQ requires a combination of dimensions, e-SQ instruments, the satisfaction of online buyers is affected by SQ of online sellers and the buyers e-loyalty towards the online sellers is influenced by their e-satisfaction.

Paulo Rita, Tiago Oliveria, Almira Parisa (2019) et al., explained the models of the e-service quality, the model is to predict customer behaviour better than other widely used scales and not overestimate the importance of e-service quality attributes. They also state different country cultures diverse relevance of e-service quality attributes. Managers should know that how e-service quality formed and how it is important, and how to measure the attributes of the e-service to improve the service quality of online stores and customer satisfaction, trust, and to retain customers.

Huan-Ming Chuang, You-Shyang Chen (2016) et. al., explained that the online shopping sites are developed and if there is no competitors it will easily get overwhelmed by the wave of the online. For this reason, there is necessity of high quality service for customers, customer retention to the online shopping sites.

Nasser, M. A., Islam, R., Zainal Abidin, I. S., Azam, M., & Prabhakar, A. C. (2015) studied the factors which influence the e- service quality of online shopping. The difference between the customers expectations for service performance priorities the service encounters and their expectations about service performance prior to the service offerings. They estimate the risk in the e-commerce payment systems, and also find quality of service impact significantly the consumer trust in online shopping. They studied the expectations relationship with the online shopping in the developing countries, and impact of culture on service quality consumer expectations in Malaysia and Saudi Arabia through E-S-QUAL.

Choi, T. M. Chow (2013) stated that online stores should build strategies to enhance fulfilment and responsiveness because they affect the customer loyalty. They argue that 'Taobao.com' if they (Taobao) improve the functions of Aliwangwang to get better communication between consumers and users. Use of Aliwangwang provides higher degree of web customization and can provide to individual customers.

Patidar, G., & Singh Verma, D. (2013) explained, service firms are facing the problems of customer satisfaction and the customer satisfaction is related to the quality management approaches and process. They followed the SERVQUAL model adopted by the Parasuraman et al (1988) to measure the service quality, the gaps are measured on the basis of five dimensions Tangibility, Reliability, Responsiveness, Assurance, and Empathy.

#### **OBJECTIVES OF THE STUDY**

1. To study the service quality of the online shopping websites.

2. The better the service quality of the online sites can develop the loyalty towards the online shopping sites.

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- **3.** To estimate the factors how they are influencing the service quality of the online shopping sites.
- 4. To find is the service quality is necessary for any online shopping websites to develop their business.

#### **HYPOTHESIS**

 $H_0$ : There is no significance difference between the variable and the service quality. If the KE value is greater than Chi square choose Null Hypothesis.  $H_1$ : There is a significance difference between the variable and the service quality. If the KE value is less than Chi square choose Alternative Hypothesis. The above stated hypothesis is used for the study.  $H_0$  is the null hypothesis and  $H_1$  is alternative hypothesis, the results of the RIDITs are analysed by considering the hypothesis for this study.

#### **RESEARCH METHODOLOGY**

The Study is Empirical in Nature but descriptive based on Result Analysis. The data collection tool is the well-Structured Questionnaire covering all Objectives of the Study. The data used in the research is Primary data.

SAMPLING DESIGN: Service Quality of Online Shopping Sites

SAMPLE UNIT: The sample size of the report is 247 in numbers.

PRIMARY DATA: Primary data is used in this study; it provides better findings in this type of studies. In Efficiency

E-S-QUAL: The study analyzed online the book trade field and it resulted in five dimensions each of which encompasses sub dimensions:

- 1. Efficiency
- 2. System availability
- 3. Fulfilment
- 4. Privacy

E-Rec S-QUAL scale: Respondents rated the web site's performance on each scale item using a 5-point scale (1=Strongly disagree, 5=Strongly agree). The items below are grouped by dimension for expositional convenience namely,

- a. Responsiveness
- b. Compensation
- c. contact

Perceived value and loyalty intentions are measured by using the 5-Point scale (1=Strongly disagree, 5=Strongly agree).

#### DATA ANALYSIS

In this paper Ridit analysis is used for the data analysis because data collected is scale data.

a) Frequently using site

#### TABLE 1: ONLINE SHOPPING SITES USED FREQUENTLY BY RESPONDENTS

		Frequency	Percent
	Amazon	167	67.6
	Flipkart	66	26.7
	Paytm	4	1.6
Valid	Snapdeal	3	1.2
Vallu	Myntra	5	2.0
	Ebay	1	.4
	Others	1	.4
	Total	247	100.0

From the table it shows the result of the sites which are used by the respondents frequently/mostly while gone for online purchases. The result state that among the shopping website mentioned, Amazon.com is used by most of the respondents and next is flipkart.com. in the results Amazon used by 167 and Flipkart used by 66 respondents out of 247 respondents. From this we assume that the services provided by this site are performing better.

TABLE 2: HOW LONG LISING THE SITE

#### b) How long using the web site?

		Frequency	Percent					
	Less than 3 months	54	21.9					
	3months - 1year	77	31.2					
	1-2 years	45	18.2					
Valid	2-3 years	28	11.3					
	more than 3 years	39	15.8					
	6	4	1.6					
	Total	247	100.0					

The results from the above table, we studied that 77 respondents (31.2%) out of 247 respondent sample are using online shopping for 3 - 12 months. 54 respondents (21.9%) and 45 respondents (18.2%) are using online sites for shopping is less than 3 months and more than 2-3 years. This data shows that the usage of online shopping web-sites by the respondents.

c) Frequency of using online shopping websites

TABLE 3: FREQUENCY OF USING THE SITE									
Frequency Percer									
	3 or less than a month	172	69.6						
\/_ :_	4-8 in a month	63	25.5						
Valid	9 and above	12	4.9						
	Total	247	100.0						

Most frequently 172 (69.6%) respondents are uses the online shopping website is 3 or less than 3 times in a month. This result shows that there is a moderate use of online shopping websites.

## RIDIT ANALYSIS

## 1. E-S-QUAL Analysis

This analysis is done by considering the factors: Efficiency, System Availability, Fulfilment, and Privacy. The analysis of the factors is mentioned below: a) Efficiency

#### TABLE 4: NOTATIONS AND ITEMS TOWARDS EFFICIENCY OF ONLINE WEBSITES

Notations	Items
EFF1	This site makes it easy to find what I need
EFF2	It makes it easy to get anywhere on the site
EFF3	It enables me to complete a transaction quickly
EFF4	Information at this site is well organized
EFF5	It loads its pages fast
EFF6	This site is simple to use
EFF7	This site enables me to get on to it quickly
EFF8	This site is well organized

#### TABLE 5: RIDITS FOR EFFICIENCY OF ONLINE SHOPPING WEBSITES

	SA	А	U	D	SD	П
EFF1	102	96	44	3	2	247
EFF2	98	89	50	7	3	247
EFF3	110	85	42	7	3	247
EFF4	105	82	52	4	4	247
EFF5	105	78	51	8	5	247
EFF6	118	78	42	6	3	247
EFF7	112	73	51	8	3	247
EFF8	113	76	51	4	3	247
Fj	863	657	383	47	26	1976
1/2*fj	431.5	328.5	191.5	23.5	13	
Fj	431.5	1191.5	1711.5	1926.5	1963	
Ri	0.22	0.60	0.87	0.97	0.99	

#### TABLE 6: RIDITS FOR EFFICIENCY DATA SETS

	SA	А	U	D	SD	ρ	LB	UB	Priority Rank
EFF1	0.0902	0.2344	0.1543	0.0118	0.0080	0.4987	0.462	0.535	4
EFF2	0.0866	0.2173	0.1753	0.0276	0.0121	0.5189	0.482	0.556	8
EFF3	0.0972	0.2075	0.1473	0.0276	0.0121	0.4917	0.455	0.528	2
EFF4	0.0928	0.2002	0.1823	0.0158	0.0161	0.5072	0.470	0.544	6
EFF5	0.0928	0.1904	0.1788	0.0316	0.0201	0.5138	0.477	0.551	7
EFF6	0.1043	0.1904	0.1473	0.0237	0.0121	0.4778	0.441	0.515	1
EFF7	0.0990	0.1782	0.1788	0.0316	0.0121	0.4997	0.463	0.536	5
EFF8	0.0999	0.1855	0.1788	0.0158	0.0121	0.4921	0.455	0.529	3

At 5% level of significance the Kruskal-Wallis (KW) = 3.64, is less than the  $\chi^2$  (6) = 153.789, it can observe that there is a significant difference in scale items towards the efficiency of the sites. The 95% confidence intervals are shown in the Table-6, it shown that item 2(EFF2) has highest probability among the all the seven items. More over the respondents are chosen he item 8(EFF8). The response of the scale items 3 and 4 are equal. It is observed that efficiency of the sites is necessary. **b)** System Availability

#### TABLE 7: NOTATIONS AND ITEMS TOWARDS SYSTEM AVAILABILITY OF ONLINE WEBSITES

Notations	Items
SYS1	This site is always available for business
SYS2	This site launches and runs right away
SYS3	This site does not crash
SYS4	Pages at this site do not freeze after I enter my order information

#### TABLE 8: RIDITS FOR SYSTEM AVAILABILITY OF ONLINE SHOPPING WEBSITES

	SA	А	U	D	SD	П
SYS1	109	64	61	7	6	247
SYS2	108	70	59	7	3	247
SYS3	104	70	63	6	4	247
SYS4	108	73	60	2	4	247
fj	429	277	243	22	17	988
1/2*fj	214.5	138.5	121.5	11	8.5	
Fj	214.5	567.5	827.5	960	979.5	
Rj	0.22	0.57	0.84	0.97	0.99	

#### TABLE 9: RIDITS FOR SYSTEM AVAILABILITY DATA SETS

	SA	А	U	D	SD	ρ	LB	UB	Priority Rank
SYS1	0.0958	0.1488	0.2068	0.0275	0.0241	0.5031	0.466	0.540	3
SYS2	0.0949	0.1628	0.2001	0.0275	0.0120	0.4974	0.461	0.534	2
SYS3	0.0914	0.1628	0.2136	0.0236	0.0161	0.5075	0.471	0.544	4
SYS4	0.0949	0.1698	0.2035	0.0079	0.0161	0.4921	0.455	0.529	1

Here the Kruskal-Wallis (KW) =0.40, is less than the  $\chi^2$  (3) =152.534, it shows that there is a significant difference in the scale items of the system availability. The 95% confidence intervals shown in the Table – 9, it shown that the items 2 and 4 are chosen by the respondents equally. But the item 1 is chosen highly compared to all the items of the system availability. The P value of the item 3 is grater so, it should be considered in the system availability.

#### c) Fulfilment

#### TABLE 10: NOTATIONS AND ITEMS TOWARDS FULFILMENT OF ONLINE WEBSITES

Notations	Items
FUL1	It delivers orders when promised
FUL2	This site makes items available for delivery within a suitable time frame
FUL3	It quickly delivers what I order
FUL4	It sends out the items ordered
FUL5	It has in stock the items the company claims to have
FUL6	It is truthful about its offerings
FUL7	It makes accurate promises about delivery of products

#### TABLE 11: RIDITS FOR FULFILMENT OF ONLINE SHOPPING WEBSITES

	SA	А	U	D	SD	П
FUL1	112	78	49	5	3	247
FUL2	115	74	52	4	2	247
FUL3	112	69	56	7	3	247
FUL4	114	75	46	8	4	247
FUL5	110	75	55	5	2	247
FUL6	105	82	50	8	2	247
FUL7	109	75	57	3	3	247
fj	777	528	365	40	19	1729
1/2*fj	388.5	264	182.5	20	9.5	
Fj	388.5	1041	1487.5	1690	1719.5	
Rj	0.22	0.60	0.86	0.98	0.99	

#### TABLE 12: RIDITS FOR FULFILMENT DATA SETS

	SA	А	U	D	SD	ρ	LB	UB	Priority Rank
FUL1	0.1019	0.1901	0.1707	0.0198	0.0121	0.4946	0.458	0.531	3
FUL2	0.1046	0.1804	0.1811	0.0158	0.0081	0.4900	0.453	0.527	1
FUL3	0.1019	0.1682	0.1951	0.0277	0.0121	0.5049	0.468	0.542	6
FUL4	0.1037	0.1828	0.1602	0.0317	0.0161	0.4945	0.458	0.531	2
FUL5	0.1001	0.1828	0.1916	0.0198	0.0081	0.5023	0.466	0.539	4
FUL6	0.0955	0.1999	0.1742	0.0317	0.0081	0.5093	0.473	0.546	7
FUL7	0.0992	0.1828	0.1985	0.0119	0.0121	0.5045	0.468	0.541	5

The results shown the values of Kruskal-Wallis (KW) =0.87, is less than the  $\chi^2$  (6) =164.27, it shows that there is a significant difference in the scale items of the fulfilment in online shopping sites. The 95% confidence intervals shown in the Table – 12, it shown that the items 1 and 3 are chosen equally by the respondents. But the item 2 is chosen highly compared to all the items of the fulfilment scale items. The P value of the item 6 is grater among all the items of the fulfilment in the online shopping websites.

#### d) Privacy

#### TABLE 13: NOTATIONS AND ITEMS TOWARDS PRIVACY OF ONLINE SHOPPING WEBSITES

Notations	Items
PRI1	It provides information about my Web-shopping behaviour
PRI2	It does not share my personal information with other sites
PRI3	This site protects information about my credit card

#### TABLE 14: RIDITS FOR PRIVACY IN ONLINE SHOPPING SITE

	SA	А	U	D	SD	П
PRI1	107	79	51	3	7	247
PRI2	113	70	58	1	5	247
PRI3	116	73	52	2	4	247
Fj	336	222	161	6	16	741
1/2*fj	168	111	80.5	3	8	
Fj	168	447	638.5	722	733	
Rj	0.23	0.60	0.86	0.97	0.99	

#### TABLE 15: RIDITS FOR PRIVACY DATA SETS

	SA	А	U	D	SD	ρ	LB	UB	Priority Rank		
PRI1	0.0982	0.1929	0.1779	0.0118	0.0280	0.5089	0.472	0.546	3		
PRI2	0.1037	0.1710	0.2023	0.0039	0.0200	0.5010	0.464	0.538	2		
PRI3	0.1065	0.1783	0.1814	0.0079	0.0160	0.4901	0.453	0.527	1		

Here the results shown the values of Kruskal-Wallis (KW) =0.53, is less than the  $\chi^2$  (1) =164.9, it shows that there is a significant difference in the scale items of the privacy in online shopping sites. The 95% confidence intervals shown in the Table – 15, it shown that the item 3(PRI3) is chosen highly compared to all the items of the privacy scale items. The P value of the item 1 is grater among all the items 2 and 3 of the privacy scale items.

2. E-Rec S-QUAL

Respondents rated the web site's performance on each scale item using a 5-point scale (1=Strongly disagree, 5=Strongly agree). The items below are grouped by dimension for expositional convenience namely, Responsiveness, Compensation, and contact.

#### a) Responsiveness

#### TABLE 16: NOTATIONS AND ITEMS TOWARDS RESPONSIVENESS OF ONLINE SHOPPING SITES

Notation	Item
RES1	It provides me with convenient options for returning items
RES2	This site handles product returns well
RES3	this site offers a meaningful guarantee
RES4	It tells me what to do if my transaction is not processed
RES5	It takes care of problems promptly

#### TABLE 17: RIDITS FOR RESPONSIVENESS OF ONLINE SHOPPING SITES

	SA	А	U	D	SD	П
RES1	111	80	46	7	3	247
RES2	113	82	45	6	1	247
RES3	104	79	52	8	4	247
RES4	102	81	53	8	3	247
RES5	97	91	47	8	4	247
fj	527	413	243	37	15	1235
1/2*fj	263.5	206.5	121.5	18.5	7.5	
Fj	263.5	733.5	1061.5	1201.5	1227.5	
Rj	0.21	0.59	0.86	0.97	0.99	

#### TABLE 18: RIDITS FOR RESPONSIVENESS DATA SETS

	SA	А	U	D	SD	ρ	LB	UB	Priority Rank
RES1	0.0959	0.1924	0.1601	0.0276	0.0121	0.4880	0.451	0.525	2
RES2	0.0976	0.1972	0.1566	0.0236	0.0040	0.4790	0.442	0.516	1
RES3	0.0898	0.1900	0.1810	0.0315	0.0161	0.5084	0.472	0.545	3
RES4	0.0881	0.1948	0.1844	0.0315	0.0121	0.5109	0.474	0.548	4
RES5	0.0838	0.2188	0.1636	0.0315	0.0161	0.5138	0.477	0.550	5

The results shown the values of Kruskal-Wallis (KW) =2.85, is less than the  $\chi^2$  (5) =157.433, results show that there is a significant difference in the scale items of the responsiveness of the online shopping web-sites. The 95% confidence intervals shown in the Table – 18, it shown that the item 1 is chosen most by the respondents. The item 5 has the greater P value.

#### b) Compensation

#### TABLE 19: NOTATIONS AND ITEMS TOWARDS THE COMPENSATION

Notation	Item
COM1	This site compensates me for problems it creates
COM2	It compensates me when what I ordered doesn't arrive on time
COM3	It picks up items I want to return from my home or business

#### TABLE 20: RIDITS FOR COMPENSATION

	SA	А	U	D	SD	Π
COM1	98	87	47	8	7	247
COM2	100	78	54	7	8	247
COM3	111 78		48 7		3	247
fj	309	243	149	22	18	741
1/2*fj	154.5	121.5	74.5	11	9	
Fj	154.5	430.5	626.5	712	732	
Rj	0.21	0.58	0.85	0.96	0.99	

#### TABLE 21: RIDITS FOR COMPENSATION DATA SETS

						-			
	SA	А	U	D	SD	ρ	LB	UB	Priority Rank
COM1	0.0827	0.2046	0.1609	0.0311	0.0280	0.5074	0.471	0.544	2
COM2	0.0844	0.1835	0.1848	0.0272	0.0320	0.5119	0.475	0.549	3
COM3	0.0937	0.1835	0.1643	0.0272	0.0120	0.4807	0.444	0.517	1

The results shown the values of Kruskal-Wallis (KW) =1.69, is less than the  $\chi^2$  (6) =139.903, it shows that there is a significant difference in the scale items of the compensation in online shopping sites. The 95% confidence intervals shown in the Table – 21, it shown that the item 2(COM2) P value is high it shown in the ranking, but the item 3 is chosen by the respondents mostly.

c) Contact

#### TABLE 22: NOTATIONS AND ITEMS TOWARDS CONTACT IN ONLINE SHOPPING SITES

Notation	Item
CON1	This site provides a telephone number to reach the company
CON2	This site has customer service representatives available online
CON3	It offers the ability to speak to a live person if there is a problem

#### TABLE 23: RIDITS FOR CONTACT OF ONLINE SHOPPING WEB-SITES

	SA	А	U	D	SD	П
CON1	103	78	49	8	9	247
CON2	106	76	51	10	4	247
CON3	103	79	56	4	5	247
fj	312	233	156	22	18	741
1/2*fj	156	116.5	78	11	9	
Fj	156	428.5	623	712	732	
Rj	0.21	0.58	0.84	0.96	0.99	

TABLE 24: RIDITS FOR CONTACT DATA SETS											
	SA A U D SD ρ LB UB Priority Rank										
CON1	0.0878	0.1826	0.1668	0.0311	0.0360	0.5043	0.468	0.541	3		
CON2	0.0903	0.1779	0.1736	0.0389	0.0160	0.4968	0.460	0.534	1		
CON3	CON3 0.0878 0.1850 0.1906 0.0156 0.0200 0.4989 0.462 0.536 2										

Here the results shown the values of Kruskal-Wallis (KW) =0.09, is less than the  $\chi^2$  (1) =142.453, it shows that there is a significant difference in the scale items of the contact in online shopping sites. The 95% confidence intervals shown in the Table – 24, it shown that the items 1 and 3 are chosen equally by the respondents. But the item 2 is chosen highly compared to all the items of the contact scale items. The P value of the item 2 is grater among all the items of the contact in the online shopping websites.

#### 3. Perceived Value

#### TABLE 25: NOTATIONS AND ITEMS TOWARDS PERCEIVED VALUE

Notation	Item
PV1	The prices of the products and services available at this site (how economical the site is).
PV2	The overall convenience of using this site.
PV3	The extent to which the site you a feeling of being in control.
PV4	The overall value you get from this site for your money and effort.

#### TABLE 26: RIDITS FOR PERCEIVED VALUE OF ONLINE SHOPPING SITES

	SA	А	U	D	SD	Π
PV1	101	92	54	0	0	247
PV2	111	91	42	3	0	247
PV3	102	97	45	3	0	247
PV4	105	93	45	4	0	247
fj	419	373	186	10	0	988
1/2*fj	209.5	186.5	93	5	0	
Fj	209.5	605.5	885	983	988	
Rj	0.21	0.61	0.90	0.99	1.00	

#### TABLE 27: RIDITS FOR PERCEIVED VALUE DATA SETS

	SA	Α	U	D	SD	ρ	LB	UB	Priority Rank
PV1	0.0867	0.2283	0.1958	0.0000	0.0000	0.5108	0.474	0.548	4
PV2	0.0953	0.2258	0.1523	0.0121	0.0000	0.4855	0.449	0.522	1
PV3	0.0876	0.2407	0.1632	0.0121	0.0000	0.5035	0.467	0.540	3
PV4	0.0901	0.2283	0.1632	0.0161	0.0000	0.4977	0.461	0.534	2

The results shown the values of Kruskal-Wallis (KW) =1.02, is less than the  $\chi^2$  (1) =15.17, it shows that there is a significant difference in the scale items of the perceived value towards online shopping sites. The 95% confidence intervals shown in the Table – 27, it shown that the item 2(PV2) is chosen highly compared to all the items of the perceived value scale items. The P value of the item 1 is grater among all the items of the perceived value scale items. **4.** Loyalty Intentions

#### TABLE 28: NOTATIONS AND ITEMS TOWARDS LOYALTY INTENTIONS OF ONLINE SHOPPING WEBSITES

Notation	Item
LI1	Say positive things about this site to other people.
LI2	Recommend this site to someone who seeks your advice?
LI3	Encourage friends and others to do business with this site?
LI4	Consider this site to be your first choice for future transactions?
LI5	Do more business with this site in the coming months?

#### TABLE 29: RIDITS FOR LOYALTY INTENTIONS OF ONLINE SHOPPING SITES

	SA	A	U	D	SD	Π
LI1	106	89	48	2	2	247
LI2	103	86	52	5	1	247
LI3	99	84	54	9	1	247
LI4	102	80	56	8	1	247
LI5	102	86	52	5	2	247
fj	512	425	262	29	7	1235
1/2*fj	256	212.5	131	14.5	3.5	
Fj	256	724.5	1068	1213.5	1231.5	
Rj	0.21	0.59	0.86	0.98	1.00	

#### TABLE 30: RIDITS FOR LOYALTY INTENTIONS OF ONLINE SHOPPING SITES

	SA	А	U	D	SD	?	LB	UB	Priority Rank		
LI1	0.0890	0.2114	0.1681	0.0080	0.0081	0.4844	0.448	0.521	1		
LI2	0.0864	0.2043	0.1821	0.0199	0.0040	0.4967	0.460	0.533	2		
LI3	0.0831	0.1995	0.1891	0.0358	0.0040	0.5115	0.475	0.548	5		
LI4	0.0856	0.1900	0.1961	0.0318	0.0040	0.5075	0.471	0.544	4		
LI5	0.0856	0.2043	0.1821	0.0199	0.0081	0.4999	0.463	0.537	3		

Here the results shown the values of Kruskal-Wallis (KW) =1.31, is less than the  $\chi^2$  (3) =157.9595, it shows that there is a significant difference in the scale items of the loyalty intentions towards online shopping sites. The 95% confidence intervals shown in the Table – 30, it shown that the items 4 and 5 is chosen highly compared to all the items of the loyalty intentions scale items. The P value of the item 3 is grater among all the items of the loyalty intention scale items.

#### FINDINGS

The service quality is relatively significant impact on the consumer loyalty in online shopping sites. The results shown that the usage of online shopping websites will be more in the near future. Efficiency and system availability of the online shopping sites is impacting the service quality of the online shopping sites. The

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results show the variables are significantly impacting the service quality of the online shopping sites. The perceived value of the sites is shown positively impacting the website development. Loyalty intention towards shopping sites says that the it can improve the customer satisfaction of the online shopping sites.

#### CONCLUSION

E-service Quality is used as the strategic tool for the service quality of the online shopping sites to survive in the competitive growing market. The aim of the study is to find the service quality of the online shopping site is beneficial for the development and growth of the market. The study is conducted in the Guntur region, it shown that the customers are showing more interest towards Amazon and flipkart sopping sites. The service quality of the online shopping sites is determined by the Kruskal-Wallis (KW) and chi square values of the variables. This study also contributed to the field survey offline and online for collection of the data. The results of E-S-UQAL find that if the variables of the test are perfect then the Perceived value and loyalty intension are increased.

#### LIMITATIONS

- 1. This study is only restricted to E-SQUAL and loyalty intention of the online shopping websites.
- 2. For analysis in this study only RIDIT analysis is done.
- 3. The study is conducted in Guntur region only.
- 4. Scale data is collected in this study for analysis.

#### SCOPE FOR FUTURE RESEARCH

To find customer satisfaction of the online shopping sites, performance of the shopping sites operations more elaborately, the study can be conducted by taking large sample (Districts, states) it will get better results. Factor can add to this study like customer satisfaction, repurchase behaviour of the consumers.

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