

**SATISFACTION OF TAXPAYERS IN E-FILLING OF INCOME TAX  
(E-VAT)  
(A CASE STUDY OF KATHMANDU VALLEY NEPAL)**

**THESIS SUBMITTED TO TRIBHUVAN UNIVERSITY  
FOR THE DEGREE OF  
MASTER OF PHILOSOPHY IN PUBLIC ADMINISTRATION**

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**November, 2015**

## **DECLARATION**

I hereby declare that this thesis entitled "**Satisfaction of Taxpayers in E-filing of Income Tax (E-VAT) (A Case Study of Kathmandu Valley Nepal)**" Faculty of Management, Tribhuvan University has been completed as per the prescribed format of Tribhuvan University and this is my original work done for the partial fulfillment of the requirement of the degree of Master of Philosophy in Public Administration (M.Phil) under the guidance and supervision of **Dr. Narendra Raj Paudel**, Co-ordinator (MPhil Program), Central Department of Public Administration (CDPA), T.U. I personally will have no objection if data and work of my thesis ,in part or whole is photocopied or used for other research purpose.

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**RECOMMENDATION**

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**(A CASE STUDY OF KATHMANDU VALLEY NEPAL)**

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**VIVA-VOCE SHEET**

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**(A CASE STUDY OF KATHMANDU VALLEY NEPAL)**

and found the thesis to be the original work of the students and written according to the prescribed format. We recommended the thesis to be accepted as the partial fulfillment of the requirements for Master of Philosophy (MPhil).

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Raja Ram Adhikari

Researcher

*Dedicated.....*



*To my beloved father and mother, and family  
who provide me strength &  
courage in every stage in my life*

## ABSTRACT

**Title:** Satisfaction of Taxpayers in E-filing of Income tax (E-VAT): A Case Study of Kathmandu Valley Nepal.

**Keywords:** *Satisfaction, E-filing, ICT infrastructure, demographic, Quality, Perception, Technical knowhow and trustworthiness.*

**Purpose:** The thesis would examine either taxpayers satisfied or not by applying (E-filing) in terms of use.

**Background:** Today, Consumer (taxpayer) satisfaction is very important that winner or loser of organizations based on the percentage of consumer who have retained. Satisfaction as consumers' judgment that a product or service feature, pleasurable level of consumption-related fulfilment, including levels of under- or overfulfilment. The tax service quality and its dimensions need to be desirable. Satisfaction being an abstract concept cannot be measured directly in terms of quantitative terms; psychological aspects of individual /phenomenon. Satisfaction of taxpayers in e-filing of Income tax (E-VAT) is also psychosomatic. E-filing is a system for submitting tax documents to the income tax department through the internet or direct connection, usually without the need to submit any paper documents.

**Methodology:** The descriptive and exploratory research design was used to conduct the study and mixed approach both quantitative and qualitative data were to be collected by using questionnaire from respondents as non-random convenience sampling (100) from Thamel kathmandu and also purposive judgement for the informal interview. Technological Acceptance Model (TAM) (Davis, 1989) and DeLone and McLean's success model (1992 and 2003) was the major theoretical aspects to conceptualize the research framework.

**Result /Conclusion:** By cross tabulation, there was association between demographic factors (gender, age, education and average annual income) and satisfaction of taxpayers in the e-filing. In perception, perceive usefulness was major indicator as they respond with agree view. There was positive relationship between the remaining four independent variables (Quality, perception, technical savvy, and trustworthiness) with the satisfaction of e-filing. Similarly, for trustworthiness, most of them satisfied or agree with trustworthiness of e-filing in communicating and networking. The reason behind to communicate and networking of e-filing for trustworthy depicted that e-fillers get quick conformitary (response) after submitting the return and time saving. To sum up, four independent variables were highly correlated with satisfaction of e-filing. Among them quality, technical knowhow/savvy and perception had played more significant role respectively than remaining one. Taxpayers were satisfied in e-filing system in general.

## ABBREVIATION

D & C	:	DeLone and McLean
ETA	:	Electronic Tax Administration
ETAAC	:	Electronic Tax Administration Advisory Committee
GDP	:	Gross Domestic Product
GTZ	:	German technical Cooperation
ICT	:	Information Communication and Technology
IRBM	:	Inland Revenue Board Malaysian
IRD	:	Internal Revenue Department
IRO	:	Inland Revenue offices
IRS	:	Internal Revenue Service
IS	:	Information System
ITRs	:	Income Tax Returns
LTO	:	Large Taxpayer Office
MOF	:	Ministry of finance
MOIC	:	Ministry of Information and Communication
MOLJ	:	Ministry of law and justice
PAN	:	Permanent Account Number
PEOU	:	Perceive Ease of Use
PS	:	Perceive Security
PU	:	Peceive Usefulness
PV	:	Perceive Value
SQ	:	Service Quality
SSL	:	Secure Sockets Layer
TAM	:	Technology Acceptance Model
TDS	:	Tax Deducted at Source
TPB	:	Theory of Planned Behavior
TSO	:	Tax Service offices
UN	:	United Nation
UNDP	:	United Nation Development Program
VAT	:	Value Added Tax

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# CHAPTER-I

## INTRODUCTION

### 1.1 Background of the Study

Traditionally, the public sector had an image of being inflexible, unresponsive and being little concerned with the people they were serving and their degree of satisfaction with the services provided to them. Historically, there can be no doubt that public sector management system were traditionally based on bureaucratic model which emphasized conformity and uniformity approach. At the same time, the public sector organization were largely monopolistic provider and the consumer of services had limited or no alternative. In recent years, public administration is being initiative such as citizen's charter a significant change among PSOs (Public Service Organizations) has been emphasized, they now placed on consumerism and keeping consumer's satisfied. Similarly, there has been a significant drive in many public service organization to improve the quality of the services as they provided (Prowle, 2000:167).

In past, public administration was focused on what happens within the bureaucracy and internal problems (Alvani & Danaeefard, 2004). At present, the approach to public administration is issued on efficiency and effectiveness has undergone a basic and radical transformation (Sharifi,2000:10). Recently, government innovation such as truth in labeling and advertising and product safety regulation as well as private efforts such as consumer magazine, research journals and other aspects of consumer advocacy are well witness to this focus on the private sector. In order to rapid response and e-government's initiative objectives are examined. One way to control outsourcing processes is assessment level of taxpayer's satisfaction.

Consumer Satisfaction is influenced by number of different factor such as the attitude of staff providing the services, the pleasantness of the physical environment in which the services are provided, promoting higher quality of service. Information Technology (IT) revolution has impacted on all areas of society, public sector as a whole around €2 billion

a year in IT. IT is one of the key means of actual service delivery in the public sector. The key policy drivers of IT development in the public sector are market mechanisms, managerial delegation, cost pressures, quality and consumer satisfaction pressure the requirement for central control. The main problem of public sector IT development are runaway system, functional failure, failure to undertake process review and communication channel. (Prowle, 2000:184).

Public sector consumer's problems are attributed two basic sources of governmental effectiveness : organizational failure (which seems from internal bureaucratic factors and political failure which stems from conflicts in the body politic. The major problems are disappointing goods, awareness, consumer preference, access and location. Consumer action and demands in the public sector are largely left out of consideration in this review. Although it has often been maintained that it is in that sector that 'consumer' problems are most serious.. we have excluded this area. The exclusion is...partly due to the fact that we find it rather questionable to conceive of citizen as consumer of government services (Young,1977:147).

In (fifth phase) 1971 onwards, public administration registered great progress and public policy prospective focused on the dynamics of administration, inter-disciplinary, new public administration and development as market orientation (state and market). Governance started to attract policy attention and get into development discourses around the period of late 1980s. Governance as a concept came in recent times to the increasing interaction of three actors – state, market and the civil society. It is taken as a process rather than immediate decision. It is a set of continuous process that usually evolves slowly with use rather than change dramatically.

The eighth Plan of Nepal encouraged the private sector participation and investment in order to confine the role of the government more for developing socio-economic infrastructure. Thus attempts were made to make the role of the government limited but effective by gradually replacing the command economy by open market system. During the Plan period, efforts were made to create an environment conducive to liberal and

market-oriented economic system. Preparations were made to introduce Value Added Tax (VAT). Privatization of public enterprises was initiated, encouraged private sector participation and controlled the subsidy. Similarly, National Planning Commission with a view to formulating a contemporary information technology system being familiar with advancement in this field at the global level. This cell will formulate and implement policies and programmes in coordination with the government agencies using the information technology and systems such as education, health, agriculture, finance, communication, commerce, etc. (NPC, 2013).

In Nepal, the concept of income tax was initiated in 1960 (2017 B.S.) and implemented gradually in 1974 (2031 B.S.). After the revolution of democracy government of Nepal efforts were created an environment encouraging to liberal and market-oriented economic system and replaced the present income tax act 2002 (2058 B.S.). Following the economic liberalization policy, Nepal had also improved for the implementation of VAT since 1998, legally and administratively began to introduce VAT. Inland Revenue Department (IRD) was established on July 16, 2002 as a result of a merger of the Income Tax Department and the Value Added Tax department. Previously, in tax administration, taxpayers are only considered as taxpayer view i.e. narrow prospective. However, after the replaced of new income tax act 2002 firstly defined as taxpayers are the consumer i.e. broader prospective. This act further defines that "consumers as producers; businesses, applicants, taxpayers, relevant government agency, buyers and sellers. Hence, the potential consumers are equipment companies (Business organization G2B), company (G2B) and citizen (G2C)"(Nepal GEA,Current State Assessment Report,2010:70). Recently, IRD developed the extensive prospective that "taxpayers are the stakeholders and working co-operatively and transparently with the business partners" (IRD Strategy Paper 2015).

VAT is tax imposed on the value added early economic activities from production to consumption. Ultimate resting place of this tax is final consumption so that consumers are the sole taxpayers of VAT. Business people only collect the VAT as a mediator so that they do not bear its burden. The tax system of Nepal has reflected a policy of

Nepalese tax system, is considered best for equity and distributive objective of economy policy. The current e-governance strategy, which guides developments in e-commerce and information technology.

The Public Financial Management Reform Program (PFMRP) was established to implement these reforms 2009/10- 2011/12 namely phase 1. The major outcome were simplified and more understandable tax system for taxpayers, improved access of taxpayers to their personal data, the provision of quality data and statistics to stakeholder and strengthening of the revenue tribunal (PFMRP,2012). Hence, ICT systems provide a comprehensive range of electronic services to taxpayers (e.g.e-registration, filing, payment) and administrative support functions within the agency. IT developments, operations and maintenance are guided by an Information Technology strategy. In present context, Infrastrucure of IRD interms of automation, e-governance, e-services and e-based monitoring and evaluation system are prominently effective by the adoption of ICT (Information Communication Technology).

Today, consumer's (taxpayer's) satisfaction is very important that winner or loser of organizations based on the percentage of consumers who have retained. Oliver (1997) described satisfaction as consumers' judgment that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or overfulfilment (Oliver, 1997:75). Satisfaction with the quality of service tax on taxpayers in VAT affects all aspects of quality (tangible factors, reliability, empathy, assurance, accountability) impact on taxpayers and guaranteed satisfaction has the highest rank. The tax service quality and its dimensions are desirable (Aida & Manouchehr, 2014:198).

One of the general problems of developing countries is economic stabilization policies. Similarly, the most important tool for governments in this regard is tax collection and redistribution to maximize social welfare. Expansion of government functions, their role in creating social welfare and community development financed resource is more important for governments. Hence taxes not only in distribution of this income, inflation, economic growth acceleration and the direction of investment is effective, but in the

induction of general policies in all income generating activities plays an important role in society. With the turn of the millennium, many organizations and their suppliers, are facing with tough and intense competition, both in the domestic and global market that is changing rapidly an inside the organization. Due to expansion, changes in commercial and economic activities, the tax system will be successful only if it can to move commensurate with the evolution and development of economic sectors consistent with the changes organization of tax affairs (Abedi, et al., 2014 :395).

In many developing countries with economies in transition, relatively simple measures, such as, providing taxpayer's tax return forms, eliminating taxpayment receipt fee by the banks, a common practice in some Eastern European countries, and establishing taxpayer assistance counters in easily accessible locations in the tax administration would significantly improve taxpayer services (Silvani & Catherine,1997 :30).

Inland Revenue Department (IRD) launched the ICT software effectively from 2007 for e-service delivery. Similarly, it has introduced an e-System (E-VAT) since 2010 and has been motivating taxpayers to use it. Various donor agencies, the major two being Danida and GTZ, have provided technical and financial support not only for initiating the e-System but also for its strengthening and upgrading almost one and a half decade. There are different internet based services to the service seekers provided by IRD. They are online filing facilities such as personal e-pan, e-pan, e-Tax Deductable at Source (e-TDS), e-returns, IMS and SMS systems. Likewise IRD website provided information (e-services) to the taxpayers.

As a matter of fact, most of the country stepped in ICT world in early 1970s with the introduction of IBM computer systems to process the population census data (Kim et al 2007). Today, technological advancement, the internet expansion and computer prevalence among users have resulted in huge demands on web site creation in factories, private and public firms and even for individual usages more than ever. Having a website is known as a standard practice, at least used in preparing organizational or individual specification and primary information such as contact information, brochures, advertisement, organization history and news among other things. The use of web site in

providing needed information has some advantages in organizations such as time and cost savings especially advertisement cost (Bickley,2003:454).

Hence, the tax system is a combination of the tax system, taxpayer, legal and operational procedures. Information communication and technology (ICT) is seen as a tool to support the work of governmental institutions and agencies with the objectives of delivering public services and information in a more convenient, citizen-centric and cost effective manner. In other words, ICT can be an effective tool to ensure increased accessibility, inclusivity and flexibility of government services, improved value for money and increased productivity.

Electronic filing implies the use of new technology, specifically the internet and some form of tax preparation software. Internet tax filing called electronic filing as part of its e-government initiative. It is the process of electronically filing income tax returns through the internet is known as e-filing. Variety method of intelligent communication is created to make all the operation of distribution of technology easier in smoothing communication transaction and administration. The advantage of e-Filing is to make it easier for the tax payer to fulfill tax form rather than manually. It is also easy because tax payer can send the form through internet wherever they are i.e. without time and place constraint. By using e-filing application, data checking and tax calculation is done automatically which gives more taxpayers's satisfaction and accurate results rather than doing it manually. Thus, Electronic tax administration (ETA) is the foundation for a modernized IRS that provides secure, convenient, timely, and accurate services to satisfy the taxpayers, tax professionals and IRD employees who serve them.

In terms of public satisfaction with online tax filing systems, most reported for extensive success in implementing the electronic service. Based on comments received from the public and reactions from officials who run the tax programs, the technology appeared to function effectively and taxpayers are happy with the results. Other than routine, scheduled maintenance, the online tax filing system does not go down and is available 24 hours a day, seven days a week, as advertised to the general public. Similarly having an

infrastructure, capability exceeds the number of people wanting to file tax returns online, at least when based on current usage levels.

The use of technology to improve the effectiveness of tax administrations and expand taxpayer services has come to attract increasing attention in developed and developing countries. Governments worldwide have increasingly been demanding substantially more effective use of modern technology systems for the delivery of services to citizens. Often, they implemented ambitious e-government projects and most modern tax agencies have also responded by expanding the scope and nature of electronic services offered to taxpayers and their agents.

Governments worldwide are moving towards utilizing the power of information, communication and technology (ICT) by embarking into the new dimension which is electronic filing (henceforth referred as e-filing). In order to improve taxpayer service and their satisfaction, governments are leveraging ICT in many ways to tap the potential cost saving and efficiency in providing online services to the citizens. However, low system acceptance by the end-users is one of the major hurdles to the proliferation of e-government projects (Sahu & Gupta, 2007).

E-filing system can enhance e-government efforts in providing fast and efficient service to its citizens. In recent years, individual innovation adoption behavior and the diffusion of innovations have turned the research agenda towards self-service technologies, particularly online services, such as Internet, e-commerce, online banking, and e-government. E-taxation acceptance is an important index of e-government in many countries. The net presence and operation of e-taxation depend heavily on composition of information system (IS), such as Internet, www, and network. If taxpayers accept and use e-taxation systems, use of technologies and innovations their satisfaction level is increased. By evaluating it, the outcome of e-taxation may influence their intention to use. Taxpayers can complete tax filing quicker (perceived usefulness) when they perceive ease of use is higher and raised their satisfaction level (Fu et al.,2006).

The dynamic way of getting citizens/consumers of public services involved in order to enhance their perceptions, expectations and commitment through active participation, has been a common strategy to obtain a legitimate level of quality and satisfaction of public services (OECD, 2001b). Thus, if the traditional relationships is bureaucratic and hierarchical, the new relationships are instead more pluralistic (Peters and Savoie, 2000). Taxpayers are able to complete the filing easier if the government provide a more user-friendly on-line tax filing system (simple operation, easy-to-understand interface, and check the tax exemptions automatically) ( Ramayah et al. ,2009). The possibility of using on-line tax filing would be increased if taxpayers know the advantages of the system i.e. easy to operate (Warkentin et al., 2002).

Hence, on-line tax filing offers excellent IT infrastructure and transaction safety would avoid the inconvenience commuting to internal revenue service (IRS). If taxpayers have positive perception, believe the benefit of it, more positive attitude toward the on-line tax filing system provided by the government, their satisfaction level is also increased. Globally, tax agencies are leveraging on the electronic tax filing (e-filing) system to achieve greater tax administrative and compliance efficiency. However, taxpayers' resistance and under-utilization of e-filing technology remain the greatest concern and still plagued the various tax agencies that had embraced e-filing system.

This study 'Satisfaction of Taxpayers in E-filling of Income tax (E-VAT)' reflects the taxpayer's beliefs, perceptions, timeliness, users friendliness, trust, interpretations of processes, issues and trends observed through the case study of Kathmandu valley, Internal Revenue Office Area No.2 (Taxpayer Service office, Kathmandu Area 2, Thamel). The reason for choosing this e-services is that it has a large coverage of tax payers as compared to other e-services; large numbers of taxpayers are taking the mentioned services electronically.

In this research, satisfaction is measured on three different levels: first there is the general satisfaction with the service; the e-service/e-filling of the IRD is concerned. Secondly, the satisfaction with areas of performance(sub departments) e.g. Information Communication Technology (ICT) and finally satisfaction with processes within the performance

areas/output of e-filing in income tax specially E-return (E-VAT). The major instrument for this measurement are reliability, empathy, convenience, perceive ease of use, perceive usefulness, security, service quality, technical know how and trustworthiness. Questions about general satisfaction are asked after the detailed ones, in order to give the respondent's view towards e-filling services.

### **1.1.1 Brief sketch of Internal Revenue Department (IRD)**

The Inland Revenue Department (IRD) falls under the auspices of the Ministry of Finance (MoF) and was established on July 16, 2002 as a result of a merger of Income Tax Department and Value Added Tax Department. It is responsible for the administration of domestic tax revenue emanating from Income Tax, Value Added Tax, Excise (the three major taxes in revenue administration), Health Services Tax and the Education Services Fee. The department has an authorized staff complement of 1,040 positions. Administration is decentralized, in a functional organizational structure. The IRD has one Large Taxpayer Office (LTO) to service the largest taxpayers, 22 Inland Revenue Offices (IRO) nationwide, and equal 13 Taxpayer Services Offices (TSO) in the Kathmandu Valley and outside the Valley. In recent years IRD, has achieved significant revenue collection growth is increased by 20.4%, 27.4% and 23% in fiscal year 2008/09, 2010/11 and 2011-12. Registration activity has increased substantially over the last four years but has been attended by increasing non-filing compliance.

It is estimated that the shadow or informal economy accounts for 38% of economic activity and there are significant gaps in filing, payment and reporting compliance for the remaining 62%. Significant improvements have been made in taxpayer service using automation to increase efficiency (e.g. e-services in registration and filing), broadening the audit approach (e.g. introduction of current audits for Value Added Tax (VAT) and Tax Deducted at Source (TDS), standardizing performance (e.g. promulgation amongst staff of an audit manual for the three major taxes), and working with external partners (e.g. developing MOUs to enhance data sharing). The IRD has a strong appetite for increased data sharing and analysis, for enhancing risk assessment processes and for exploiting the benefits of information technology. Notwithstanding these achievements,

there is a need for comprehensive reform to build a tax administration that can meet the challenges of the future. Several factors influence this need for reform, including: i) tax revenue to GDP ratio which is approximately 13.2% and which needs to be continuously enhanced ii) continuing positive revenue growth over several years, leading to a 23% increase in the target ([www.ird.gov.np/](http://www.ird.gov.np/) accessed on 03/03/2015.).

## **1.2 Statement of the Problem**

93 countries adopted e-filing of income tax in the world. According to the Global e-government annual report, which reviewed 1,667 government websites in 198 countries, the top five ranking countries were South Korea, Taiwan, the United States, Singapore, Canada and Australia. The report analyzed 18 different features of e-government (West, 2008). In developing countries, like Nepal, e-filing of income tax is implemented since 2007 and E-VAT by using ICT since 2010. In Nepalese context, E-VAT is the major source of revenue for the development economy. Open boarder, weak administration, lack of accounting based transactions, due to large number of business units, antitax attitude of taxpayers are some of the complexities of VAT which should be corrected timely. Due consideration is also to be given on the development of ways for typing e-commerce would be the expanding activities in future. Tax education is important of revenue mobilization (Shrestha, 2001).

GTZ had taken 312 taxpayers for the study on satisfaction level of taxpayers representing ten of 22 Inland Revenue Offices (IRO) (five within and five outside the Kathmandu valley) and almost all types of business entities (individuals, proprietors, partnerships, private limited, public limited companies and public corporations). The majority of the sampled taxpayers stated that people should pay income taxes and deserve to be penalized if they fail to do so. Only one third of respondents were satisfied with the delivery of public services in the fields of security, electricity supply, drinking water supply and social benefits, whereas about 50 percent of respondents were satisfied with the services in the telecommunication, transportation and education sectors. Similarly, less than 40 percent were satisfied with the quality of services of IROs (except for location and accessibility). In spite of the perception that services during the past seven

years have improved. The majority of the respondents were reasonably satisfied with the tax procedures and administrative mechanisms, except with tax refunds (GTZ,2010).

The registered taxpayers too were not effective instrumental to the tax generation. Around 21.25% taxpayers werenot filling their returns that reflect higher filling risk in VAT administration. The major hinders was weak inforcement of the law by both custom and inland revenue administration at the time of under declaration at custom point, under billing and non-billing in the consumer markets. Customers were largely unaware of VAT system, taxpayer education, consumer awarness campaign, procedural simplification through application of e-based system, scalling up investment for ICT sophistication, restructuring and reengineering of the organization, decentralization of service delivery, centralization and sepicaliztion of audit and investigation guides to indicator for the improvement of IRD (Koirala,2011).

The weak performance in filling compliance of VAT policy might due to the multiple of problems including ambiguity, inconsistency and complexities in VAT policies and ineffective implementation. The major problem was VAT registration not complying with the policies for return filling. The institutional capability of the key ability of the tax administration was to enforce law, institutional capability (adequacy, competency, commitment of tax official, sufficient financial resources, comprehensive and robust information about the personal and business transaction of the taxpayers and information communication and technological (ICT), infrastructure). The non e-filling of tax returns by the VAT registrations might prove to be weak compliance on the port of taxpayers and weak enforcement of tax administration. The researcher found that policy mandates affected filling compliance behaviour of taxpayers. Similarly, policy clarity enhances the filling compliance in VAT system, in the process of submission of tax returns, provision related to the penalties chargeable to the late fillers and non-fillers might affect the compliance behaviour of taxpayers. The result also depicted that policy consistency affected the filling compliance behaviour of taxpayers whereas ICT infrastrucure of IRD interms of automation, e-governance, e-services and e-based monitoring and evaluation system were found to be effective in influencing the filling behaviour of taxpayers. The

IRD major problems in regards to VAT is unambiguous policies and procedures for easy registration and deregistration from the VAT system and effective enforcement of the tax law (Koirala,2014).

In Malaysia, majority of the e-filers (taxpayers) used e-filing for the sake of convenience; speed of filing and in faith to get faster tax refund. For those 21% who had attempted to use e-filing, but failed to e-file successfully, they indicated that the key impediments was the Inland Revenue Board Malaysia (IRBM)'s server was not responding properly or hanged half way through. Some gave up either due to the slowness of the network service or they were unable to sign the tax return form electronically. By moving electronic business environment, taxes should be easy to administer and easy to comply with. Individual taxpayers are the most important users. Sufficient understanding of taxpayers' acceptance and usage of e-filing system should be made to reduce the risk of user rejection; preventive and predictive measures ought to be taken on a timely basis to ensure future acceptance. Tax administrators need to build 'a better and user friendly' e-filing system. The reasons for unsuccessful attempt was the Inland Revenue's server was not responding or the server hanged half way through (44%), unable to download the tax return form electronically (16%), unable to access IRBM's website (11%), unable to sign electronically with the Personal Identification Number or password provided by the IRBM (11%), computer did not have enough specification (11%) and unclear instruction from the IRBM's website (5%) (Ling, 2008 : 340-341).

Though e-filing has many benefits, the inherent weaknesses and insecurity of it become more challenging. Worldwide, many studies found tax users' resistance to use e-filing system remains a widespread problem. In Singapore, it was suggested that the government needs to restore public trust in e-filing, and to blend socio-political strategies, ICT and taxation together. In US, the Electronic Tax Administration Advisory Committee (ETAAC) is recommending to mandate certain taxpayers and tax practitioners to e-file personal tax returns (Teo & Wong, 2005: 3-18). Since the e-filing system is an approach of adopting technology in the tax administration system which involved the changes of taxpaying method, there would be barriers or challenge arised. Moreover, all

users could not barely accepted the changes. only 120,000 tax returns done through e-filing represent only 1.2% of the population of taxpayers (Ramoo, 2006).

Scott (1991:1) said that customer service and customer satisfaction were discussed by many organizations, but poor service was still a major concern of most organizations. However, the Public Administration Act (2002) stipulated that government bodies must perform based on the principles of good governance (The Revenue Department Annual Report 2004:39). Thus, the RD is determined to develop satisfactory services for taxpayers and needs to be sure that taxpayers are satisfied.

Hence, in order to achieve tax administrative and compliance efficiency, tax administrators need to apply the theory of efficiency in tax administration procedures, one of its arguments is by a greater use of technology (Gardner, Willey & Tate, 2000: 174) . E-filing system was used as one of the strategies to facilitate tax compliance and to achieve tax administrative and compliance efficiency. In most countries, e-filing is offered as an option to taxpayers and their tax representatives. In the international arena, many countries, for example United States (US), Canada, Australia, New Zealand, Taiwan, South Africa, Singapore, United Kingdom (UK) and Japan had progressively embraced e-filing (ETAAC, 2007).

In the present globalization, new technologies are introduced and improved very fast in all fields. Now new technology gifted to tax payers for filing their income tax returns through online is e-filing. The e-filing is the new effective method of filing income tax return through online and make e-payment. It saves the golden time, energy, cost and also reduces taxpayer's tension. So they are requested to use e-filing and epayment facilities. The existing users are satisfied with the e-filing facilities but most of the individual tax payers are not awared about the e-filing and e-payment procedures so sufficient steps are required to create more awareness in the minds of tax payers regarding e-filing of income tax (Annes & Kumar, 2014: 379).

There are users who attempt to use e-Filing for the convenience, speed filing and to get faster tax refund whereas there are also users who intend to use e-Filing but failed to do so due to the slow networks; discourage them to proceed using the computerized system. Hence, beyond the security level of e-Filing, it is also necessary to identify the acceptance level and the perceptions of users towards e-Filing system (Ling , 2008).

The major challenges regarding system security needed mass awareness in order to make e-filing more successful. TRPs have to play a very catalytic role and the Government would have more revenue with global integration through technological advancement of e-filing. one prominent type of e -government is the introduction of e-filing system for income tax that would make the process of filing Income Tax Returns (ITRs) easier for tax payer as well as reduce the time required for data entry at their end on receipt of ITRs. The significant portion of potential tax revenue is not collected because of poor tax administration and high tax evasion. The e-filing is the new effective method of filing income tax return through online and make e-payment. Despite many benefits associated with e-filing, tax authorities face some major challenges towards the implementation of e-filing system is the public perception. After using an e-service over the Internet, the public may find that whether the e-service system is easy and useful or not (Mary, 2014 :39).

Government initiated the e-filling system in tax for ensuring the effective tax administration, convenience, speedy, transparent and time saving of consumers (taxpayers). But the obstacles remain concerns that taxpayers who are really anxious about the technology, lacking of technical skills, or do not trust of any online transaction. This study depicts the following research questions to state the research problem.

- Is there any relationship between the demographic factors and the satisfaction level of taxpayers in the e-filling?
- Is the quality factor effect the satisfaction level of taxpayers in regards to e-filling?
- How do taxpayers perceive towards satisfaction in e-filling of income tax returns?

- Do taxpayers's technical know how increase satisfaction in e-filing of income tax returns?
- Do taxpayers's trustworthiness influence satisfaction in the e-filing of income tax?

### **1.3 Objective of the Study**

The main objective of this research is to study the satisfaction level of taxpayers in the e-filing of income tax (E-VAT). The sub-objective of this study are as follows:

- To know the relationship between level of income, age and education and the satisfaction level of taxpayers in the e-filing.
- To examine the upshot of information quality, system quality and service quality towards taxpayers's satisfaction in regards to e-filing.
- To explore taxpayers's perception (perceive usefulness, perceive ease of use, perceive security, perceive value) towards satisfaction in e-filing of income tax .
- To analyze whether the technical know how of taxpayers increase satisfaction in E-tax or not.
- To find out the relationship between trustworthiness of taxpayers and their satisfaction in the e-filing of income tax.

### **1.4 Significance of the Study**

The taxpayer's propensity towards e-filing system has to do with their level of optimism, innovativeness, discomfort, and security tightening of the system. Ease of use and taxpayer's feeling of control in e-filing tax system would give them confidence about the new technology system. Finally, user's perception about genuineness of the tax web, authenticity, trustworthiness and easiness in e-filing the return process can also be enhanced if user feels very knowledgeable about what he/she is doing when they are filing their tax returns electronically. Thus, the users' awareness and experience also helped to enhance their satisfaction subsequently.

Technology readiness is an overall state of mind and not a mere measure of competency. Satisfaction have pointed to some important issues surrounding human aspects of

technology readiness. First, technology readiness varies perceptually from one individual to another. Some people can be consumer of a technology, but some may seek technology actively, whilst others may need special help or coaxing depending on the level of their readiness. Second, technology readiness could be used to predict and explain taxpayer's responses towards new technologies. Empirical findings had also indicated that technology readiness correlated with actual used and intention to use the technology-based products and services in varying degrees (Parasuraman and Colby,2001). In addition, taxpayer with a higher level of technology readiness has higher usage intention and more experience in using the technology based products and services in varying degrees. Online tax system or e-filing has gained its popularity since it was launched in 2006. The rationale for providing quality taxpayer services is to raise taxpayer's awareness and onehand enhance the level of voluntary tax compliance and other reflect their satisfaction .

E-filing has increased significantly since its introduction in the late 1990s. Electronic filing implies the use of new technology, specifically the internet and some form of tax preparation software. These types of software packages have been used for many years by professional accounting firms. Nonetheless, many taxpayers are still hesitated to use software and to e-file because of various reasons, such as lack of trust, limited access of technology, and limited knowledge about the technology. However, at present satisfaction of taxpayers in e-filling of returns are very popular and most of the users used/ subscribed it due to save waiting time, cost, travel cost and many more. Further e-filling of income tax is significant since anyone fill the return file from anywhere by using internet.

This study traces the satisfaction level of tax payer's in the e-filling of income tax henceforth beneficial to the Internal Revenue Department (IRD) and its stakeholders, individual income taxpayers, income tax payers, tax authorities, researchers, financial software engineers, academicians, policy makers and Ministry of Finance of Nepal Government to solve the issue and problems arised in the e-filling of income tax payers as measuring their satisfaction level, compliances and fulfil their needs and perception.

## **1.5 Research Hypothesis**

Alternative hypothesis (H<sub>1</sub>) : There is association between age of taxpayers and their satisfaction in e-filing of income tax /E-VAT.

Alternative hypothesis (H<sub>2</sub>) : There is association between Average annual income of taxpayers and their satisfaction in e-filing of income tax /E-VAT.

Alternative hypothesis (H<sub>3</sub>) : There is association between education of taxpayers and their satisfaction in e-filing of income tax /E-VAT.

Alternative hypothesis (H<sub>4</sub>) : There is association between gender of taxpayers and their satisfaction in e-filing of income tax /E-VAT.

Alternative hypothesis (H<sub>5</sub>) : Independent variables (service quality, perception, trustworthiness, and technical know how) are correlated .

Alternative hypothesis (H<sub>6</sub>) : Independent variables (service quality, perception, trustworthiness, and technical know how) are correlated (significant) with satisfaction in e-filing of income tax /E-VAT.

## **1.6 Conceptual Research**

The satisfaction of taxpayer's in e-filing of income tax (E-VAT) is borrowing from some theories and models there on has been studied and analyzed in order to construct the theoretical and coceptual framework. Moreover, dependent variable satisfaction is identified with key indicator of measurement namely independent vairables in regards to online filling tax (e-filing). The conceptual framework has been designed or drawn from Technology Acceptance Model (Davis,1989); DeLone and McLean's success model (1989,2003) Theory of Planned Behavior (Hung et al.,2006, 2009), Value-Percept Disparity theory, originally formulated by Locke (1967), Disonnace theory (cognitive dissonance; Cardozzo, 1965, psychological discomfort;Yin,1990). Beside this, Assimilation theory Festinger's (1957); Anderson (1973) approach assumes that there is a relationship between expectation and satisfaction but does not specify how disconfirmation of an expectation leads to either satisfaction or dissatisfaction. Further elaborated of this theoretical model and framework have been presented in the Chapter II (Conceptual framework and Review of literature). However, the conceptual research; satisfaction with it's major indicator are commenced in the following table 1.1.

**Table 1.1**  
**Satisfaction and It's major indicator used in this research**

<b>Construct</b>	<b>ouffitted definition</b>	<b>Sources</b>
Satisfaction	Attitude based on past experience with an actor consumer's fulfillment response,judgement of product or service feature under or overfulfilment.	Oliver (1996:13)
	Emotional aspects of consumer response towards the product or service experience.	Peyton, Pitts & Kamery (2003)
	Emotional response or affect towards an object both perception and attitudes.	Livari (2005:8), Galetton & Lederer (1989:25)
Demographic	The significant relationship between active user of the e-filling and those with higher level of income and education.	Mohsin & Raha (2007)
Quality	Quality relates to logic: it is the positive or negative character of proposition.	Merriom & Webster (2000:905).
	Quality of public service requires research and knowledge of other relationship.	Zeithaml, et. al (1996)
	Information quality is most important than service quality to the taxpayers.	Ludwig et al.(2010)
Information Quality	An individual perception on the information that the system procedure.	Lee et al. (2009)
	Quality infromation regarding their needs.	Ching Wen (2010)
System Quality	The quality which user's perception on performance of information system itself.	Lee et al. (2009)
Service Quality	User's perception on the performance of service provider.	Lee et al. (2009)
	To which the electronic device facilities efficient and effective consumer activities at service counter.	Zeithaml, Berry & Parasuraman (1996:31)
Perception	The usefulness of the e-filling system i.e. perceive usefulness.	Zaherawati, et al. (2009)
Perceive ease of use	User's perception when they using e-government services ,it improve efficiency of their work.	Chang et al. (2005).
Perceive Usefulness	User's perception e-government easy to use when using it.	Davis (1989), Moon & Kim (2001)
Perceived value	Convenience related aspects are part of the perceived value scale.	Parasuraman et. al (2005:231).
Technical Savvy	Postive correlation between user satisfaction and positive attitude towards computer use.	Igbaria&Nachman (1990),Harrison& Rainer (1996)
	User's satisfaction is an attitude that might be affected by computer training	Pancer, George & Gebotys (1992)
Trustworthiness	The most significant factor affecting e-government services is trust.	Titah & Barki (2006)
	The relationship between satisfaction, trust, value and commitment in business.	Gmorgan & Hunt (1994)
Social influence	An individual's perception that people who are important think, she/he should perform the behaviour.	Fishbein & Ajzen (1975)

*Source: Supaporn & Thanakorn (2013) <http://scialert.net/abstract/?doi=itj.2013.880.893> & other citation adopted from various reseach Journals.*

## **1.7 Organization of the Study**

The research study has been organized into five chapters and each chapter is further divided into various subsections which are given below.

### **Chapter I : Introduction**

This is the introductory part of the study. In this chapter background of the study, brief sketch of IRD, statement of the problem, objective of the study, significance of the study, research hypothesis and conceptual research of the study are included.

### **Chapter II : Conceptual framework and Review of literature**

This is the second chapter which deals with theoretical review of satisfaction of taxpayers in the e-filing of income tax. This chapter mostly sketch the conceptual framework, operational definition of variables both dependent and independent variables are gathered. In this part chapter, review of different books, journals articles and scholar research have been used as secondary manner.

### **Chapter III: Research methodology**

This is the third chapter which deals with research design, sources of data collection techniques, data processing and data analysis tools. This chapter also presented method that are going to be applied and the procedure adopted to analyze data.

### **Chapter IV: Presentation and analysis of data**

This is the fourth chapter which deals with the presentation and analysis of the data. This is the body of the study. Under this, collected data are presented and analyzed by using SPSS 18.0 version. In this chapter, major finding of the study is also drawn.

### **Chapter V: Summary and Conclusion**

This is the last chapter which summarizes and concludes the whole thesis. Some suggestion is also drawn on the basis of findings and conclusion. After completion of these five chapters, a list of literature that reviewed earlier is included APA format in **references**. Likewise, **Questionnaire and appendices** (data, information, calculation sheet etc) are incorporated and attached at the end of study.

## **CHAPTER-II**

# **CONCEPTUAL FRAMEWORK AND REVIEW OF LITERATURE**

It is defined as broad, comprehensive, in depth systematic and critical review of publications and unpublished scholarly research. In reality literature reviews are a type of research. In this research, the major books, journals, research scholar articles and other relevant studies towards satisfaction have been sketch in purifying manner. This chapter mainly outlined the conceptual framework of dependent variable satisfaction of taxpayers with independent variables demographic factors, quality factors, perception, technical knowhow and trustworthiness in regards to e-filling of income tax E-VAT. The conceptual framework is also sub divided into theoretical model in regards to satisfaction and relevant previous studies for deriving research framework (variables). Under theoretical model, the major reviewed in this study are dissonance theory, value , percept theory, technical acceptance model, DeLone and McLean's is success model, brief sketch of e-filling of income. Similarly, different authentic citation i.e. pure review of scholar research, the independent variables have been explained in this study. At the end of this chapter, the research gap is also identified in order to distinguish from the previous research. It has been elaborated in the following manner.

### **2.1 Conceptual Framework**

#### **2.1.1 Concept of Satisfaction**

Hunt (1977b) notes that "...satisfaction is a kind of stepping away from an experience and evaluating it...one could have a pleasurable experience that caused dissatisfaction because even though it was pleasurable, it wasn't as pleasurable as it was supposed to be. So satisfaction/dissatisfaction isn't an emotion, it's the evaluation of the emotion"(Hunt, 1977b : 39). The different scholar view in regards to the satisfaction have been shown and sketched in the following table.

**Table 2.1**  
**Concept of Satisfaction**

<b>Construct</b>	<b>outfitted definition</b>	<b>Sources</b>
	Clients' Assessment of received goods and services quality is satisfaction.	Fecikova (2004:5)
	Customer satisfaction is a result that can be achieved of a comparison between expected performance with actual performance and perceived paid costs.	Beerli & <i>et al</i> (2004:256)
	Customer satisfaction in terms of psychological, is emotion that obtained as a result of comparison between products perceived needs and demands of our customers and social expectations in relation to the product.	Maleki <i>et al</i> (2008)
	Clients perception of organizational performance and received services.	Treasury Board (2002:1)
Satisfaction	Variable insight into particular short-run product or service encounters.	Johnson, Anderson & Forrell(1995:699), Allison <i>et al.</i> , (1996:80).
	Experience the service has a very strong relationship with satisfaction of the citizen.	Zeithamal <i>et al.</i> (1996)
	Consumer's response to the evaluation of the perceived discrepancy between prior expectation and actual performance of the product as perceived after the consumption.	Tse & Wilton (1988:204)
	Difference between product's perceived performance in delivering value relative to buyer's expectation before a product's purchased	Nor & Yusinzo (2009), Kamarulzaman&Azmi (2009)
	Global evaluative judgement about product usage /consumption.	Westbrook (1987:260)
	The sum of feelings or attitudes, both positive and negative, affecting the specific situation.	Bailey & Pearson (1983:530)
	Satisfaction includes both perceptions and attitudes.	Galetta & Lederer (1989:25)
	Satisfaction is influenced by the quality and value perceived which is determined based on their expectation.	Baroudi, Olson & Ives, (1986 :233).
	Customer expectations have been investigated and treated with their satisfaction/ dissatisfaction and service quality.	Zeithaml, Berry & Parasuraman (1993:10)
	Probabilities of occurrence of positive and negative events if the consumer engages in some behavior.	Oliver (1981:33)

*Source: Mahtab Abedi et al., 2014 & other citation adopted from various reseach Journals.*

The proposed definitional framework lead the reader to question why satisfaction is limited to an affective response rather than including cognitive and conative components. Limiting satisfaction to affective responses is consistent satisfaction and dissatisfaction reflect the general affective tone (Oliver, 1992 : 242).

User satisfaction is a critical issue in the success of any business system either traditional business or online business. Ambali (2009) suggested a need for improvement in the implementation of the online e-filing to ensure that the system conform to the public e-filers' satisfaction as the result for users' retention only indicate moderate level. He also said that the overall level of the e-filing usage among taxpayers is still low, despite many campaign activities by IRBM to increase the level of e-filing usage in the country.

Assimilation theory also assumes that consumers are motivated enough to adjust either their expectations or their perceptions about the performance of the product. If the consumer adjusts either expectations or perceptions about product performance then dissatisfaction would not be an outcome of the post-usage evaluation process. A number of researchers have found that controlling for actual product performance can lead to a positive relationship between expectation and satisfaction (Anderson, 1998: 7).

Customer satisfaction was measured by a nine item adapted from Walfried et al.(2000). A sample item include: How satisfied are you with the checking account services provided by bank. The questions of customer satisfaction followed a five-point Likert format with anchors of very dissatisfied (1) and extremely satisfied (5) and an option for not applicable. The item indicates that high scores reflected stronger satisfaction with service.

Satisfaction and quality are quite confusing but distinct to each other. Both these concepts are different in many dimensions (e.g.experience dependency, short or long term referent etc.). Quality and satisfaction relationship is also complex because of intricate interplay between performance dimensions used in quality judgments and satisfaction judgments (Oliver,1996:188). Previous research shows that performance based quality comes from the best expectations and idiosyncratic preferences of consumers.

In different situations, consumers can do different things when they claim that they are satisfied. The simple question, "Are you satisfied" is not so simple to answer because of a variety of things involved in satisfaction process. Researchers should concentrate upon the both processing stage as well as emotion stage of the satisfaction response and in this way a new post purchase research would open new doors for better understanding of satisfaction response.

Peterson and Wilson (1992) noted that differences in results depend on how satisfaction was operationalized. For example, how do expectations influence satisfaction? It is impossible to compare results across studies since differences in the definition and operationalization of satisfaction would influence the role of expectations in the model. Furthermore, expectations might be irrelevant for the particular context in which satisfaction is being determined.

Dissatisfaction can be defined using the three components of the definitional framework: affective response, focus and timing (Lewis, 1990: 10). Satisfaction as simply an overall postpurchase evaluation (Forgas,2000: 125).

"The satisfaction process is more likely to be raised to a conscious level and thus evoke a positive or negative emotional response" (Woodruff *et al* 1991:300). (Zeithaml, Berry & Parasuraman, 1993:5) attempted to measure the "zone of tolerance" by computing the difference between *desired level* and *adequate level* of expectations. The desired expectations refer to what they hope to receive, a blend of what can and should be, which is a function of past experience (Lewis, 1990). The adequate level refers to what is acceptable which is based on an assessment of what the service would be (the predicted service), and depends on the alternatives which are available.

The satisfaction construct has been defined in a number of different ways. Researchers have defined satisfaction in terms of need fulfillment, pleasure/displeasure, cognitive state, attribute or benefit evaluation and subjective evaluation of experience. Currently, satisfaction is viewed as an emotional response to a product experience. However, while

researchers have used a number of different definitions for satisfaction, they generally agree that satisfaction involved a set of inter-related variables rather than a single variable.

## **2.1.2 Theoretical (Model) Review**

The theoretical review of satisfaction has been presented in the following manner.

### **2.1.2.1 Dissonance Theory**

A person who expected a high-value product and received a low-value product would recognize the disparity and experience a cognitive dissonance (Cardozo, 1965). It is similar to "post exposure ratings primarily a function of the expectation level because the task of recognizing disconfirmation is believed to be psychologically uncomfortable. Thus consumers are posited to perceptually distort expectation-discrepant performance so as to coincide with their prior expectation level" (Oliver, 1977:480). For instance, if a disparity exists between product expectations and product performance, consumers may have a psychological tension and try to reduce it by changing their perception of the product. Disconfirmed expectations created a state of dissonance or a psychological discomfort (Yin,1990). Consumers might have a psychological tension and try to reduce it by changing their perception of the product.

### **2.1.2.2 Value Percept Theory**

Westbrook and Reilly (1983) argued that the Expectancy-Disconfirmation paradigm might not be the most appropriate model to explain customer satisfaction, as customer satisfaction/dissatisfaction more likely to be determined by comparative standards other than expectations. They proposed a Value-Percept Disparity theory, originally formulated by Locke (1967), as an alternative to the Expectation-Disconfirmation paradigm. Criticizing the predictive expectations used as a comparison standard in the traditional Disconfirmation paradigm, Westbrook and Reilly argued that what is expected from a product may or may not correspond to what is desired or valued in a product. Conversely, that which is valued may or may not correspond to what is expected.

Thus, values had been proposed to be a better comparative standard as opposed to expectations in explaining customer satisfaction/dissatisfaction. According to the value-percept theory, satisfaction was an emotional response that is triggered by a cognitive Customer Satisfaction: Conceptual Issues evaluative process in which the perceptions of an offer were compared to one's values, needs, wants or desires (Westbrook & Reilly, 1983). Similar to the Expectancy/Disconfirmation paradigm, a growing disparity between one's perceptions and one's values (value-perception) indicates an increasing level of dissatisfaction.

They suggested that both constructs (expectations and values) were needed in explaining customer satisfaction, as they found neither the expectation-disconfirmation model nor the value percept model was sufficient on its own. Similarly, results of recent studies investigating the ability of value and expectations in determining satisfaction demonstrate that it might be better to integrate desires and expectations into a single framework, as they were both affecting consumer satisfaction (Spreng et al 1996).

### **2.1.2.3 Technology Acceptance Model (TAM)**

TAM was a conceptual model to explain and predict the adoption by users of Information Technology (IT). The TAM proposes that the two important determinants when users decide to use information technology were: perceived usefulness and perceived ease of use. Perceived usefulness refers to “the degree to which a person believes that using a particular system would enhance his or her job performance while perceived ease of use refers to “the degree to which a person believed that using a particular system would be free of effort (Davis,1989).

Users' perceived ease of use of an information system was a determining factor in which users would decide to make use of it and perceive usefulness and attitude a direct influence on users' intention toward the technology. Perceived ease of use affects users' attitudes toward using and perceived usefulness. Hence, individual attitudes towards using information technology was the intention of the user, which in turn increases usage

of the technology. Thus, TAM had been used to predict user acceptance of e-government as well.

#### **2.1.2.4 DeLone and McLean's is success model**

The Information System Success model, a theoretical model designed to explain the success of information technology, which was developed by DeLone and McLean (1992). System quality, information quality, Information System (IS) use, user satisfaction, individual impact and organizational impact were the six determinants of IS success. In this model, use and user satisfaction were affected by system quality and information quality. Both use and user satisfaction are determined to affect the user when using the information technology. As a result, the organizational impact for a user that used an information system and the model was interrelated among the six dimensions.

Hung et al. (2006) conducted the use of online tax filing and payment systems in Taiwan. The Theory of Planned Behavior (TPB) had been used to investigate citizens' intention to accept the technology. They found perceived usefulness, perceived ease of use, perceived risk, trust, compatibility, external influences, interpersonal influence, self-efficacy and facilitating conditions significantly affect citizens' intention to make use of the service.

Hung et al. (2009) conducted this by using the Theory of Planned Behavior (TPB) to predict factors that influence users' intention to use intergovernmental services. Their findings indicated that perceived usefulness, perceived ease of use, training, compatibility, external influence, interpersonal influence, self-efficacy and facilitating conditions directly affect intergovernmental intentions. This study added system traits and personal traits were external variables on TAM to explore factors that lead to citizen acceptance of e-government service.

Hence, in this research, Satisfaction of taxpayers in e-filing of income tax, TAM (Technology Acceptance Model, Davis,1989) and DeLone and McLean's is success model, 1989,2003) is most relevant and used since satisfaction is related with technology adaptation and service quality mostly while filling tax.

### **2.1.3 Satisfaction of E-filing in Income tax**

An e-filing program was first introduced by the US-IRS as a pilot project for the 1986 filing period with the primary objective of improving its efficiency in processing tax returns. Prior to the launching of the project, the IRS worked closely with tax-preparation software providers and tax professionals to ensure a successful launch of the program. During the test year, the IRS offered e-filing services in three cities and restricted the types of taxpayers and the types of return that could be filed electronically – e.g. tax preparers were only allowed to file returns with nil balances (Anderson, et al, 2005).

E-filing, since its inception, has generated interest among Government agencies, academicians and researchers. Governments were implementing information and communication technologies (ICT) to enable E-usage with Singapore, one of the countries that were categorized as “Gold Medalists” in the E-government category, with conceptualization, policies, and implementation of E-government initiatives were characterized as sound and authentic, Malaysia was not far behind as a “Silver Medalist (Mohd, 2003).

The process of electronically filing income tax returns through the internet was known as e-filing. It was mandatory for companies and firms requiring statutory audit to submit the income tax returns electronically. Electronic filing implies the use of new technology, specifically the internet and some form of tax preparation software. Internet tax filing called electronic filing as part of its e-government initiative.

Electronic filing was the most efficient and effective way to file. “Returns filed electronically are 99 percent accurate, compared with paper returns, of which more than 20 percent had errors. And those errors could result in penalty, interest and possibly an audit (ETAAC, 2007).

A taxpayer registered with URA for any tax type had an obligation to submit a return for the tax period defined by the respective tax law. URA facilitated the taxpayer to fulfill this obligation by introducing electronic filing in *eTAX*. The taxpayer can obtain a return

from the web portal (<http://ura.go.ug>), save a template on any storage device, take time to fill in the return and validate the return before they finally upload it on the web portal ([www.ura.go.ug/](http://www.ura.go.ug/) accessed on 3/3/2015).

E-filing tax system was an application on filing information of tax payment and tax return forms (ITRF) electronically by obtaining a valid digital certificate from the Inland Revenue Board. This valid digital certificate was to help taxpayers to complete their tax filing online. This shows an obvious contrast between the traditional manual tax filing method and e-filing tax method where the transaction process could be done in a paperless environment and rather without physically paying a visit to the tax department (Anna, 2012).

Hence, Electronic filing is extremely important to good tax administration. However, e-file is only one component of a broader range of tax-related technology applications rooted in the concept of electronic tax administration.

E-Filing is the process of electronically filing returns including attachments, if any, specifically through the internet. Using the e-commerce technology adoption, People who efile perceived e-filing to be less useful measured as convenience, and less expensive than non-e-filers, with convenience making the greatest contribution. The results for perceived usefulness were unexpected. People who e-file also perceived e-filing to be safer but less easy-to-use than those who do not e-file; however, these variables were not significant discriminators of e-filers from those who did not e-file.

Thus, e-filing as the transmission of tax information directly to the tax administration using the internet. Electronic filing options include i. online, self-prepared return, using a personal computer and tax preparation software, or ii. online submission of returns using a tax professional's computer and tax preparation software. Electronic filing may take place at the taxpayer's home, a volunteer site, the library, a financial institution, the workplace, stores, or a tax professional's place of business.

E-filing of income tax is depicted as successful filing of income tax return through the internet. The e-governance has developed the concept and strategies of e-filing of income tax return through the internet. Thus the income tax department has facilitated the taxpayers with defining the provisions to be followed, which can be filed and how to file the income tax for the benefit of tax payers as well as the Government. Various tax return preparation softwares with e-filing capabilities are available as outside commercial use. E-file is the term for electronic filing, or sending your ITR from tax software via the Internet to the tax authority.

E-filing of Income tax return online refers to the process of filing Income Tax electronically. Now no longer have to stand in long queues and no waiting for deposits. Customized return forms have been devised by the Income Tax Authority which is available on the site of the department. These forms have been devised with such details that tax payers need not file any supporting document along with (Rajeswari & Mary, 2014 :39).

Hence, E-filing of income tax is understood as successful filing of income tax return through the internet. The e-governance has developed the concept and strategies of e-filing of income tax return through the internet. Thus the income tax department has facilitated the taxpayers with defining the provisions to be followed, which can be filed and how to file the income tax for the benefit of tax payers as well as the Government. For the best e-filing, the government is modifying provisions every year for the convenience of both beneficiaries.

- **Types of E-filing**

Accessibility is allowed 24x7x365 → The transactions can be done electronically with a click of a Button. → Eliminates error notices from tax administrations caused by data entry errors. → Use of online commercial tax preparation software. → Taxpayer privacy and security was assured. → Fast refunds– allow taxpayers receiving refund to get them sooner. → Certainty of delivery and quick confirmation – provided immediate

confirmation from tax administration that returns had been received. → Convenience – returns could be filed at anytime (day or night) (Gadag, 2005 ).

The benefit of e-filing were convenience, increased customer satisfaction, certainty of delivery and quick confirmation, fast refunds, taxpayer's perceive security, online help facilities and help guides,use online commercial tax preparation software, elimination error notice by tax administration caused by data entry, reduce operating cost of tax administration, timely information and data and improved quality. Thus reducing the risk of audits and penalties as returns filed electronically had a much lower error rate than paper returns (Kumar & Mahumad, 2014:383).

### 2.1.3.1 Traditional Vs. E-filing (Submission of tax return business process)

**Table 2.2**  
**Submission of tax return business process**

	<b>Traditional system</b>	<b>E-filing</b>
Receiving the tax return	<ul style="list-style-type: none"> <li>• Collect post</li> <li>• Open post</li> <li>• File tax return in correct file</li> </ul>	<ul style="list-style-type: none"> <li>• Automatically received on</li> <li>• e-filing system with no involvement by the tax practitioner</li> </ul>
Completing the tax return	<ul style="list-style-type: none"> <li>• Find correct client file</li> <li>• Complete tax return</li> <li>• Attach relevant original Documentation</li> <li>• Make a copy of the tax return and documentation</li> </ul>	<ul style="list-style-type: none"> <li>• File the copy of tax return and supporting documentation</li> <li>• Find correct client file</li> <li>• Log into e-filing</li> <li>• Find client's tax return</li> <li>• Download the return on hard drive</li> <li>• Complete the tax return electronically</li> <li>• File all the original supporting documentation</li> </ul>
Submitting the tax return	Hand deliver to SARS or post to SARS	Submit electronically by pressing the submit button

*(Source: Advancing E-file Study Phase 1 Report, 2008)*

**Table 2.3**  
**Comparison of Paper Versus E-File Tax Return Processing**

<i>Steps</i>	<i>Paper</i>	<i>E-Filed</i>
<b><i>Return Receipt</i></b>	Returns in sealed envelopes are delivered, opened, counted, and batched by return type. Returns with payments are separated from those without payments, and the payments are deposited.	<i>E-filing</i> saves the costs of manually handling and sorting tax returns delivered by mail. It also has an integrated payment option so electronic funds can be withdrawn from or deposited to a bank.
<b><i>Review and Coding</i></b>	Manually reviewed to ensure all forms are attached, completed, and signed. Returns are coded and edited so they can be manually transcribed into IRS computers.	<i>E-filing</i> saves the costs of manually reviewing tax returns and eliminates the need to transcribe return data for computer processing.
<b><i>Computer Processing</i></b>	A variety of checks are performed to determine if the return data are complete, were transcribed accurately, and are mathematically accurate. Returns that fail these checks are transferred to an error register, where IRS personnel attempt to correct the errors.	Compared to paper filing, <i>e-filing</i> is far less prone to transaction, math, and other errors because many errors are identified and corrected before IRS accepts the returns for processing.
<b><i>Return Numbering</i></b>	The document locator number is a control number assigned to every return and must be manually stamped on every return.	<i>E-filing</i> allows control numbers to be assigned automatically, which eliminates the need to manually stamp a control number on each return.
<b><i>Master File Posting</i></b>	Computer tapes with perfected return data are sent to the IRS's Martinsburg Computing Center in West Virginia where the data are uploaded to the Master File within about 4 weeks after the returns are filed.	Most <i>e-filed</i> returns post directly to the Master File within 1 week, if not sooner, after the returns are filed.
<b><i>Audit Screening</i></b>	Returns are mailed from IRS files to examiners, where they are manually screened to determine which ones warrant an audit and which ones do not. Returns that do not warrant an audit are returned to IRS files.	<i>E-filing</i> facilitates online audit screening and enables returns warranting an audit to be delivered electronically to examiners.
<b><i>Storage and Retention</i></b>	Returns are stored at the Federal Record Center for 75 years, requiring a large amount of space to house returns prior to being allowed to legally dispose of the paper returns.	<i>E-filing</i> saves the costs of storing paper returns in the Federal Record Center. Returns are maintained on an electronic storage media, which reduces the amount of storaspace needed.

Source: *Treasury Inspector General for Tax Administration, 2011 Reference Number: 2011-30-048, <http://www.tigta.gov> Accessed on 3/5/2015.*

### **2.1.3.2 Income tax Policy/Act and IRD**

In simple terminology, tax is a liability/ compulsory contribution on the government revenue from the taxpayers according to law. Tax originally denoted to assess an amount to be levied; the notion of imposing such a levy is a secondary development. Taxes are general contributions of wealth levied upon persons, natural or corporate, to defray expense incurred in conferring common benefits upon the residents of the state" (Bhattraï and Koirala, 2004:34).

The tax classified in to direct and indirect tax. If a person has to pay directly the tax liability to the government, such tax is known as direct tax. Examples of direct tax are income tax, house and land tax, interest tax, vehicle tax, property tax, Gift tax, Casual gain tax. on the otherhand indirect tax is levied on one person who does not bear it from own income. Example of indirect taxes are excise duty, custom duty, Value Added Tax (VAT). Income tax was finally introduction by a first elected government in the fiscal year 1959/60 known as Business Profit and remuneration tax. The major income tax are as follows.

- Income Tax Act, 1962 (2019 B.S)
- Income Tax Act, 1974 (2031 B.S.)
- Income Tax Act, 2002 (2058 B.S.)
- Income Tax Directive 2009 (2066 B.S.)

### **2.1.3.3 E-governance Initiatives in Nepal**

In 2005, the Government of Nepal (GoN), adopted e-Government Master Plan (eGMP), with the objective of using Information and Communication Technology (ICT) to enhance government process, service to citizens and foster social integration, economic growth and poverty reduction. The Asian Development Bank (ADB) has provided Technical assistance for developing the e-Government projects under the guidelines of eGMP and Enterprise Architecture is one of the major projects. The Implementing agency for this project is Ministry of Home Affairs. The Government of Nepal intends to leverage ICT in meeting its development goals and has designed the E-Governance Master Plan with a specific focus in the areas of e-Services, e-Community and e-

Economy. online taxation filing at Inland Revenue Department (IRD), online registration, process renewals and on-line counseling at the Cottage & Small Industries Office (CSIO) and the establishment of e-procurement platforms were examples of the progress made in some government agencies.

The wide collection of software infrastructure and system which is envisioned to be the gateway for electronic information and electronic interactions in Nepal, is generally referred to Government Enterprise Architecture (GEA) initiative. The project aims at (i) improving the enabling environment for the use and adoption of ICTs for economic development, (ii) generating increased employment in the IT and IT-Enabled Services sector and (iii) enhancing efficiency, transparency and accountability to facilitate good governance and improve access to information and services for citizens and businesses. The third phase enables the electronic delivery of the entirety of services and transactions, like filing taxes, renewing licenses, visas and passports, thus obviating the need for a service seeker to visit a government office in person (GEA,2010).

It is clear that the Nepali government showed its commitment towards adopting e-governance as early as 2000 AD by promulgating the first IT policy; however, the progress has been very slow and has mostly been concentrated in the cities. The status of e-governance in Nepal can be substantiated from the UN's recent e-government survey in which Nepal is grouped in the category of low-EGDI countries with an EGDI of 0.2344. The ranking of Nepal plummeted from 130th in 2003, when the first survey was conducted, to 165th in 2014 (United Nation report,2014).

IT Policy 2010 came ten years after the previous IT Policy was promulgated. Construction of GIDC and GEA are indications of commitments towards long-term projects that are essential to reach the *connected phase*. Besides, the government has also shown gradual efforts towards managing the adoption of e-governance through the formulation of the *Website development and management directive 2011* and *Companies (electronic filing) directive 2012* (Paudel,2014).

The major e-governance initiatives in Nepal are :

- IT Policy, 2000
- Electronic Transaction and Digital Signature Act (ETADSA), 2057 (2000)
- Copyright Act, 2059 (2000)
- Telecommunications Policy, 1999
- Telecommunication Act, 1997 Telecommunication Regulations 1997
- National Communication Policy, 1992
- National Strategy Paper on ICT (National Planning commission).

Some of the important institutions created towards ICT sector are Ministry of Science and Technology (MoST), High Level Commission for Information Technology (HLCIT), and Nepal Telecom Authority. In addition to these governmental entities, a number of private organizations which offer tele-services including telephone, and internet services. There are 52 Internet Service Providers (ISPs) (SinghDurbar's permit), six VSATs (Very Small Aperture Terminal), eight radio paging service provider, and more than 15 software-developing companies have been operating their services. The government has also emphasized BOT system and permitted FDI for the development of this sector (Source: <http://www.apdip.net/projects/dig-rev/info/np/> accessed on 3. 06.2015).

### **IRD : E-file Income Tax Returns**

The IRD is all set to start online filling (e-filing) of income tax returns from the fiscal year 2010. The e-filing system save taxpayers's trouble of having to make a trip to the tax office to submit their forms. The IRD decided to launch the e-filing of Value Added Tax (VAT). Initially, e-filing with D1 (Small taxpayers) and D3 (Large taxpayers). The IRD has had e-filing of VAT operational in 2010. E-filing allows taxpayers to submit details through the internet. Taxpayer first have to obtain an e-mail identity from the IRO to use this facility. As with VAT, taxpayers can submit their tax forms through the website of the IRD. E-PAN, E-VAT, ETDS, E-returns are the major e-filing services provided by IRD. on the othehand, while tax returns can be filed online, taxpayers still have to pay their taxes at banks which are designed by the IRD. IRD also planning to introduce Any Branching Banking Service (ABBS) for the convenience of taxpayers (IRD annual Report 2013/14). Currently IRD have 22 Inland Revenue Offices (IROs) and

one Large Taxpayer Office (LTO) under the IRD. The total number of taxpayers in Nepal was over 11,17,499. out of them 134,091 and 34,967 taxpayers registered as VAT and Excise duty respectively. Almost i.e. 98% taxpayers submitted online registration and 97% taxpayers have been e-filing(IRD, 2015 :16).

### **Infrastrucure of IRD**

The infrastructure of IRD is presented as given below.

- **Business or services architecture** : Business or service architecture will capture the integrated whole-of-government service delivery operating model at the strategic level for accomplishing the e-Government vision, and individual functions, processes and government services at the segment level required to support the service delivery model.
- **Information architecture** : integrated whole-of-government data standards, the structure of the governments, common logical and physical data assets required to support business services and address data management considerations.
- **Application architecture**: blueprint for ICT application or service capabilities, their interactions, as well as their relationships to core business services of the MDAs.
- **Technology architecture** : support ICT application capabilities identified in the application architecture. It mostly focuses on the blueprint definition in the following domains: Integration architecture required to integrate ICT applications in order to enable real-time seamless information exchange across MDAs government-wide leveraging SOA-based approach. It includes the Security architecture business functions to maintain compliance with the legal requirements such as confidentiality, privacy, accessibility, availability, and integrity Infrastructure architecture required to lay down the network, data centre and infrastructure (hardware as well as software).
- **Interoperability framework** : To create an open, transparent, interoperable environment in order to help government information systems work successfully technical

standards that a government adopted in departments, agencies, citizens and partners interact with each other in a standardised manner.

- **Taxpayers**

The term “taxpayer” means any person subject to any internal revenue tax. Ryker et al. (1997) considered two sources of vendor communication: television commercials and vendor personnel. Word-of-mouth communications were also considered in two ways: outside the organization they might come from friends outside-of-work, and inside the organization they might come from co-workers.

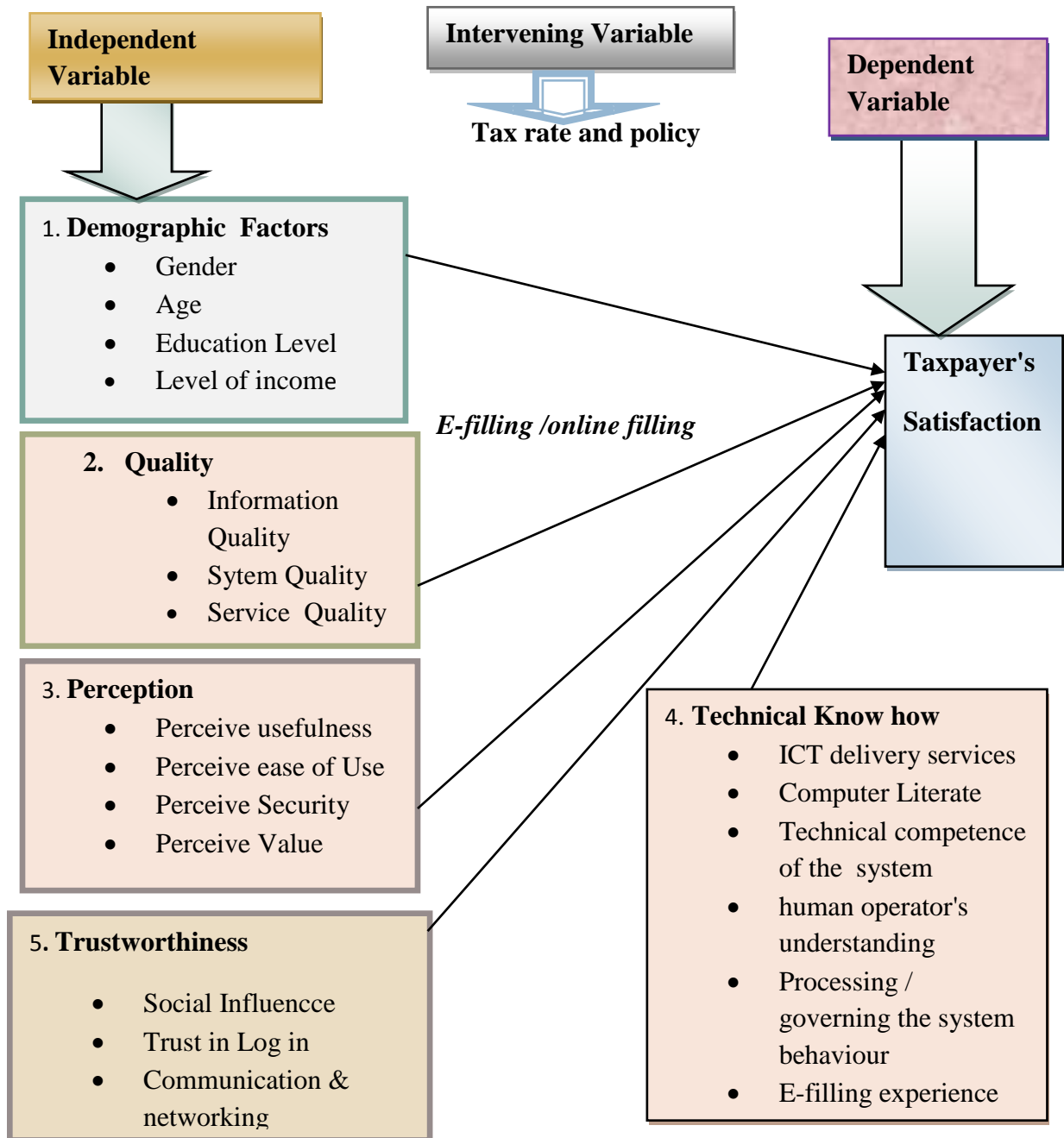
An individual or entity that is obligated to make payments to municipal or government taxation agencies. For the return of income, The income tax Act, contains provisions for e-filing namely e-returns. Further, it is the format in which the assesses furnishes information as to his total income and tax payable. The format for filing of returns by different assesses is notified by the IRD. The particulars of income earned under heads, gross total income, deductions from gross total income, total income and tax payable by the assesses are required to be furnished in a return of income. In short, a return of income is the declaration of income by the assesses in the prescribed format.

The Act has prescribed due dates for filing return of income in case of different assesses. All companies and firms have to mandatorily file their return of income before the due date. Other persons have to file a return of income if their total income exceeds the basic exemption limit. There are different taxes direct taxes, income tax, wealth tax, custom duty, service sales tax/VAT. Collecting return from these sources are defined as tax and who paid the tax are called as taxpayers.

## 2.2 Research Framework

The analytical research framework is more understood by the following figure.

**Figure 2.1**  
**Research Framework of variables**



Source: Researcher Creation 2015

In social science research studies, researchers try to draw the relationship or correlation among or between these variables. All these variables can be divided in to two broad categories namely; dependent variables and independent variables. The study has identified a couple of variables which influence the dependent variable.

## **2.3 Research Variables**

### **2.3.1 Dependent Variable**

#### **2.3.1.1 Satisfaction**

In simple words, Satisfaction is defined as a person's feelings of pleasure or disappointment resulting from comparing one's perception of a tax service received (an outcome) and one's initial expectations. Kotler defined satisfaction in general and Millett defined the characteristics of service that create client satisfaction.

Kotler (2000:36) defined satisfaction as a person's feelings of pleasure or disappointment resulting from comparing one's perception of a performance received (an outcome) and one's initial expectations. If performance falls short of expectations, the client is dissatisfied. On the contrary, if performance matches expectations, the client is satisfied. If performance exceeds expectations, the client is highly satisfied or delighted.

Parasuraman, Zeithaml and Berry (1985:79-84) said that in an achievable service, the ten most common dimensions cited by clients consisted of :

**Tangibility:** The appearance of physical facilities, equipment, personnel and communication materials.

**Reliability:** The ability to perform, dependably and accurately.

**Responsiveness:** The willingness to help clients and provide prompt service.

**Competence:** Possession of the required skills and knowledge to perform the service.

**Courtesy:** The politeness, respectfulness, consideration and friendliness of service providers.

**Credibility:** The trustworthiness, believability, honesty of the service providers.

**Security:** The freedom from danger, risk or doubt of clients.

**Access:** The approachability and ease of contact with the service providers.

**Communication:** Keeping clients informed in language they can understand and listening to them.

The satisfaction areas were satisfaction with access & facilities, communications, tax personnel, services per service, service results and overall satisfaction. Satisfaction with access & facilities includes appropriateness of location and appearance, adequateness and comfort of facilities. Satisfaction with communications includes appearance and clarity of signs, posted instructions/announcements, ease of understanding regulations, ease of getting information, ease of understanding information, instructions, forms, or documents provided to taxpayers, ease of filling out forms. Satisfaction with the tax personnel includes courtesy, helpfulness, skillfulness, competence, clarity of information/advice provided by tax personnel, understanding of taxpayer businesses by tax personnel, responsiveness of tax personnel, respectfulness of taxpayer rights as individuals, efforts of tax personnel to understand/listen to taxpayers, equitability of service provided to taxpayers. Satisfaction with the service per service includes satisfaction with the overall quality of the service offered; the meeting of taxpayer expectations, and acceptance of service levels, and finally user fees (Edward, 2008:36).

Individuals who file their returns electronically consistently report a much higher satisfaction level with the filing process than do the individuals who file their returns on paper. Since taxpayers have dedicated the most weight to the technical–infrastructural issues, this indicates that there are good deals of tangible problems in the technical and infrastructural sections. There are numerous reasons for the taxpayers’ dissatisfaction such as: Low-speed Internet, Constant network connection failure, slow loading of web pages, slow transmission, low flexibility of the offered system, the lack of full implementation of electronic signatures which leads to taxpayers’ need to attend the tax affairs departments, time consuming completion and submission of electronic tax returns (Hodges, 2013).

Yu and Danto's (2001) conducted web site quality according to four dimensions: web site easy usage, attractive design, processing speed and security. Under it, web site easy use

includes respondent's believe the department of taxation website, tax processing online was a pleasant experience, satisfied with their previous online tax processing experience. Intention of using the website included using the web site frequently, intend to use this website only in case it was compulsory.

Loyalqconon et al (2002) studied the web quality subject with respect to 10 dimensions as: information relevant to functions, interaction, reliability, response time, innovation and compatible image, higher position compared to alternative communication channels, personal referral, demand affective flow and on-line evolution (Minjeong,2006).

Thus, there are many reason for satisfaction with e-file. The major reasons were e-file make it easy to file, convenient, easier than other ways, involves less paperwork, it's quicker/ faster than other ways of e-filing, one get an immediate acknowledgement of receipt, it reduces the errors one can make and saves money.

**Information:** Overall, how satisfied or dissatisfied were you with the information available about the service? This might include, for example, information about when and where the service was available, or the range of services it provides, the accuracy of that information and how easy it was to find out. The respondent's answer with Linkert 5-point Scale of 1 (Strongly disagree /very dissatisfied) to 5 (Strongly agree/very satisfied) with the information overall.

**Timeliness :** How satisfied or dissatisfied are you with the length of time it took for you to get what you needed? This might include, for example, the speed of the first response and the time taken overall to fill the tax return/ e-filing process. The respondent's answer with Linkert 5-point Scale of 1 (Strongly disagree /very dissatisfied) to 5 (Strongly agree/very satisfied) with the information overall with how long it took.

### **Timeliness of updates**

For the purposes of the present research, the timeliness of updates of the services refers to how frequently the e-services are updated to ensure that only the most up-to-date information is available at any given time. The timeliness of updates on the website is an

crucial to satisfy the taxpayers convenience. The matter has been addressed by making it possible for tax practitioners/payers to update their own profiles (self-service), with little or no involvement by IRD.

**Overall experience :** Thinking about your experience of the service overall, how satisfied or dissatisfied are you with the service? The respondent's answer with Linkert 5-point Scale of 1 (Strongly disagree /very dissatisfied) to 5 (Strongly agree/very satisfied) with the service overall.

**Delivery :** To what extent do you think the service delivered what you needed? This might include, for example, the final outcome. The respondent's answer with Linkert 5-point Scale of 1 (Strongly disagree /very dissatisfied) to 5 (Strongly agree/very satisfied) means one got all you needed from the service.

The three strongest drivers of overall satisfaction (delivery, timeliness and information) are also the aspects of user experience. This emphasises the importance of public services addressing users' concerns in these areas in order to improve their satisfaction ratings overall, and if they want to meet user needs more effectively.

Hence, Satisfaction being an abstract concept cannot be measured directly in terms of quantitative terms. Satisfaction can be measured indirectly by devising an attitude scale. An attitude scale for measuring the level of satisfaction of e-filing of income tax returns. To analyze the level of satisfaction of the respondents, some important components are identified and a comprehensive study has been made by measuring the level of satisfaction.

### **2.3.2 Independent Variables**

The researcher has taken the five independent variables which are shown below:

#### **2.3.2.1 Demographic factors**

Hwang (2000) Taiwanese taxpayers preferences for tax-filing method stated that the users of internet tax filling method was dominated by men, ages between 30-39, college

education having 1-3 years of experience using the computer and internet and filed tax return for 8-11 years.

Lavin, Epping and Davies (2004:162) claim that ...policymakers must study the individual circumstances of the taxpayers in question. Income levels and source, family and employment status, education, gender and age were just a few of the numerous factors that could influence how the tax law impacts citizens.

Fu et al. (2004) depicted that demographic characteristics of gender, level of income, education, age, experience using the computer, internet facilities and frequency using the internet had been found to predict potential adoption of the e-filing method of submitting tax returns forms. They also pointed that e-fillers having higher education, younger, more computer and internet experience had more access with e-filing. Further, it was similar to the major influence of tax compliance were age, gender, income level, education, income sources, occupation status, peer influence, ethics, complexity, tax rates and contact with tax authorities (Jackson & Million,1986).

The young Indian professionals' BI to use the income tax e-filing service were: perceived ease-of-use, personal innovativeness in information technology, relative advantage (RA), performance of e-filing service, and compatibility (COMP). By investigating the antecedents of young Indian professionals' intention to use the income tax e-filing, the crucial point noted by them was to practice the e-government adoption approach (Ojha, Sahu and Gupta,2008 : 170).

Individuals with higher education was more responsive to change in the tax rate. Respondents with a higher education was more likely able to understand the tax system and keep up with news, thus able to form their opinions based on actual tax rates. Therefore, higher education were more closely linked to variations in their actual average tax rate. Similarly, Middle income taxpayers views on their tax system were significantly affected by changes in their actual tax rates, while taxpayers in the low and high income brackets were less affected. Taxpayers dissatisfaction and progressivity positively

correlated across all income groups. In other words, an increase in progressivity increased the likelihood that a taxpayer would be dissatisfied with their taxes regardless of whether the change was beneficial or unfavorable to the taxpayer (Hofmann, Hoelzl, & Kirchler, 2008).

A study was conducted among taxpayers in Labuan FT, to see the difference in attitude towards e-filing usage between different level of education, previous experiences using the e-filing system and having learn to use the e-filing system (Ilias et al., 2009).

Ambali (2009) found that gender had influenced in the user intention to use the e-filing system and perception ease of use on it i.e. whether a user had the intention of age, gender, education, prior experience using computer, internet and having access to computer and internet resources had significantly influenced on the acceptance of e-government initiative including e-filing.

According to Torgler and Schneider (2009), educated taxpayers are thought to have more information about tax regulations and fiscal relations (Torgler and Schneider, 2009 : 230).

Thus, under demographic factors the most prominent which have taken by the researchers are age, gender, income level, education, occupation, experience using the internet. Hence, in this research researcher includes respondent's gender, age, level of income and education level as demographic factors.

### **2.3.2.2 Quality**

The quality is the main attributes to determine the overall service facilities and overall satisfaction of service seekers/ taxpayers. It can be also divided into three sub headings; service quality, system quality and information quality.

Plutchik (2000) depicted when evaluating the emotion, the degree of the positive or negative reaction to each aspect or characteristic of a product or service process

cummutatively creates an emotional response to such a degree of satisfaction or dissatisfaction.

Krajewski and Ritzman (2002) placed customer satisfaction at the center of the "TQM Wheel" (p.243). Quality functional deployment provided a framework for translating customer requirements into the design of the product or service, the key output was customer satisfaction. Similar result to focus quality; measured by conformance to basic standard and quality was measured by how well these standards were performed and how the customer views the standards as being high quality (Bitner, et al.,1990).

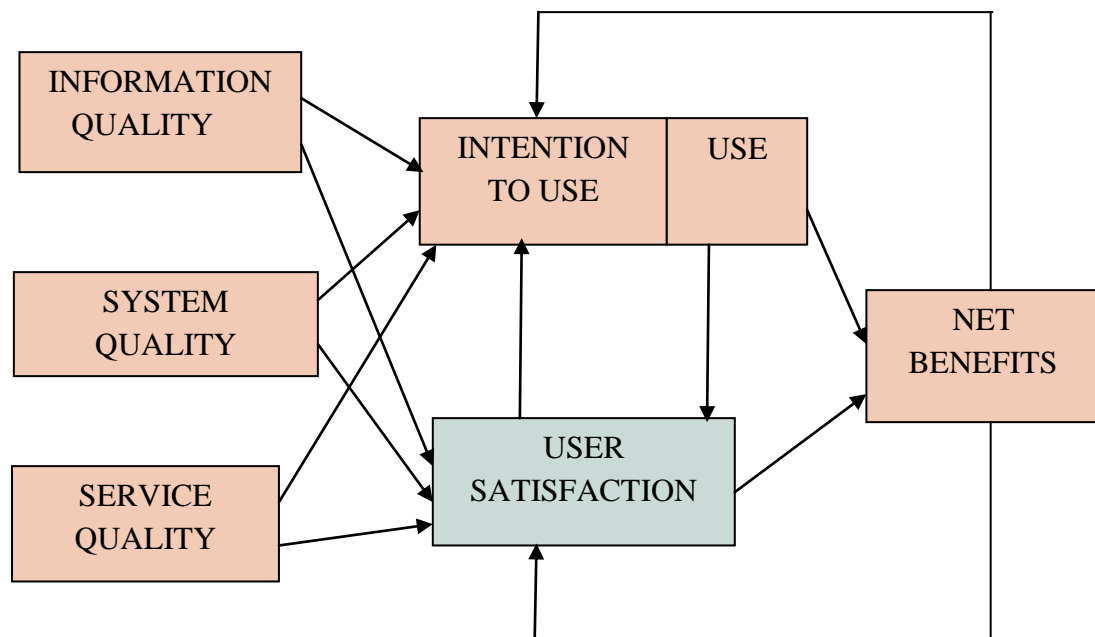
Yang (2003) introduced an important satisfaction model to allow enterprise and classify quality attributes. Due to customer evaluating the quality of products or service firm must had taken important quality attributes of satisfaction. Satisfaction survey of the quality attributes was a simple and powerful tool for enterprises to findout the excellence attributes and to be improved attributes which required improvement actions immediately.

Kara et al. (2005) there were no universal accepted definition every expert define the term differently. Quality as the summation of the affective evaluation by each customer of each attitude object that created customer satisfaction where the term customer was defined as the particularly entity of interest. This definition addresses all aspects basically cost product improvements, technological implementation and strategic focus of customer satisfaction other than the strict process and service quality definitions that create value for the customer .

Lewis and Soureli (2006) identified speed of delivery, competence, friendliness, reliability, responsiveness and trust as key factors. whereas Attitudes such as satisfaction were formed by all the emotional evaluations (which consists of affects, feeling,emotions and moods) about the attitude objects (Forgas ,2000) .

Thus, Satisfaction with an online system for filing income tax returns. Information quality, system quality and service quality were conceptualized to impact taxpayer satisfaction and found empirical support for this model of taxpayer satisfaction. However, the study did not consider commitment or loyalty and did not elaborate or conceptualize antecedents for service content quality or service delivery quality (Rust & kannan,2003:37). Hence, the quality factors can be shown in the following figure.

**Figure 2.2**  
**Quality of User satisfaction**



*(Source: Updated DeLone and McLean IS Success Model,2003, p.24)*

### 2.3.2.2.1 Information Quality

Antecedents Information quality depends on user perceptions of the value of Information System(IS) output. Thus, most of its measures are perceptual, including accuracy, precision, currency, output timeliness, reliability, completeness, conciseness, format, relevance, understandability, report usefulness, etc. (Lee,2002:134). System quality as the degree to which an information system possesses desired characteristics, and measured it by using four scales: convenience of access, system flexibility, system integration, and response time (Livari,2005:8). System quality measures the information processing system itself, the background characteristics of the system under study need to be outlined

before developing measuring instruments. Service quality is an elusive and abstract construct. In marketing research, SERVQUAL was developed to assess general service quality.

Zeithaml et al. (1985) supported that e-service users sometimes did not know how to use the systems or how to find information (Zeithaml et al.,1985:41) ; Ching-Wen (2010) concluded that quality antecedents strongly influenced the usage of e-tax systems.

From information quality perspective, personalization, completeness, relevance, easy of understanding, and security quality dimensions were used to measure electronic information system content issue (DeLone and McLean, 2003).Ching-Wen (2010), information quality had been defined by the degree to which users were provided with quality information regarding their needs.

In practices, the e-Filing system benefited to taxpayers because tax returns were sent electronically which saves taxpayers' time and also in this system, promotion campaign, the tagline 'easy to use, accurate and safe to use. As a user of e-Filing system, we need a convenience and usefulness services in order to get quality information and satisfactory results.

In addition, the quality of the services is another incentive from government to promote the use of e-Government services. It is highlighted that the individual can spend less time and do not have to wait in a queue in order to receive the services. Hence, the major issue of service quality in this matter expected is quite low.

Cyert and March (1963) believed that if an information system meets the requirements of the users, the users' satisfaction with the information system would increase. Conversely, if the information system did not provide the needed information, the users would become dissatisfied.

Ives, Olson and Baroudi (1983) defined user satisfaction as the extent to which users believed the information system available to meet their informational requirement.

Further there was evidence that the users' expectations towards the system would play an important role in how satisfied they would become (Ives, Olson & Baroudi, 1983:785).

Focusing on accuracy, characteristics, relevance, completeness, timeliness, accuracy, ease of understanding, harmony and security as the criteria for the quality of information in the websites of government. Accuracy of information, timeliness and completeness are identified as the main criteria for the quality of information in electronic services provided by the government (Saha et al.,2012:300).

Tax authority was not effective in the process of data collection. Tax authorities faced problems and issues in implementing the system and interact with citizens can be a valuable input to improve the quality of the system. Therefore, this study also suggested to assess the quality from the service provider's perspective (Saha et al.,2012).

Hence, user satisfaction is proved to have a strong relationship with user participation. It is believed that higher satisfaction can be achieved through activities users are able to influence the system and thereby feel as a part of the system.

The statistical significant and strong relationship discovered between user satisfaction with quality information and decision-making performance, supported the psychological theory that availability of relevant information improved the performance of making quality decisions in a modern information system setting. The quality antecedents had been used in the analysis of this paper following the D&M model. Previously, this model was used on e-service research in Taiwan and results proved that information and system quality were more important than service quality to the tax payers (Ludwig et al., 2010).

User Satisfaction with the Information Seeking on the Internet how satisfied Australian academics were when they used the Internet to search for information (Lee, et al., 2002 :134).

Thus, information quality is the primary and foremost quality approach to the service seeker in order to satisfy and primary impression, feeling towards the service delivery. Moreover, e-filing service is delivered mainly based on the information of service providers such as, websites, email, processing instructions, software, network and updated response. Hence, information quality is the foremost and first attribute of e-filing in tax returns/services.

#### **2.3.2.2.2 System quality**

Parmyta Saha et al (2012) empirically investigated the system's applicability and information quality criterion in an effort to evaluate websites providing electronic services in the government. They were focusing on performance characteristics, reliability, usability, efficiency, responsiveness, ease of access and productivity for the attributes of systems quality. The findings showed that ease of access and the possibility of control play an crucial role in determining the quality of the system perceived by the citizens.

System quality measured the information processing system itself. Similar to information quality, system quality depends on three factors: accessibility, interactivity, and ease of use. Accessibility refers to access speed and system availability, which are adopted as a measure of system quality. Interactivity is another important aspect of system quality. When using the Web-based taxation system for tax-filing, taxpayers must interact with the proxy of the tax agency – the website – for all communication. The Internet is interactive and dynamic, and users can manipulate specific event outcomes by filling out a form, requesting a particular Web page, or completing an online survey. Ultimately, the Internet supports direct and continual response to user requests. Interactivity positively affects online system quality by providing two-way communication and is associated with website success. Tax agencies hope that taxpayers able to operate the Web-based taxation system with minimal difficulty. The literature contains many studies that show that ease of use is important. Hence, it is justified and appropriate to adopt ease of use as a measure of system quality.

In recent years, individual innovation, adoption behavior and the diffusion of innovations have turned the research agenda towards self-service technologies, particular online services, such as Internet, e-commerce, online banking, and e-government. E-taxation acceptance is an important index of e-government in many countries. The net presence and operation of e-taxation depended heavily on composition of information system (IS), such as Internet, WWW, and network. When taxpayers accepted and used e-taxation systems, they also accepted and used technologies and innovations (Fu, et al.,2006:112). Hence, E-taxation is similar to doing transaction on the Internet. online transaction is treated as a voluntary behavior depended on users' beliefs and corresponding evaluations of the outcome of this particular behavior. With this, evaluation of outcomes about e-taxation may influence users' intention to use. The system includes submission of online rectifications, verification of status updates for receipt of ITR, processing status and refunds for e-filed returns processed at CPC. Selected information is also available through a mobile interface.

#### **2.3.2.2.3 Service Quality**

Service quality is also an important determinant of user satisfaction with the tax-filing system. Under it, researcher mainly considered reliability, responsiveness, and empathy.

Grönroos (1998) defined service quality as “the outcome of an evaluation process, where the consumer compares his expectations with the service as perceives he has received” (Gronroos, 1998: 337).

In IMEs service quality is defined as the extent to which the electronic device facilitates efficient and effective consumer activities at service encounters (Zeithaml, Berry & Parasuraman,1996 : 31).

Many researchers concluded that the development of a single convergent measure of Information System (IS) was unlikely. However, a model of IS success was introduced; it incorporated six aspects: system quality, information quality, use, user satisfaction, individual impact, and organizational impact (Buckley, 2003:454) .

Information quality and system quality, representing semantic and technical levels, respectively, were postulated as the two key antecedents of user satisfaction. Information quality is typically assessed by measuring information attributes, while ease of use is assumed to represent system quality (Fu, et.al., 2006: 116).

Perceived service quality as "a global judgment, or attitude, relating to the superiority of the service" (Parasuraman *et al.*,1988:16). In this regard, Parasuraman *et al.* (1985) proposed that ten dimensions determine service quality: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding knowing the customers and tangibles.

This study is adopted from Delone and Mclean (2003) to measure online service quality with three major dimension of information quality, system quality and service quality. From the information quality perspective, personalization, completeness, relevance, ease of understanding and security quality dimension are used to measure electronic information system content issue.

Another approach defined success of Information System (IS) innovations through different perspectives of evaluating. This were information, system and service quality, intention to use, user satisfaction, and net benefits (DeLone and McLean, 2003).

As considered as management service quality, Key component that determined customer satisfaction according to the way it had experienced the service. This factor had very strong relationship with satisfaction of the citizen. Quality of Public Services required research and knowledge of other relationships (Zeithaml et al, 1996).

Hence, service quality was mainly used to measure the quality recognition of special services on the IS because of their inherent face validity and the availability of reliable measurement instruments, such as satisfaction questionnaires, measures of user satisfaction became the most widely utilized indicators of system success. Thus, this study examines and measures user satisfaction with online tax-filing system using the same factors.

- i. **Reliability:** In offline contexts, reliability is defined as the “ability to perform the promised service dependably and accurately. Consumers place significant emphasis on service outcome if they used the self-service technology. Full information about taxes or other charges are clearly detailed, Information in this web site is available & up to date, the registration process is simple, a validation is required before the declaration is sent, and a complete overview of the operation is presented after the declaration is sent. Likewise, the question related to service provider's website operates reliably and depended on it's operation.
- ii. **Tangibility:** Finding easy way on the web site, information easily found with a minimum number of clicks, Web site design attractiveness with needed information, time and size of the downloadable file displayed and contained with date of publication.
- iii. **Empathy:** It is easy to contact a help desk for technical questions; Web site shows the most important contacts (address, phone, fax, e-mail) in Web site has a clear and accessible language for the taxpayer, provided newsletter for the exchange of ideas.
- iv. **Security :** the question related to, I feel secure in providing confidential information,When confidential information is provided, the web site shows a message that the taxpayer is logged into a secure web site , security policy is clearly visible on the web site .
- v. **Responsiveness :** Relevant links are provided for the exchange of ideas, frequently asked questions web page addressed most of taxpayers queries , The navigation is fast , it is easy to open any document type ,When a document cannot be opened, the correspondent software is available to proceed with the file download .
- vi. **Accessibility:** Accessibility is related to the actions taken by the service provider to ensure no service interruption. More and more customers now look for company access and support via IMEs (Moorman & Lemmink,2001:271-286). In this research, accessibility is defined as the level of efforts had taken to minimize service disruptions. 24\*7 customer support with instant messaging to improve accessibility. Likewise, the question related to service provider's allows

information to be readily accessible to customers, website's make information very accessible and easy to access.

Finally, the measurement of service quality is one crucial factor for taxpayer's satisfaction. This might be shown by processing time for applications, the accuracy of the assessments and so on. This information should come regularly from the results of taxpayer surveys.

### **2.3.2.3 Perception**

The *Cambridge Advanced Learner's Dictionary* (2008:1053) defines 'perceive' as '[to] to come to an opinion about something or have a belief about something'. People's perceptions are subjective and are influenced by their culture, language, gender, and various other factors (Lumsden & Wiethoff, 2010:92). Lumsden *et al.* (2010:89-92) acknowledge comments that 'there may well be a vast difference between the actual preferences of taxpayers and those that theoreticians and policy-makers have identified. How individual taxpayers perceive the tax burden is a concept central to the main purpose of the current study. Taxpayers' views and experience of their tax burden might differ from the tax burden imposed and measured by government (Fochmann *et al.*, 2010:2). Similarly, perception towards e-Filing was influenced by the way as they identified the usefulness of the e-filing system which was perceived usefulness (Zaherawati et al.,2009).

People's perceptions are influenced by three main factors. The first factor is that people perceive selectively and that their needs, drives, motives, wants and experiences may prevent them from seeing something that is unknown themselves. The second factor is that people's background affects their perceptions. Their culture, language, gender and previous experiences all play a role in creating their perceptions about something. The last factor is that people multiply their misperceptions regarding other people. In this regard, Katona (1963:3) explains that both people's perceptions of their environment and their behaviour are shaped by their attitudes, motives and frame of reference. Lumsden *et*

*al.* (2010:92) argued that perception is the ‘way people do or do not pay attention to a stimulus and how they interpret that stimulus for themselves’.

Individuals had perceptions about the behaviour of other individuals. The greater the perceived by an individual that engaged on tax evasion practices, the more would tend to lower the level of tax morale (Molero and Pujol,2005). Similarly, greater the perception other taxpayers meet their tax obligations, the greater willingness of individual to pay taxes. If trust was matched by trustworthy behaviour in others, the costs of dealing with risks and uncertainty were reduced (Helliwell, 2001).

People’s perception that paying taxes is the right thing to do related with idea that the state has some social value. Hence, the citizen’s obligation to contribute to its financing. The Tyrannical state exploits its citizens without providing any services whatsoever the notion of tax morale would lose its ethical and political meaning. From this point of view, the concept of tax morale was closely related to the idea of reciprocal behavior from the individual towards the state. According to the “reciprocity towards the government” hypothesis, people were more likely to pay taxes when they perceived the government was doing a better job. Likewise, in response to friendly actions, people were frequently much nicer and much more cooperative than predicted by the self-interested model (Fehr & Gächter, 2000). Similarly, the result as shown "The consumer’s response to the evaluation of the perceived discrepancy between prior expectations (or some norm of performance) and the actual performance of the product as perceived after its consumption" (Tse & Wilton,1988 : 204).

Researchers using early technology acceptance constructs had shown that perceived usefulness influences taxpayer intention to use electronic filing more than perceived ease of use. In addition, perceived credibility, a combination of individual trust in security and trust in privacy, played a role in predicting intention to use e-filing for the Taiwanese taxpayers (Chang, Li et al., 2005).

Further research on the effects of attitudes was conducted by (Harison & Rainer,1996:80) who set up several hypotheses to prove a relationship between attitudes and user satisfaction among other things. They mailed a questionnaire regarding various aspects of computer use to the 3488 university salaried personnel and total of 776 useable respond were received. The relationship between computer skill and user satisfaction had not been thoroughly addressed in the literature.

Taxes are used to a large extent to fund the traditional function of government. Taxpayers are therefore within their rights to expect government, to render certain public goods and services in terms of this traditional function. If taxpayers have a perception that their government is not rendering these expected services adequately, this will have an impact on how they perceive the tax burden.

Perceived ease of use was measured as “Software for e-filing tax returns is easy to use.” Perceived usefulness was measured as “E-filing tax returns saves time.”The findings demonstrated that perceived ease of use, perceived usefulness, perceived security, and perceived credibility influenced the Perak State academic’s e-filing adoption intention. However, perceived service and information quality had not influenced their e-filing adoption intention. This study provided several important implications for building and promoting effective e-filing system by the IRBM (Hawaii,2007).

#### **2.3.2.3.1 Perceived Ease of Use (PEOU)**

The importance of PEOU as a determinant of the citizen adoption for e-government services, either directly or indirectly (Fu,etal, 2006:112). This study acknowledged that developing e-government websites that were easy to use and more user-friendly would positively influence citizen intention to use e-government services among them Perceived ease-of-use was prominet for user satisfaction through information systems.

Perceived ease of use is defined as the degree to which a potential adopter views the usage of the target technology to be relatively free of effort (Davis,1989:320). The researcher also identified that perceived ease of use as a primary determinant of information system adoption at the pre-implementation stage. Similar result as

Innovations that are perceived to be easier to use and less complex have a higher likelihood of being accepted and used by potential users (Agrawal & Prasad,1998: 206).

#### **2.3.2.3.2 Perceived Usefulness (PU)**

Gilbert et al. (2004) found that citizens willingness to use e-government services increased if they perceived that the electronic delivery of public services was saving them money and time.

Similarly, Kleven et al. (2011) found that proxies of social and cultural factors (i.e., gender, age, marital status, church membership and place of residence) had a very modest effect on tax behavior in Denmark.

Perceived usefulness is defined as a prospective user's which is subjective or with the likelihood of using a specific innovation to enhance it processes (Galletta and Lederer, 1989:26) whereas PEU and utilization of the internet technology model to explore the ways by which it was been implemented (Jiang, Hsu, Klein, & Lin,2000).

#### **2.3.2.3.3 Perceived Security (PS)**

Security is a major factor but people are not often worry about security in physical way. But, when it comes to e-filing, people are concerned more about their security information required in the system. Therefore, it can be concluded that people may perceive that the facilities in electronic tools are not adequately secured (Ambali, 2009:255).

Terms of technical security for electronic returns, privately offered tax preparation software and returns prepared by government tax authorities can provide common measures such as the Secure Sockets Layer protocol for Web communications (*IRS Strategic Plan,2005-2009*).

Hence, internet has provided greater convenience for tax payers to file taxes and make use of the online services. However, some believe (taxpayers) that they are able to file their income taxes manually rather than using the internet medium as advantage. The

major issue here is whether the security of the system and information can give perception of confidence among tax payers or not. one example of the California Franchise Tax Board has presented in the below.

The California Franchise Tax Board presented the following assurances of security on its website: treat the security and privacy of taxpayer data as our highest priority. It employed a strategy of “Defense in Depth,” whereby they rely upon multiple layers of security to resist all classes of attacks. They used a combination of IT security technologies to protect taxpayer information such as routers, firewalls, switches, and intrusion detection devices. Further, the use of industry standard Secure Sockets Layer (SSL) protocol with 128-bit key length to ensure a secure connection between a taxpayer” s computer and the ReadyReturn application. For online authentication, they required shared secrets that only FTB and the taxpayer would know. For IVR-requested paper ReadyReturns, they would not include the taxpayer” s Social Security Number on the return. We maintain strict internal policies for protecting taxpayer privacy. Only staff with a right to know and need to know may access taxpayer data. <http://www.ftb.ca.gov/readyReturn/readyreturn.971.pdf/> Accessed on 3/7/2015).

#### **2.3.2.3.4 Perceive Value Dimension (PV)**

The value-based approach for quality concluded that the cost-benefit value measure is likely to be whether the efficiency of the service provider (that is IRD) would enable the practitioner/auditor to recover the cost of his or her time from the taxpayer client in full. Zeithaml (1988:14) defined customer value as a trade-off between benefits and cost (salient give-and-take components).

Zeithaml (1988:13) found that convenience has divergent meanings for different individuals. The results of the present research confirm that convenience is a very personal thing what one person would find convenient would be a matter of indifference to another person, for example, the aspects classified under the reduction of effort service attribute. Similarly, the convenience-related aspects are part of the Perceived Value scale (Parasuraman *et al* ,2005:231).

Adam Smith in his book ‘*The Wealth of Nations*’ which was published in 1776 suggested that a tax system was based on certain basic principles, namely equity, certainty, convenience and efficiency. Lymer and Oats (2009: 42) briefly defined as equity and convenience as below.

**Equity:** means a tax system should be fair among individuals and taxes should be levied based on taxpayers’ capacity. Horizontal equity means that taxpayers with the same income or wealth should pay the same amount of tax (tax burden) while vertical equity means that taxpayers with high income (capacity) should pay higher tax (tax burden).

**Convenience:** relates to how people pay their taxes or engage with the tax system. For example, people more conveniently pay tax by it being deducted at source rather than paying a large amount of tax annually (Lymer and Oats, 2009: 50). The introduction of electronic filing is another example of a facility provided by the tax authority to ease the method of filing tax returns.

Hence, the perceived value dimension is defined as the convenience and incentive benefits of using e-filing. The convenience of using e-services is directly related to the benefits of the e-services, and therefore to the perceived value of the services. Incentives to use e-services could also relate either to the benefits of using the service or to the (lower) cost of using the service.

Service convenience is defined by Berry *et al.* (2002:12) as consumers’ time and effort perceptions related to buying or using a service. Berry *et al.* (2002:13) propose that service convenience has two dimensions, namely time and effort. They argue that it is more important to consumers in some situations than in others. Yang *et al.* (2004:1158) do not specifically define convenience, but they identified the following service attributes as relevant to the convenience determinant within the tax agency environment:

- the service saves time;
- the service is available when the client wants to use it;
- the client can access the service wherever the client wants to use it; and

- the client can avoid service personnel.

“E-filing is convenient especially for clients staying far away”, “it is available 24/7”, “one can submit returns while on holiday”, “it saves a lot of administration effort”, “it saves us photocopying documents” and “it is convenient to have an electronic filing system.”(Buckley, 2003:454).

### **Time-saving**

The time-saving service attribute usually focuses on the transaction speed of e-filing. E-service quality includes a statement on the ability of the website to complete a transaction quickly (Parasuraman *et al.* 2005:230). As the incorporation of individual taxpayers (the majority of taxpayers) on e-filing filed themselves or they also could be assumed that they hire tax practitioners/auditors to focus on the time-saving aspects (which were classified as part of the convenience service determinant) and would not really be able to judge the actual transaction speed of e-filing. For a tax practitioner to judge whether a transaction was completed quickly.

Under it, the question related to analyze e-filing is more productive”, “e-filing is quicker” and “e-filing saves a lot of time” convenience of the “operating hours” of e-filing and the website were classified under this service attribute. This service attribute therefore focused on the productive time of the taxpayers/ tax practitioner (auditors) required to complete a particular transaction. It included the time taken to download forms, as this aspect only replaces the traditional receiving of the form through the post and filing it.

Thus, time-saving convenience aspects would be directly affected by the actual transaction time of a business process, as well as the effective working of the e-filing system. System availability should not influence transaction speed, but this is only true if the taxpayers knows about system availability in advance.

### **2.3.2.3.5 Attitudes**

Melone (1990) defined user attitude as a tendency to respond favorably or unfavorably to a computer system, application system, staff member, or a process related to the use of system or application (Melone, 1990:76).

The research on the effects of attitudes conducted by Harrison and Rainer (1996) who set up several hypotheses to prove a relationship between attitudes and user satisfaction among other things. The result found that there was relationship between computer skill and user satisfaction had not been thoroughly addressed in the literature (Harrison & Rainer 1996).

Satisfaction is defined as a feeling of fulfillment and contentment and is often dependent on one's definition of success. "Evaluating your level of satisfaction with your financial life is much more of an emotional issue than a material one. Your sense of satisfaction is influenced heavily by your personal attitudes and beliefs. Hence, studying the attitudes, motives and expectations of taxpayers may contribute to an understanding of taxpayers' economic spending and saving patterns, as well as their compliance with tax legislation" (Katona, 1963:3) whereas moral positive attitude towards on-line tax filing allows 24 hour data transmission so that taxpayers were not limited by office hour (Warkentin et al., 2002).

Positive actions by the state were intended to increase taxpayers' positive attitudes and commitment to the tax system and tax-payment and thus compliant behavior (Smith 1992). If the government acts in a trustworthy fashion, taxpayers might be more willing to comply with the taxes. On the other hand, perceived unfairness increased the incentive to act against the tax law as psychological costs were reduced (Torgler, 2004). The similar behaviors of voluntary registering as a tax payer, making tax assessments and filling returns and finally paying taxes due to the tax authority (Azjen & fishbein,2000).

Torgler (2003) regarded attitude as the individual's positive or negative behavior towards innovation adaptation. Attitude could be portrayed by perceptions for the usefulness of

taxes, perceived ease of assessment, tax administration system and any other tax payer preference.

Hence, attitudes includes the major questions related to be using online tax filling system like or dislike, would be a pleasant experience, intended to use it for income tax return, priority of it, recommend to others (relative, friends, businessman).

#### **2.3.2.4 Technical Know how/Savvy**

Theory of people's satisfaction suggests that only the effective government is one which meets the requirements of its citizens (Acrete etal. 2005:22). The operational definition of effectiveness of ICT is understood in terms of achieving the goals of ICT initiatives. E-services is understood as improved service delivery which is the main moto of satisfaction of taxpayers in the e-filling system/services. Improved in the online services (E-services) is also determine by the time factor. Hence, ICT infrastructure is defined as availability of technologies used in the organization. It includes internet facility, power supply, digital devices, maintenance and update of e-services.

Trust and trustworthiness were also relevant in human-computer or human-automation interactions. In respect of electronic infrastructure, i.e. computers, networks, software etc., the trustworthiness dimensions would be perceived technical competence of the system, perceived performance level of the system, human operator's understanding of the underlying characteristics and processes governing the system's behavior (Lee and Turban, 2001).

The Income Tax Act might be appeared as though it is difficult to comprehend but once a methodical approach is employed in reading and using it, understanding the income tax law becomes easier. The reader should find out who is liable to pay the tax, based upon which the tax will be levied, the tax rates to be applied to the tax base and how or when the tax is to be paid. When these are identified, understanding of the other structural elements will not be difficult. i. To avoid digital signature is best. ii. Very awareness to clients. iii. Very easy to file the income tax. iv. Network is very big problem in the peak time. v. Computer illiterate people can't do this work. vi. Very difficult to remember the

registration number. vii. E-filing gives more safety to file. viii. E-filing gives very accurate result. ix. E-filing gives acknowledge very short time. x. In the time of filing tax, one PAN number is changed means cannot do the file (Kennedy, 1992 :317).

The most important determinant of individual intention to use technology was the perception of how technology would help perform a required task. Other theoretical factors were the individual's social environment and various demographic variables, especially age and gender (Wixom & Todd, 2005) whereas Poor knowledge on the tax system increased taxpayers' distrust for the government (Hofmann, Hoelzl, & Kirchler, 2008).

Computing Experience - Venkatesh et al. (2003) posit that computer efficacy and computer anxiety did not significantly influence individual behavioral intention beyond what was already captured in the "effort expectancy" construct.

The site was designed to make it easier for taxpayers to find information and to be more focused on: taxpayers as customers. The website was divided into categories of taxpayers. For example, the small business/self-employed community, compiled relevant information for the kind of taxpayer and thus made the site easier to use. The website was in the process of being enhanced with registered user capability, electronic transcripts, and greater information availability (Edward, 2008). This result similar to computer attitudes could be related to user satisfaction (Igbaria and Parasuraman,1989).

Pancer, George and Gebotys (1992) insinuated that user satisfaction was an attitude that might be affected by computer training (i.e.user computing satisfaction) whereas computer anxiety could be related to dissatisfaction with the computer system (Igbaria & Parasuraman,1989:374).

Melone (1990) concluded that an individual's perceptions of the computer system and related activities were predictive of success of the computer system, and that user

satisfaction was an affective attitude toward all the various activities surrounding an end-user's interaction with a computer-based information system.

Though there are many factors that determine expectations of computer users, the key determinants to be word-of-mouth communications, personal needs, past experience, and communication by the service provider (Zeithaml, Berry and Parasuraman,1993:10).

There was found strong relationships between user satisfaction and computer usage; positive correlation between them (Baroudi, Olson and Ives, 1986; Harrison & Rainer,1997).

Melone (1990) concluded that an individual's perceptions of the computer system and related activities are predictive of the success of the computer system, and that user satisfaction is an affective attitude toward all the various activities surrounding an end-user's interaction with a computer-based information system (Melone,1990:90) . Similarly, Improving their performance and increasing their levels of satisfaction will probably lead to more efficient use of information systems in an organization (Baroudi & Olson,1986: 233).

Hence, e-service quality included a question to evaluate the user-friendliness of the structure,layout and organisation of the information on the website. E-filing perceived technical competence of the system, perceived performance level of the system, human operator's understanding of the underlying characteristics and processes governing the system's behavior. Similary question related to technical know how about facility to download Pre-filled XML File -(after Login feature), PAN Details at one place (Name, D.O.B, Status, Gender, Address) -(after Loginfeature), request for Intimation - Earlier there was no option to download if mail not received. (Submit request for resend print of Intimation to ITR/PAN Address/New Address or via Email) (After Login Feature), For New Users, Resend Activation Link Feature - Helpful if link not received or mail deleted earlier. Technical know how also included about scanning files, upload files, past experience, technical message in english use.

### **2.3.2.5 Trustworthiness**

A review of the e-government adoption literature conducted by Titah and Barki (2006) showed that trust was the most significant factors affecting e-government adoption. Citizen trust was essential for the widespread adoption of e-government services. People usually had concerned about privacy and misuse of their personal information when it was shared over the internet (Carter & Bélanger, 2005).

Similarly, Trust as "the mutual confidence that no party to an exchange will exploit another's vulnerabilities", while they defined trustworthiness: "as the word itself implies, an exchange partner is trustworthy when it is worthy of the trust of other. An exchange partner worthy of trust is one that will not exploit other's exchange vulnerabilities" (Barney & Hansen, 1994:176). In this study, one adopted this distinction, and view government trustworthiness as an important antecedent of citizen trust. This study argued that trust was an attitudinal response of citizens to the government's efforts to be trustworthy. It followed that perceived trustworthiness was likely to be an important strategic factor in predicting e-government adoption.

Customer satisfaction, as well as trust and commitment had become focal constructs in relationship marketing research (e.g. Garbarino & Johnson 1999, Morgan & Hunt 1994). Considering theory as well as practice in relationship management, one found that satisfaction, trust, value and commitment to represent the most important aspects of business relationships.

Trust had a direct positive impact on commitment: Trust diminished the perceived risk and vulnerability in a relationship and thus leads to a higher commitment to the relationship (Ganesan, 1994). The crisis of trust in e-services was equally a big question (Bailing Liu et al., 2010). Unawareness on its usage procedures and or existence had slowed down use (Zhenji et al., 2005). on the otherhand, Wang et al. (2005), defined e-services as "the information and services provided to the public on government web sites.

Rowley (2006) referred to it as: "...deeds, efforts or performances whose delivery was mediated by information technology". Lu (2001) held that e-services made it easier to reach large amount of customers with less cost and time, broadening and reducing market barriers. Likewise, Saha (2008) asserted that e-services aim at improving customer satisfaction, developing strong relationships with customers and business partners, and reducing the service delivery.

Trust as a predictor for voluntary compliance, which was achieved without enforcement, based on taxpayers' willingness to act in the interest of their peers and perform their duty as citizens in response to authorities' trustworthiness (James & Alley, 2002) whereas Chopra and Wallace (2003) depicted trust exists on four level: individual (psychological), the interpersonal (one to another), the relational (social glue), and the societal (functioning). Similarly, security referred to the protection of the information systems resources and controlling access to the information itself good governance (Ciborra and Navarra, 2005: 151).

Thus, some important ethical issues concerning to e-governance are e-communication legislation, e-commerce legislation, e-procurement legislation and database legislation. The e-governance implication needed to make the trust of people. Hence, Trust in cyberspace emerged as an important factor, once the communications networks enable unprecedented level of convenience in the workplaces and homes, i.e., online shopping and e-transaction, which might be affected the quality of life in a positive way.

#### **2.3.2.5.1 Social Influence**

This construct is designed to measure the extent that individuals believed "important others" think they should be using tax software. One significant difference in this study is that there is no supervisor expecting (requires/wishes/implies) the individual to use the software. "Important others" are spouses, partners, parents, friends, co-workers, etc. one believed that this construct is less important in measuring technology acceptance in this setting because of the lack of an organizational context.

#### **2.3.2.5.2 Trust in Login**

This construct is defined as the belief that tax software correctly applied the rules and regulations when completing the tax return. Most taxpayers do not possess expert knowledge concerning tax law. This is a primary reason for most taxpayers to use tax preparation software. In this context, the software is a surrogate for the tax expert.

#### **2.3.2.5.3 Communication and Networking**

Communication and networking is the main parameter of the taxpayer's satisfaction. Though online filling is one of the best way to get the government services/file the return 24 hours × 365 days. But sometimes if taxpayers feel the problem while filling their return or submission process due to system software problem i.e. technical errors and other public holidays. However, electronic filers must ensure that electronic returns are filed in timely manner. Hence, the questions in this regards to respondents, e-services have helped to time saving than from bureaucratic proceedings, reduced procedural fairness in the system, diminished in physical visit of IRD/IROs, easily accessible. Thus, they get the quick conformitary (response) after submitting their return.

#### **2.3.3 Intervening variables**

Timely correction of tax rate sytem and tax policy also reflects the satisfaction level of taxpayers. But these rate and system are unknown to the taxpayers. Government changed in the income tax rate and effective tax policy in regards to tax exemption limit, value added services and it's business coverage, annual turnover of business in timely manner. These intervening variables are basically guided by government, amendment of income tax Act, economic growth of development, market condition and business environment and other external hindering factors. These might be affected the satisfaction of taxpayers in e-filling of income tax.

## 2.4 Literature Map

**Table 2.4**  
**Latent variable indicator**

<b>Research variables</b>	<b>Indicators</b>	<b>Sources</b>
1. Tax service quality	Tangible Rationality Responsiveness Assurance Empathy	Theory: Service quality Oliver (1977)
2. Regional tax regulation	Regional tax clearance Tax incentives Regulation overlap	Theory : institutional theory Zukler (1987), Donaldson (1995)
3. Taxpayers satisfaction	Perception Performance Importance	Theory :Cognitive Dissonance theory Hunt (1991) Research: Mohamad (2010)
4. Taxpayer behaviour	Sanction and fine Tax avoiding Self- restrain	Theory: Theory of planned behaviour Fishbein (1975) Research: Misue (2011)
5. Taxpayer compliance	Tax calculation Punctual tax payment Tax reporting	Theory: Compliance theory Tyler Saleh (2004) Research : Boobek and Hatfield (2003), Hidyat and Nugroho (2010)
6. Taxpayer Perception	Perceive usefulness Perceive risk Perceive eas of use Facilitating condition	Theory: People perception (Davis,1989), Fu,etal, (2006) Research : Zakaria etal. (2013)
7. Service quality Taxapyer Satisfaction	Convenience Reliability Tangibility Empathy Security Responsiveness	Theory : E-service quality (Buckley, 2003). Research: Nezamabadi & Taheri (2010)
8. Satisfaction level of taxpayers	E-filling Awarness	Theory : Hite and McGill (1992), individual behaviour Research : Geetha & Sekar (2012).
9. Service quality taxpayer satisfaction	ICT application Intention of using web Convenience	Theory:Technology Acceptance Model (Davis,1989). Research:Javanmard, Nezamabadi & Taheri (2012)
10. Taxpayer Satisfaction level	Quality of tax service Regional tax regulation Taxpayer behaviour / compliance	Theory:Conformatory Factor Analysis (CFA) (Westbrook & Reilly,1983) Research: Hidayat, Handayani & otok (2014).
11. Taxpayer Satisfaction	E-filling Age, Income, Education, Gender, Race (Demographic perspective)	Theory:Expectancy/Disconfirmation, (Westbrook & Reilly,1983) Research: Islam,et al. (2015)

(Source : Hidayat, Handayani & otok, 2014, Islam,et al.,2015,Geetha & Sekar,2012)

## **2.5 Research Gap**

Many research reports, articles and books written on understanding the use of e-filing services was introduced in public institutions in international context. Previous researcher mainly concerned on perception, accountability, awareness, tax compliance and service quality etc. in one angle aspects through using either secondary data or the primary analysis by respondents views. In this regards, they had taken and focus quantitative judgement rather than qualitative. Yet, until now very few attempts have been made to examine the satisfaction level of taxpayers. With the former support of DANIDA to the Nepalese revenue administration, the Kathmandu University undertook a survey on Tax Payers' satisfaction in 2002. Similarly, taxpayer's satisfaction level in Nepal had been studied by the joint project of the Inland Revenue Department (IRD) – Ministry of Finance and the German Technical Cooperation (GTZ) in 2010. Likewise, there were found the e-filing of taxpayer's satisfaction, awareness, perception in the research journals rather than whole research. But in this study, 'Satisfaction level of taxpayers in the e-filing of income tax (E-VAT)' researcher used dependent variable satisfaction of taxpayers and five independent variables demographic, quality, perception, technical knowhow/savvy and trustworthiness. Henceforth researcher used both quantitative method through primary questionnaire survey of 100 respondents and qualitative method through selected respondents through interview of field survey to draw the finding and conclusion. Secondary documents are also used to draw the information and number of taxpayers and the authentic requirement and sources. Hence, this study is addressed and crucial to findout the satisfaction level of taxpayers in the context of e-filing of income tax (E-VAT).

## **CHAPTER-III**

### **RESEARCH METHODOLOGY**

The methodology for a scientific research is one of the foremost important as well as inevitable parts. The validity and reliability of findings in any research necessarily depend upon the methodology being applied for the data collection and data analysis. It connects empirical data to the research problem(s) by which conclusions and recommendations were made (Yin, 2003). In order to obtain the objective of the research, researcher used the following prescribed research tools and techniques.

#### **3.1 Research Design**

It connects empirical data to the research problem(s) by which conclusions and recommendations are made (Yin, 2003: 14). Research have adopted a descriptive and exploratory approach to study on the satisfaction of tax payers in the e-filing of income tax (E-VAT) by adopting a case study method. Exploratory research helps to determine the best research design, data collection method and selection of subjects. It investigated into a problem or situation which provides insights to the researcher. The research is meant to provide details where a small amount of information exists. Under this method, researcher included informal interview, different semi-structure questionnaire and tactics for the purpose of gaining information in regards to satisfaction of taxpayers in e-filing of income tax (E-VAT). Hence, exploratory research design is the conceptual structure within which research is conducted and constituted the blue print for the collection, measurement and analysis of data. Similarly, it provides the unique tool for studying what lies in behind decision, attitudes, behavior or other phenomenon of tax payers in the e-filing of income tax (in-depth qualitative research).

#### **3.2 Research Philosophy**

Babbie (2006:15) explained that research philosophy discusses the knowledge, reality of the research problem and a way of interpreting some research findings to the reader. Research philosophy identifies the limitations of particular research methods and

suitability of selected research methods to solve the research problem in a methodical manner. Hence research philosophy determines the most suitable research approach. Positivism research philosophical approach have been used to investigate the particular research problem because the knowledge is can be generated through positive information. And interpretive research philosophy is going to be far more useful in generating the evidence needed to answer research questions. Because there are evidences available about the satisfaction level of taxpayers in the e-filing of income tax.

According to Saunders (2009:160-161) positivism research philosophical approach enables to discuss particular knowledge confirmation through genuine knowledge. Positivism research philosophical approach enables to discuss particular knowledge confirmation through genuine knowledge about e-filing service delivered by IRD. Hence the positivism research philosophical approach is possible to investigate the particular research problem. And interpretive research philosophy is going to be far more useful in generating the evidence needed to answer the research questions towards satisfaction and independent variables quality, perception, technical knowhow and trustworthiness in e-filing of income tax.

### **3.3 Theory applied**

The study focuses to satisfaction level of taxpayers in the e-filing of income tax. disonance Theory is useful since disconfirmed expectations create a state of dissonance or a psychological dicomfort (Yin,1990). consumers may have a psychological tension and try to reduce it by changing their perception of the product.

Value Percept Theory theory is better which was already discussed in literature review part i.e. chapter II.

Technological Acceptance Model (TAM) is a conceptual model to explain and predict the adoption by users of Information Technology (IT). The TAM proposes that the two important determinants when users decide to use information technology are: perceived usefulness and perceived ease of use (Davis, 1989).

**DeLone and McLean's is success model:** The Information System Success model is a theoretical model designed to explain the success of information technology, which was developed by DeLone and McLean (1992). System quality, information quality, Information System (IS) use, user satisfaction, individual impact and organizational impact are the six determinants of IS success. Similarly, information quality, system quality and service quality measures the user satisfaction towards e-filing (*Source: Updated DeLone and McLean IS Success Model,2003:24*). Hence, prescribed theory are described in the earlier chapter -II literature review.

### **3.4 Research Approach**

Further, as revealed by Saunders (2009: 160-161) deductive research approach is possible to solve the research problem which flows from the theory; hypothesis setting; data collection; findings; hypothesis testing and revision of theories. When considering about this research study, TAM model is more apparent regarding research problem. The hypothesis is sortout on satisfaction with independent variables demographic factors, perception,technical knowhow/savvy and trustworthiness in e-filing E-VAT. Data collection have been done to get the research findings. Hence, some hypothesis is also tested i.e somehow deductive approach. However, in order to generate the theoretical approach /issued such as TAM model, DCLone and MC Lean success model, value perception theory etc. have been used to solve the research issued i.e. inductive approach. In orther words, the result of the satisfaction of taxpayers (selected respondents) in e-filling of income tax (E-VAT) help to generate the satisfaction variables towards e-fillers. Hence, data collection have been done to get the research findings and to investigate the satisfaction level of taxpayers in the e-filling of income tax (E-VAT).

### **3.5 Research Strategy**

As said by Traver (2001) survey research strategy is used to collect data from large samples. Survey strategy includes survey research questionnaire distribution, data collection and data analysis. Therefore, survey strategy emphasis the whole data collection procedure from the particular research sample.

### 3.6 Data Collection Methods

According to Bell (2005:31) both quantitative and qualitative data have used to investigate a research problem. The primary data collection method have been used to collect both quantitative and qualitative data while using survey strategy. Secondary data collection method have used to get the qualitative data about the research problem. The main purpose of data collection is to examine the causal relationship of e-filing (online) of income tax and it's output satisfaction of taxpayers. This study only focuses on demographic factors, Perception, Quality, User's technical knowhow and trustworthiness towards e-filing of income tax and their satisfaction. For this researcher require two types of data: primary and secondary. Primary data is obtained direct from the respondents through different methods of investigation such as interview, observation, questionnaire, etc. Similarly, secondary data have obtained from the reports and other published and unpublished documents of agencies concerned as shown in data collection tools.

#### 3.6.1 Population and Sample

In the view of Saunders (2009:160-161) primary data is collected from a particular research sample. Samples is drawn to investigate the research problem service seeker of the customers i.e. income taxpayers. The population and sample of the study are shown as below.

**Table 3.1**

#### **IRD Taxpayer offices**

<b>Offices</b>	<b>No. of Offices</b>	<b>Functions having 100+ Achievement (%)</b>
Large Taxpayer Office (LTO)	1	0
Inland Revenue Office (IRO)	22	6
Taxpayers Service Office (TSO) (Inside Kathmandu)	13	1
Taxpayers Service Office (TSO) (outside Kathmandu)	13	1
Total	49	8

*Source, IRD Annual bultin 2013/14*

Total Population: Total e-returns (income tax) Registrants in IRD: FY 2013/14: 6,85,958 in which 60.49% (4,14,936) e-filler and remaining 39.51% (271,022) nonFiller. Similarly, out of them 1,33,178 taxpayers registered in E-VAT (IRD, Annual Report 2013/14).

**Table 3.2**  
**Population for the study**

e-services	Number of (income) taxpayers
E-PAN	6266
E-VAT	2361

*Source: Annual Report form Taxpayer's Service office, Thamel, 2013/14*

In Nepal, the total number of Taxpayer Service Office (TSO) are 49 in which 13 TSO are established in Kathmandu valley. For this research, Taxpayer's Service Office (TSO) Kathmandu Area No. 2, Thamel as population or area and hence E-VAT 2361 of TSO, Thamel is considered as total number of population.

### **Sample**

Under e-filling services, this study focused on income tax of E-VAT users. The reason behind to choose E-VAT is that there is compulsion of Income from VAT in efilling. In E-VAT, almost respondents used the e-filling of returns while only limited person used the e-filling of their tax in E-PAN. Hence, they are the full users of e-filling of the tax.

Time, money and workforce of these limitations, it is almost impossible to randomly sample the entire population and it is often necessary to employ another sampling technique, the non-probability sampling technique. In contrast with probability sampling, non-probability sample is not a product of a randomized selection processes. Subjects in a non-probability sample are usually selected on the basis of their accessibility or by the convenience of the researcher. Hence, convenience and purposive judgement sampling is more suitable for this research. By the purposive personal judgment of the researcher, subjects are chosen to be part of the sample with a specific purpose in mind. With judgmental sampling, the researcher believes that some subjects are fit for the research

compared to other individuals. Judgmental sampling is more commonly known as purposive sampling.

Researcher had taken the Taxpayers Service Office Kathmandu area number 2 Thamel is the primary site since it is a major business place of its operation for all round Nepal. On the otherhand, it is easy to collect data and field survey since closer to researcher destination from resident. The total sample size is 100 respondents i.e. 4.24% (out of 2361 E-VAT) which had been taken through convenience sampling (non-random probability sampling).

### **3.6.2 Data Collection Tools**

#### **Primary Data**

Primary data is collected by administering semi-structured interviews and questionnaires on the Businessman/enterprenuer with E-VAT.

- Primary data related to dependent and independent variables.
- Quantitative data collection through conducting a survey.
- Data collection through questionnaire.
- Qualitative Information collection from individual income tax payers with selected interview.
- Field visits to the sample offices to observe the management of e-filers

In this manner primary data collection is planned to solve research problems.

#### **Secondary Data**

Apart from primary data, secondary data had been collected from different sources. The secondary data are drawn from the websites, journals of IRD, strategy plan of IRD, UNDP, UN, ICT development plan, books, MOF (Ministry of Finance), MOIC (Ministry of Information and Communication), previous scholar research and different websites. Moreover it can be shown as following way.

- Secondary data is collected through published and archival data.
- Periodic Development Plans
- Fiscal Policy
- Tax Policy

- Income Tax Act, 2058
- Income Tax Directive 2066
- Income tax manual , 2069
- Legal Mandates of the IRD and Functional Offices
- Job Description of the Tax Official
- Performance Based Incentive System (PBIS) of IRD
- 5 Years Strategic Plan and 3 Years Reform Plan of IRD
- Annual Report of IRD
- Economic Survey of MoF
- Satisfaction Survey of tax payers by GTZ projects 2010.

### **Content Analysis**

Content analysis, a type of secondary data analysis, is used to analyze text, including, interview, newspapers, books, manuscripts and Web sites to determine the frequency of specific words or ideas. The results of content analysis allow researchers to identify, as well as quantify, specific ideas, concepts and their associated patterns, and trends of ideas that occurred within IRD. During the study, rigorous content analysis was done by reviewing different published and unpublished books, journals, research works, articles, notes, magazines etc.

### **3.6.3 Data collection procedure**

Primary data is collected at various time intervals through different methods and tools such as interview, questionnaires and field observation. The researcher himself involved in obtaining field information.

*Interview:* Gathering data by interview may take one of several different forms. Semi-structure interview is one of them. This approach used most often in public administration research is in-depth personal interview. Individual interview occurs as conversations between a researcher and a subject or respondent. To keep conversation focused, the researcher uses a conversation guide in which are listed the key points that are to be covered in the interview (McNabb, 2005:365). This method is particularly useful for accessing individuals' attitude and values- things that cannot necessarily be

observed or accommodated in a formal questionnaire (Silverman, 2006:114). However, this method of data collection would bias due to poorly constructed questions. There might also be reflexivity- interviewee gives what interviewee wants to hear (Yin, 2003: 86). Forty-four respondents are considered in informal interviewed. These interviewees have been chosen purposively and the method of interview is face-to-face. Out of them, thirty respondents is interviewed first phase on the basis of semi-structured questionnaire to get the taxpayers opinion regarding to their satisfaction in the e-filling of income tax (E-VAT). Similarly, four respondents who are tax auditors/practicetioner(agent) interviewed on the basis of information of first phase.

*Questionnaire:* The purpose of the questionnaire is to generate responses to specific questions including question about perception, attitude, opinions, motivations, technical knowhow, knowledge, demographics, quality and many more categories of data. Similarly, semi-structured questionnaires is distributed to 100 respondents who is selected on non-random purposive judgemental and convenience of the researcher from Thamel, Kathmandu lies in Taxpayers service office Ktm area 2 Thamel.

#### **3.6.4 Data Analysis Methods**

According to Pallant (2007:124) both quantitative data analysis method and qualitative data analysis method have been used to analyze quantitative and qualitative data respectively. Hence, After collecting primary and secondary information, data is analysed mostly in descriptive and explorative ways, while the quantitative data is presented in tables, figures, mean, standard deviation and percentages. Some analytical tools such as cross tabulation, correlation and content analysis is employed for analysing both qualitative and quantitative data. Quantitative data is analyzed by using SPSS statistical software whereas qualitative data is analyzed by using thematic analysis. The graphs, charts, data plots and other graphical methods have been used to present quantitative data of the research study. Further, specific research themes is used to identify the solutions for research objectives. Then, intensive triangulation of qualitative response and quantitative data as well as data from secondary sources in relation to research problems and questions have been undertaken. Triangulation is important to substantiate validity of the study finding (McNabb, 2005:366).

### **Statistical analysis**

Being the quantitative research the collected data are analyzed with SPSS and MS Excel. Almost all the collected data of this research have been analyzed descriptively with frequency and percentage and chi-square test for testing hypothesis. Similarly, the correlation is used to identify the portion of explained variables towards dependent variable satisfaction. In other words, it helped to measure the percentage of explained independent variables of quality, perception, technical knowhow/savvy and trustworthiness towards satisfaction of taxpayers in e-filing of income tax (E-VAT). Similarly, whether these variables are correlated or significant or not, the researcher have been taken t-paired test by using SPSS. The information collected through questionnaires are transferred into quantitative data sheet and then the necessary tabulation is done using SPSS 18.0 and microsoft excel . Statistical tools provided in SPSS 18.0 is used to analyze and micro soft excel to make bar chart.

### **t- Statistics-**

It was developed by W.S. Gosset (Pen name Student) in 1908. Then this distribution is explained by R.A. Fisher. To test the validity of assumption of the study for small samples, t- test is used. For applying t distribution, the t- values are calculated first and compared with the critical values at a certain level of significance for given degree of freedom. If the computed value of 't' exceeds the table value (say t 0.05), it is known that the difference is significant at 5 percent level of significance but if t-values are less than the corresponding critical of the 't' distribution, the difference is not termed as significant.

### **Linkert Five Point Scale**

An attitude can be defined as a positive or negative evaluation of people, objects, event, activities, ideas, or just about anything around our environment. Rensis Likert in 1931 introduced a technique for measuring attitude of people. The technique has been using to measure an abstract concept - such as satisfaction motivation, commitment, accountability, integrity, and so on. A **Likert scale** is a psychometric scale and is the most widely used scale in survey research. It is often used interchangeably with rating scale even though the two are not synonymous. When responding to a Likert

questionnaire item, respondents specify their level of agreement to a statement. The Likert scale can be four-point, five-point, six-point, and so on. In this analysis, Satisfaction is measured in five point Scale usually respondents are asked to show their level of agreement or disagreement to each Likert item in a **five point** scale.

### **3.7 Validity and reliability of research methods**

The mixed method (both qualitative and quantitative techniques) is employed to collect data for the study. Both qualitative and quantitative data have collected from multiple sources, which is increased the validity of data. However, multiple sources of evidence might provide multiple measures of the same phenomenon (Yin, 2003:99).

In order to obtain valid and reliable data, researcher use the following approaches in this case study. First, documentation, interviews, direct observation and questionnaire as multiple sources of data have been chosen to obtain data. Checklists is developed to gather data from each source. These sources of data will supplement each other. Data have cross-checked to ensure whether they are reliable or not. Based on these sources, there is a rich data bank, which would increase the validity and reliability of the study. Second, validity of data could be ascertained by triangulating the collected data. Conceptually, triangulation referred to the use of more than one method or source of data in the study of a social phenomenon so that findings might be cross-checked (Bryman, 2001:274, McNabb, 2005:366 and Yin, 2003:99).

In this research Satisfaction of taxpayers in the e-filling of income tax, data is gathered from the respondents through interviews, questionnaires, household survey and field observations. The respondents in this study are income (E-VAT) taxpayers who are using the online tax system in the payment and filing of their tax returns since it's implementation and the preference is established on convenience sampling method. Besides, secondary data is gathered from authentic sources such as annual report of taxpayers service office, Thamel, annual report of IRD, economic survey of MoF, Satisfaction Survey of tax payers by GTZ projects, income tax manual 2069, ICT development plan, IRD journals and websites, Ministry of Information and communication.

Researcher is well aware of how to get access to selected office, place and respondents as well as potential biases of documentary evidences. In this research (case study), sufficient citations of relevant portions of the case study database have been done. Database revealed the actual evidence and also indicated the circumstances under which the evidence was collected, for example, the time and place of interview. These circumstances would be consistent with the specific procedures and questions that revealed the link between the contents of the study. As a result of that validity and reliability issues would improve limitations of research findings.

### **3.8 Triangulation Method**

As described by Gillham (2008:84) triangulation method would used to improve the quality of research findings. Triangulation method allows using different methods to investigate the same research problem in different views. Hence this method can be identified as a strong research strategy to investigate a research problem. There are limitations included in different research methods. But use of more than one research method is used to minimize the limitations of research methods and improved the validity and reliability of research findings. Furthermore, triangulation method is helped to cover a wide area of data collection, data analysis and data presentation rather than used of one or two methods. Hence triangulation method would be supported to improve the quality of research findings.

### **3.9 Ethical Issues**

McNabb (2005:55) explained four practical ethical principles. The research has to be *truthfulness, thoroughness, objectivity* and *relevance*. Ethical research studies are highly accepted by readers of the research paper. The researcher should be very careful when continuing the research under ethical perspective. Hence researcher should not force the customers and employees during the data collection procedure. On the other hand researcher must not use unpublished articles when secondary data collection procedure. Further, the researcher should provide correct references about secondary materials. The main ethical issue would be arised in the following manner.

- The letter attached to the questionnaires would explain the objectives and relevance of the study and to assure respondents of anonymity.

- The information collected from respondents would not be disclosed to the public i.e. respect for privacy.
- The anonymity would be maintained in reporting of participant's identity, address, profession and other personal information.

### **3.10 Limitation of the research**

The study is limited in two ways: a) data access and b) generalisability.

#### *a) Data access*

- There is difficulty in collecting data from respondents because all respondents are not be equally competent and perceptive. There is difficulty in collecting data from less educated respondents due to their shyness. The primary data collection method includes its limitations due to misleading and inaccurate answers. Because taxpayers might provide incorrect responses due to several reasons such as to keep security issues, fear of the company, misunderstanding of this research questionnaire, and lack of focus upon this study. Hence, It is important to obtain data without affecting respondents negatively.
- Secondary information represents different market conditions, political conditions, organizational regulations, economic conditions etc. Therefore, secondary data is different from a real organizational prospective of IRD. Further, the available e-governance theories would not be properly addressed and presented thus only concerned ICT online services.
- IRD provides e-services over more than half million subscribers in different region of the country. Among them, IRD provide E-VAT services more than one and half lakh taxpayers. Hence research sample sizes and place might be considered regarding the real research problem of taxpayers. Sampling error would arise with validity issues in research investigation procedure.
- Time management with respondents is another potential risk factor in data collection. In Nepal, businessmen and auditor/tax practitioners are busy and have not been willing to give in-depth interviews.

- The study is considered the taxpayers of Kathmandu valley (Kathmandu Area no. 2) with selected areas i.e. taxpayer service Thamel, Kathmandu Area 2, Thamel only . Thus, it might lack the general applicability to same and other places of taxpayers.
- e- filling (online) facilities includes such as Taxpayer Portal, personal e-pan, e- pan, Tax Deductible at Source (TDS), e-returns, IMS, Tax Family, Diplomatic Refund and SMS systems. Likewise the varieties of information provided by the website of IRD are also e-services provided to the concerned seekers. However, this study does not consider all the e-services provided by IRD rather it focused on (online Services) e-filling of income taxpayers (E-VAT return) while measuring the satisfaction level of tax-payers. Hence, generalization of the satisfaction level of income taxpayers might not be correct cent percent.
- This research is limited on few internal efficiency aspects of IRD i.e. e-filling services and hence it does not elaborate other organizational factors like legal provisions, the role of outsourced human resources, political, social and administrative leadership.
- This study is only limited to service seekers aspects i.e. taxpayers and doesnot cover the service providers aspects due to time, resources and budget constraint.
- The background information of the respondent taxpayers shows that most of them have above average academic qualification as well as professional experience, which may have affected the responses.

### **Generalizability**

The common concern about case studies is that they lack general applicability to the whole population or universe like experiments or survey (Yin, 2003:10). Critiques might argue that the findings of ‘ satisfaction of taxpayers in the e-filling of income tax taking 100 respondents from kathmandu valley one selected area is an unity. Similarly, the findings generated by the purposed research would also true in all other places due to this city and area represent the best and large flow of taxpayers e-filling and their perception. As mentioned earlier, it emphasized comparative mixed methods (qualitative and quantitative) to overcome such critiques of case study. Usually, in the mixed case

study method, the purpose is to understand the case by converging or triangulating both numeric trends from quantitative research and the details of qualitative research. Numeric results of satisfaction could be found from quantitative research from the sample and followed up with qualitative research to explore those results in greater depth. In this study, data from various sources such as documentation, interview, questionnaire and observation are used to explore satisfaction of the e-filing of income taxpayers. It might be actually increased the generalisability of the result.

## **CHAPTER-IV**

### **DATA PRESENTATION AND ANALYSIS**

This is body part of the study as it includes detail analysis and interpretation of data from which concrete result of satisfaction of taxpayers in e-filing of tax services can be obtained. In this chapter, the relevant data and information necessary for the study are presented and analyzed keeping the objectives set in mind. To make this study effective, precise and easily understandable, this chapter is categorized in three parts; presentation, analysis and interpretation. The analysis is almost based on primary data. In presentation section data are presented in terms of table, graph chart of figures, according to need. At last the results of analysis are interpreted. In this chapter, data are interpreted and analyzed with the means of collected questionnaires.

This chapter consists of various calculation made for the analysis using SPSS Version 18.0 for descriptive statistic and Linkert 5 point scale to measure the satisfaction level of taxpayer in the e-filing of income tax (E-VAT). Collected data are tabulated and presented in table and later on the findings is shown on graphical representation. For the satisfaction level, taxpayer's survey is performed preparing the Questionnaire. To meet the primary objective of this study the survey questionnaire tried to find out the satisfaction of taxpayers by considering independent variables demographic factors, quality, perception, technical know how and trustworthiness. The primary analysis of data consists of 100 respondents e-file income tax (E-VAT) taxpayers in kathmandu valley (Thamel) through distributing questionnaire ( Appendix, Questionnaire detail) and results are shown by using SPSS version 18.0 as prescribed on research methodology.

The study also tried to test the hypothesis by using Chi-square test and t-paired test. The Satisfaction level of taxpayers on e-filing tax (E-VAT) with reference to KathmanduValley (Taxpayer service office, Ktm 2, Thamel) is taken for the case study. The Detail of this study is Presented Below:

#### 4.1 Demographic Perspective for Satisfaction of e-filing

The major influence of tax compliance are age, gender, income level, education, income sources, occupation status (Jackson and Million,1986). In this research researcher includes respondent's gender, age, level of income and education level as demographic factors in order to measure the satisfaction of e-filing.

##### 4.1.1 Gender of the respondents

The gender of respondents have been shown in the following table.

**Table 4.1**  
**Gender of the respondents**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Gender	Male	49	11	60
		100.00%	21.60%	60.00%
	Female	0	40	40
		0.00%	78.40%	40.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

##### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	64.052 <sup>a</sup>	1	.000		
Continuity Correction <sup>b</sup>	60.826	1	.000		
Likelihood Ratio	81.420	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	63.412	1	.000		
N of Valid Cases	100				

Table 4.1 depicts that the gender of the respondents satisfaction of e-filing income tax (E-VAT). The result shows that among 100 respondents, 60% are male and 40% are

female respondents. However, while measuring satisfaction, 78.4% female are agree in this view i.e. satisfied whereas only 21.6% male are agree in the same view. By testing hypothesis Decision: Under p-value approach, since p value (.000) is less than level of significance 5% (0.05), i.e. ( $p < 0.05$ ) Gender is independent (association) their satisfaction of e-filling of income tax (VAT).

#### 4.1.2 Age of the respondents

**Table 4.2**  
**Age of the respondents**

		Satisfaction of e-filling		Total
		Disagree	Agree	
Age	20-30	15	0	15
		30.60%	0.00%	15.00%
	30-40	29	1	30
		59.20%	2.00%	30.00%
	40-50	5	20	25
		10.20%	39.20%	25.00%
	50-60	0	20	20
		0.00%	39.20%	20.00%
	60+	0	10	10
		0.00%	19.60%	10.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

#### Chi-Square Tests

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	80.125 <sup>a</sup>	4	.000
Likelihood Ratio	104.801	4	.000
Linear-by-Linear Association	65.682	1	.000
N of Valid Cases	100		

The result shows that among 100 respondents, the majority of them agree i.e. 51% in the satisfaction of e-filing. Among them, the moderate age group i.e. 40-50 and 50-60 are more satisfied i.e. equal 39.2% whereas the age group,20-30 and 30-40 are more dissatisfied. The reason behind to satisfaction to the moderate age group is that they have more experience and trained in e-filing system. Similarly, chi-square test shows that there is association between age of the respondents and satisfaction of e-filing since p value (.000) is less than level of significance 5% (0.05), i.e. ( $p < 0.05$ ).

#### 4.1.3 Education level of respondents

Education is the basics of human capital formation and the key source of economic development of a nation. Human capital is that source which can be mobilized and utilized the available resources optimally and cause to enhance the pace of economic development of a nation. Similarly, education develops the knowledge, learning, communication, technical skills and interpersonal skills of the taxpayers.

**Table 4.3**  
**Education level of respondents**

		Satisfaction of e-filing		Total	
		Disagree	Agree		
Education	Below SLC	10	0	10	
		20.40%	0.00%	10.00%	
	SLC	14	0	14	
		28.60%	0.00%	14.00%	
	Intermediate	25	1	26	
		51.00%	2.00%	26.00%	
	Bachelor	0	30	30	
		0.00%	58.80%	30.00%	
	Master & above	0	20	20	
		0.00%	39.20%	20.00%	
	Total		49	51	100
			100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

<b>Chi-Square Tests</b>			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	96.152 <sup>a</sup>	4	.000
Likelihood Ratio	130.112	4	.000
Linear-by-Linear Association	69.944	1	.000
N of Valid Cases	100		

The majority of them agree i.e. 51% in the satisfaction of e-filing. Among them, the higher education bachelor and master & above are more satisfied i.e. 58.8% and 39.2% whereas the moderate education intermediate and SLC are more dissatisfied i.e 51% and 20.4% respectively.

Similarly, chi-square test shows that there is association between education level and satisfaction of e-filing since p value (.000) is less than level of significance 5% (0.05), i.e. ( $p < 0.05$ ).

#### **4.1.4 Average Annual income of the respondents**

Annual income plays the vital role in order to chose the satisfaction of e-filler. The average annual income of the respondents are shown in the following table.

**Table 4.4**  
**Average Annual Income**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Average Annual Income	less than 5 Lakhs	5	0	5
		10.20%	0.00%	5.00%
	5 Lakhs-10 Lakh	10	0	10
		20.40%	0.00%	10.00%
	10 Lakh-15 Lakh	15	0	15
		30.60%	0.00%	15.00%
	15 Lakh-20 Lakh	19	1	20
		38.80%	2.00%	20.00%
	20 Lakh-25 Lakh	0	30	30
		0.00%	58.80%	30.00%
	25 Lakh +	0	20	20
		0.00%	39.20%	20.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

<b>Chi-Square Tests</b>			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	96.198 <sup>a</sup>	5	.000
Likelihood Ratio	130.649	5	.000
Linear-by-Linear Association	68.771	1	.000
N of Valid Cases	100		

Most of the respondents i.e. 58.8% average annual income ranges between Rs.20 lakh - 25 lakh are more satisfied/agree this view whereas 25+lakh agree with 39.2%. It shows that as their level of income increased their satisfaction in e-filing is also increased. In other words, higher taxpayers have more trained and use e-filing system i.e. significant

relationship between level of satisfaction in e-filing and their level of income while testing chi-square test at 5% significance level (p value < 0.05).

#### 4.2 The role of Quality Factors for the satisfaction of e-filing

Under the quality factors /variables, the respondents views in regard to boarder in three aspects and derived the questions under it. The three quality factors are information quality, system quality and service quality.

##### 4.2.1. Information quality for the satisfaction of e-filing

Information quality refers to the information that a system provides to users through its website. A wide range of measurements has been developed to determine information quality in terms of timeliness, accuracy, relevance, consistency and completeness. In this study, information quality was mainly effectiveness of website mainly in e-filing. It includes respondent's view in web is useful, log in problem while browsing the website, update and maintenance of website regularly and accessible website. higher information quality presents (perceive) rises satisfaction of respondents in e-filing. The overall information quality of respondents is presented in the following table.

**Table 4.5**  
**Information quality for the satisfaction of e-filing**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Information quality	Low	46	1	47
		93.9%	2.0%	47.0%
	High	3	50	53
		6.1%	98.0%	53.0%
Total		49	51	100
		100.0%	100.0%	100.0%

*Source: Field Survey 2015 by using SPSS*

Among the respondents, 53% high with the information quality of IRD in e-filing. It implied that IRD website is effective to satisfy them while filling their income tax (E-VAT). To derived this view, researcher label 4-12 in one label below 50% (1=disagree)

and 13-20 label 2 above 50% (2= Agree) (See annexure detail). Similarly, after this, cross tab with satisfaction of e-filing i.e. dependent variable. The result shows that the information quality of e-filing system is low, the satisfaction of taxpayer is also low (dissatisfied) with 93.9%. In other words, only 6.1% of them satisfy if information of quality is not effective. The data derived from the five-point likert scale also depicted that, five factors is considered while asked the questionnaire them. They are web is useful, log in problem while browsing the website, update and maintenance of website regularly and accessible website. Among these factor, the heavy respondents respond and irritating their dissatisfaction in web log problem while borrowing the website whereas most of them highly with accessible website.

Similarly, by asking them informal interview with selected respondents with purposive judgement by the researcher, almost them agree that if the information quality is effective in website we (respondents) can e-file quickly henceforth encourage us time and again or frequently check and correct our profile (updated). Some of them also respond that they negligence the website and only check and update their profile when they see the E-file return date /notice by the IRD or financial book closing date. The researcher also curious this view and again asked few of them what is the reason behind this?, they respond that hanging log in problem loss my (his/her) opportunity gain i.e. wasting time and increase both burden and cost. Henceforth, effective website is the first door step of quality in e-filing return/tax.

#### **4.2.2. System quality for the satisfaction of e-filing**

System quality is a measure of the information processing system itself. In other words, system quality depends on three factors: accessibility, interactivity, and ease of use. Taxpayers accept and use e-taxation systems if they accept and use technologies and innovations (Fu, et al.,2006:112). The important factor in online tax services is access speed and system availability. The respondent's view in regards to system quality with satisfaction of e-filing are presented in the following table.

**Table 4.6**

**System quality for the satisfaction of e-filing**

		Satisfaction of e-filing		Total
		Disagree	Agree	
System quality	Low	44	1	45
		89.80%	2.00%	45.00%
	High	5	50	55
		10.20%	98.00%	55.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

Among the respondents, 55% agree with the system quality of IRD in e-filing is high. It implies that IRD's ICT system to satisfy them while filling their income tax (E-VAT). To derived this view, researcher label 3-10 in one label below 50% (1=disagree) and 11-15 label 2 above 50% (2= Agree) (See annexure detail). Similarly, after this, cross tab with satisfaction of e-filing i.e. dependent variable. The result depicted that the if system quality of e-filing is low, the satisfaction of taxpayer is also low (dissatisfied) with 89.8%. In other words, only 10.2% of them satisfied if system quality is not effective. The data derived from the five-point linkert scale also depicted that, three factors is mainly considered while asked the questionnaire them. They are System Quality(SQ) is accessible, SQ is interactive and SQ is ease of use. Among these factor, the heavy respondents disagree with accessibility of SQ whereas most of them agree with interactivity. Similarly, most of the respondents depicted that high interactivity would promote in the system so that they can use easily. in other words, interactivity positively affected online system quality by providing two-way communication and is associated with website success as they respond.

**4.2.3 Service quality for the satisfaction of e-filing**

Information quality and system quality, representing semantic and technical levels whereas ease of use is assumed to represent system quality (Fu, et.al., 2006). Hence, service quality is also an important determinant of user satisfaction with the tax-filing

system. Here, researcher mainly considered reliability, responsiveness, and empathy and tangible.

**Table 4.7**  
**Service quality for the satisfaction of e-filing**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Service quality	Disagree	47	1	48
		95.90%	2.00%	48.00%
	Agree	2	50	52
		4.10%	98.00%	52.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

The result demonstrates that 52% agree with the service quality of IRD in e-filing is high. It implies that IRD's ICT quality to satisfy them while filling their income tax (E-VAT). Similarly, if service quality of e-filing is low, the satisfaction of taxpayer is also low (dissatisfied) with 95.9%. In other words, only 4.1% of them satisfied if service quality is not effective. The data derived from the five-point linkert scale also depicted that, four factors is considered through the questionnaire. They are service quality is reliability, responsiveness, empathy and tangible.

Respondents emphasis on service outcome and service quality, which would suffer if the use of self-service technology on service quality. Similarly, most of respondents wanted the tangible services so that information is easily found with a minimum number of clicks, time and size of the downloadable file is displayed and relevant links are provided for the exchange of ideas.

#### **4.2.4 Overall quality for the satisfaction of e-filing**

overall quality includes information quality, system quality and service quality. The quality of service or taxpayer satisfaction is one of the important factors for measurement. It is shown in the following table.

**Table 4.8**

**Overall quality for the satisfaction of e-filing**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Overall Quality	Low	48	1	49
		98.00%	2.00%	49.00%
	High	1	50	51
		2.00%	98.00%	51.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

The result shows that 51% agree with the overall quality of IRD in e-filing is high. It reflects that IRD's ICT quality to satisfy them while filling their income tax (E-VAT). Similarly, if overall quality of e-filing is low, the satisfaction of taxpayer is also low (dissatisfied) with 98%. In other words, only 2% of them are satisfied if overall quality is not effective. The data derived from the five-point linkert scale also depicted that, three factors, most of them, the information quality is low whereas service quality is high by considering their respond. This findings is similar to information, system and service quality, (intention to) use, user satisfaction, and net benefits as DeLone and McLean, 2003.

Similarly, they depicted that sometime error or their might be duplicate filling / mistake while e-filing. Hence, they also expressed that tax offices (IRD) mainly installed the system software for the effective interact to solve user request /response and dynamism in internet E-VAT services. Beyond this, while informal interview with selected respondents, they said that IRD is not curious to other tangibel services rather notice to pay tax and financial transaction of business as they respond or their dissatisfaction against tangible services. They have faced file interrupted /hanging problem time and again while e-file/download attachement.

### 4.3 Perception of Taxpayer for the satisfaction of e-filing

Perceived ease of use is measured as “Software for e-filing tax returns is easy to use.” Perceived usefulness is measured as “E-filing tax returns saves time.” The findings show that perceived ease of use, perceived usefulness, perceived security, and perceived credibility do influence the Perak State academic’s e-filing adoption intention (Hawaii,2007).

Under the perception factors /variables, researcher developed the respondents views in regard to boarder in mainly four aspects and derived the questions under it. The four perceive factors are perceive ease of use, perceive usefulness, perceive Security and perceive Value.

**Table 4.9**  
**Perception of Taxpayer for the satisfaction of e-filing**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Perception	Unfavourable	47	1	48
		95.90%	2.00%	48.00%
	Favourable	2	50	52
		4.10%	98.00%	52.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

The result illustrates that 52% agree with the perception of IRD in e-filing is favourable. It reveals that taxpayers are perceived positively towards satisfaction of e-filing. Similarly, if taxpayers of e-filing is disagree towards perception, the satisfaction of taxpayer is also unfavourable with 95.9%. In other words, only 4.1% of them satisfied if they perceive negatively. It implies that taxpayer perception plays the crucial role towards satisfaction of e-filing. The data derived from the five-point likert scale also depicted that, four factors, most of them perceive negatively (unfavourable) towards Perceive Ease of Use (PEU) and whereas favourable (positive) with perceive usefulness heavily by considering their respond. This finding is similar to Zaherawati et al. (2009) as

depicted perception towards e-Filing is influenced by the way they identify the usefulness of the e-filing system which is perceived usefulness. Similarly, respondents most perceive security for technical Security (Sockets Layer protocol for Web communication) in e-return and IT security in their information as they expressed. The reason behind to their disagreement is that they do not target technology relatively free of effort. Hence, taxpayer perceive value as convenient and equity mostly while asking in perceive value in depth. It implies that their feeling intend to use for e-return.

The most concern that perceive security as respondents depicted is technical security for return i.e. 37%. In other words, technical security includes the Sockets Layer protocol for Web communication. Similarly, 27 % respond as IT technologies security for their information in order to perceive security. It means that IT technologies security for their information includes routers, firewalls, switches, and intrusion detection devices which are the main server for e-tax services. Likewise, remaining e-filing respond as they perceive security is information required in system and E-tools facilities. To sum up, Respondents most perceive security for technical Security in e-return and IT security in their information (selected respondents within informal queries/interview).

According to the “reciprocity towards the government” hypothesis, people are more likely to pay taxes when they perceive the government is doing a better job. Similarly, technology acceptance constructs have shown that perceived usefulness influences taxpayer intention to use electronic filing more than perceived ease of use as depicted by (Chang, Li et al., 2005). In this result also shown same as depicted by the respondents they expected perceive usefulness mostly more than perceive ease of use in order to perceive highly and positive vibration. Perceive usefulness is accomplished being used as benefit for easy application of a new technology.

In this field research, the researcher is also curious about the respondents how they perceive the technology /e-filing system? then, as selected judgement basis conducted the informal interview/queries who seems to be interested and more experience in filling the return. He/they depicted that normally 'I e-filed my E-return in Friday after notice by

IRD but before Ashad end after office hours tentatively 5:30 pm and also invited my other friends and auditors/tax practitioner (tax agent). They are also involved in business and file e-return with competitively who complete first while e-filling the (our) return on average less than 15 minutes'. It also gives them pleasure, experience each other sharing idea and convening the knowledge and help to make friends also. After completing their e-file return they refresh in his office by demanding snacks. He also depicted that e-filling save their save time and money i.e. perceive usefulness.

However, another interesting point is that some of them also file in delay return i.e. after shrawan (date extend by IRD ). The researcher is excited with his view, he is large taxpayer (E-VAT) business. He depicted that the reason to file the return and e-payment is fruitful for him because of time value of money. He further explains that during two weeks/ one month gap he generated more income by investing the tax liability money which yields normally thrice (3) times higher than normal interest rate or even fine/penalty.

However, he also highly perceive value as e-filling that it help him more convenient and saving time. Thus, as considering a small taxpayers (D1) e-filler and large taxpayers (D3) e-filler both relaxed the e-filling of income tax (E-VAT) as positively perceived. Hence, this service attributed and focused on the productive time of the taxpayers/ tax practitioner (auditors) required to complete a particular transaction. Similarly, E-filing is more productive, quicker, saves a lot of time and convenience of the operating hours.

#### **4.4 Technical Knowhow/Savvy for the satisfaction of e-filing**

Effectiveness of e-services is understood as improved service delivery which is the main moto of satisfaction of taxpayers in the e-filling system/services. ICT (Information Communication and Technology) application is adpoted in IRD to e-filling syetem. As ICT initiatives are undertaken to increase the administrative efficiency which thereby ensure better delivery of services to the customer. Hence, effectiveness of e-services is understood as improved service delivery which is the main moto of satisfaction of taxpayers in the e-filling system/services. As ICT initiatives are undertaken to increase

the administrative efficiency which thereby ensured better delivery of services to the customer. Thus effectiveness of e-services is understood as improved service delivery which is the main moto of satisfaction of taxpayers in the e-filling system/services

In respect of electronic infrastructure, i.e. computers, networks, software, etc. the trustworthiness dimensions in accordance with (Lee and Turban, 2001) would be: perceived technical competence of the system, perceived performance level of the system, the human operator’s understanding of the underlying characteristics and processes governing the system’s behavior. Hence, the taxpayers are needed to develop their technical skills and competency i.e. technology adoption in e-filling system. In other words, in this regards; technical savvy of taxpayers, the researcher mainly considered the five attributes namely computer literate (efficacy), technical competence of the system, human operator's understanding, processing/governing the system behaviour and e-filling experience. These attributes with satisfaction of e-filling are presented in the following manner.

**Table 4.10**  
**Technical Knowhow/Savvy for the satisfaction of e-filling**

		Satisfaction of e-filling		Total
		Disagree	Agree	
Technical Knowhow /Savvy)	Not well	48	1	49
		98.00%	2.00%	49.00%
	Well	1	50	51
		2.00%	98.00%	51.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

The result demonstrates that 51% agree with the technical knowhow/savvy of IRD in e-filling is well. It reflects that taxpayers technical knowhow/savvy positively towards satisfaction of e-filling. To derived this view, researcher label 5-18 in one label below 50% (1=disagree) and 19-25 label 2 above 50% (2= Agree) (See annexure detail). Similarly, after this, cross tab with satisfaction of e-filling i.e. dependent variable. From

this ranges scale, the majority of them not well with technical competence of the system and their satisfaction of e-filing whereas well known with e-filing experience heavily.

Similarly, if taxpayers technical savvy is not well, the satisfaction of taxpayer is also low with 98%. In other words, only 2% of them satisfied if they have not technical knowhow. It implies that taxpayer technical savvy plays the vital role towards satisfaction of e-filing. There are many factors which determined the expectations of computer users/e-fillers. This findings is also similar to remark concluded by (Zeithaml, Berry & Parasuraman,1993) as depicted computer users, the key determinants to be word-of-mouth communications, personal needs, past experience, and communication by the service provider. Similarly, this finding also similar as found strong relationships between user satisfaction and computer usage/efillers (Baroudi, Olson & Ives,1986) and significant positive correlation between user satisfaction and computer usage (Harrison & Rainer,1997).

The researcher is curious towards the respondents henceforth also design the questionnaire towards ICT training and tax education to enhance their both technical competency and moral support and feedback. Among the e-fillers,the result exposed that respondent's ICT training and education is low i.e. Yes respond is 46% launched by taxpayer service office with the joint collaboration of inland revenue office/department. Majority of them who have not participated in ICT training and education program, they got e-filing tax /services knowledge through self initiative.

Similarly, most of them depicted that technical problem is major in ICT strong infrastructure of IRD/tax offices i.e.44%. The respondents mostly pointed that due to power cut, software problem, hang, slow router and low connction/loading page/attachment are the major trouble faced by them. Similarly, e-fillers also found that due to financial insufficiency and constraint, service provider could not adress the respondent's feedback as they expected.

The respondents depicted that most of them faced slow loading of web pages (www.ird.gov.np). Further they respond that after opening this web page they also error and slow connection in e-file tax return/E-VAT. Similarly, 25% respond that they faced network connection failure time and again while they are filling their return. In the same manner, 20% respond as low speed-internet problem. Likewise, rest depicted low flexibility of the offered system and slow transmission problem. In conclusion, highly problem faced by respondents is slow loading of web pages, network connection failure and low speed of internet.

The researcher also asked the question about the time normally taken by them while e-filing the return since it depicts the overall technical competency of the e-fillers. The most of the respondents respond that they completed their e-return form and upload supporting their documents within half hour to 59 minutes i.e. 30% and least 11% consumed time more than 2 hours. To sum up, their average time consumed is near to half hours-59 minutes. The researcher also asked the queries the respondents who chose the option (tick) consumed time more than 2 hours by informal interview, the reason behind to take longer duration is interrupted software system /server system. Similarly, they also respond that service disturbance, power cut and the most is the problem of network, slow loading page and hanging problem.

Researcher further inquires with them through informal interview with selected respondents by judgement/purposive sampling (i.e. who are curious) in regards to technical know how about facility to download Pre-filled XML File -(after Login feature), PAN Details at one place (Name, D.O.B, Status, Gender, Address) -(after Login feature), request for Intimation - Earlier there was no option to download if mail not received. (Submit request for resend print of Intimation to ITR/PAN Address/New Address or via Email) (After Login Feature), For New Users, Resend Activation Link Feature - Helpful if link not received or mail deleted earlier, about scanning files, upload files, past experience, technical message etc. Majority of them familiar about this services. Similarly, the result shows that almost e-filer respond as technical knowledge

about download Pre-filled XML File (after Login feature) and Scanning files & system message.

#### 4.5 Trustworthiness (factor) for the satisfaction of e-filing

Efficient, responsive and prompt service delivery is now prominent agenda of most countries. Now new technology gifted to tax payers for filing their income tax returns through online is e-filing. Information and communication technologies (ICT) is a broad term that covers all technical means for processing and communicating information. It includes internet facility, power supply, digital devices, maintenance and update of e-services. IRD also launched the ICT software effectively from 2007 for effective service delivery and E-VAT from 2010 specially e-filing tax services.

As discussing in literature review also trust was the most prominent factor in the e-filing. Trust was among the most significant factors affecting e-government adoption (Titah & Barki, 2006). Chopra and Wallace (2003) Trust, considered as crucial element with regard to social capital, and exists on four levels: the individual (psychological), the interpersonal (one to another), the relational (social influence), and the societal functioning (communication and networking). Hence, under this variable the overall their satisfaction measure in Linkert scale 5 with three aspects social influence, trust in Log in and communication and networking as presented in the following manner.

**Table 4.11**  
**Trustworthiness (factor) for the satisfaction of e-filing**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Trustworthiness	Low	44	1	45
		89.80%	2.00%	45.00%
	High	5	50	55
		10.20%	98.00%	55.00%
Total		49	51	100
		100.00%	100.00%	100.00%

*Source: Field Survey 2015 by using SPSS*

The result illustrates that 55% agree with the trustworthiness in e-filing is high. It implies that taxpayers trustworthiness positively towards satisfaction of e-filing. To derived this view, researcher label 3-11 in one label below 50% (1=disagree) and 12-15 label 2 above 50% (2= Agree) (See annexure detail). Similarly, after this, cross tab with satisfaction of e-filing i.e. dependent variable. From this ranges scale, the majority of them low trust with both social influence and trust in Login in which social influence is higher rate. on the otherhand, communication and networking is prominent for trustworthiness for e-filing of income tax.

Similarly, if taxpayers trustworthiness is low, the satisfaction of taxpayer is also low with 89.8%. In other words, only 10.2% of them satisfied if they have not trustworthiness. It reveals that taxpayer trustworthiness seen as prevital role towards satisfaction of e-filing.

The researcher is curious towards the respondents distisfaction i.e. low trustworthiness view also. Hence, while depicting the few short informal interview what might be the important attributes in regards to social influence?, they respond partners, friends, co-workers, etc. one believe that this construct is less important in measuring technology acceptance in this setting because of the lack of an organizational context. Further, they also complied with tax software and system and server appicability. They also unawared or low trust that system is correctly run the rules and regulations when completing the tax return while informal interview with selected e-filler.

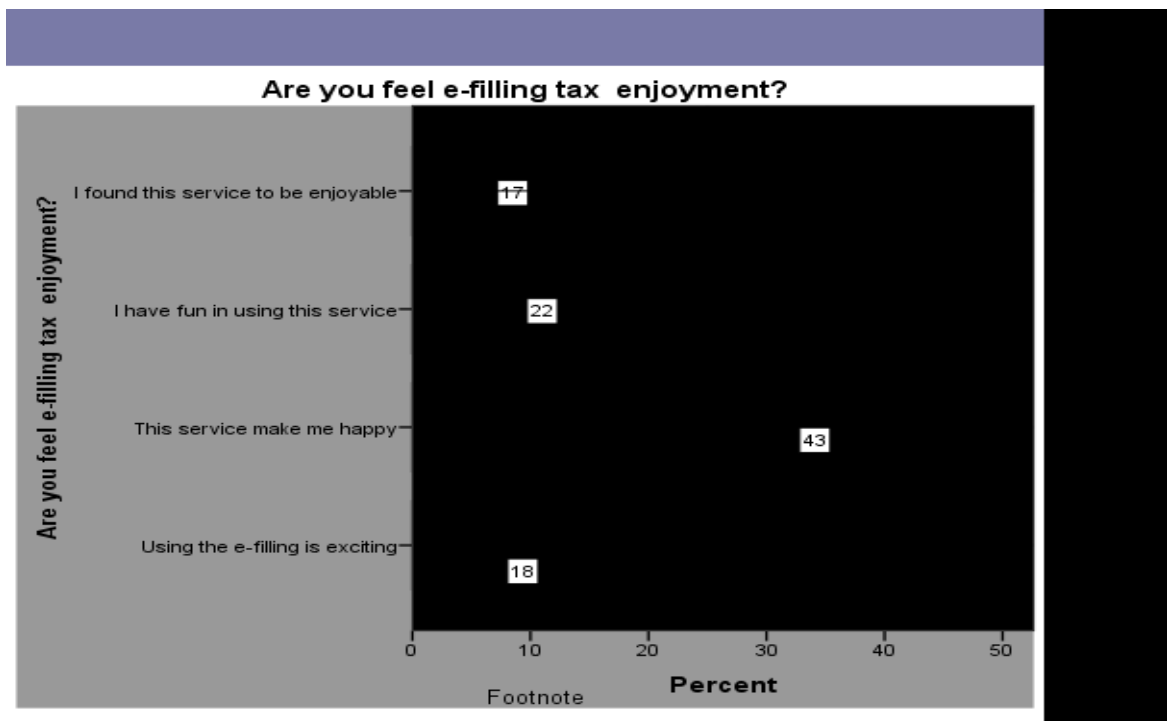
Similarly, most of them satisfied or agree with trustworthiness of e-filing in communicating and networking. Researcher also conculded some remarks that the reason behind to communicate and networking of e-filing for trustworthy through questionnaire. The result depicted that the main reason of communicating and networking for trustworthy in e-filing is to get quick conformitary (response) after submitting the return is 42% whereas time saving than from bureaucratic proceedings is 40% . Similary least 18% respond as reduce procedural fairness in the system is the main reason of communicating and networking for trustworthy while e-filing/e-return.

To sum up, communicating and networking is the major inspiration for the trustworthiness on e-filing of income tax (E-VAT). Under it, their trustworthiness is heavily influence if e-fillers get quick conformitary (response) after submitting the return and also time saving and reduce burden from (physical visit) bureaucratic proceedings. Similarly, IRD/service provider should increase the system server and upgrade their ICT infrastructure so that e-filler imposed to trust in Login.

#### 4.6 Are you feel e-filing tax enjoyment?

The last question towards taxpayer is whether they feel e-filing tax enjoyment or not. The feeling covers the overall variables such as satisfaction with their quality, perception, technical know how and trustworthiness of taxpayers (e-fillers). The overall response of them are presented in the following figure.

Figure 4.1



Source: Field Survey 2015 by using SPSS

The figure depicted that E-filing (E-VAT) service make them happy dramatically 43% whereas e-filing excited them 18%. Similarly, they have fun in using this service with 22% and found this service to be enjoyable is 17%. To conclude e-fillers view, e-filing service make them happy and this react their satisfaction enjoyably.

#### 4.7 Correlation Matrix analysis (t-paired test)

Under this analysis, the relationship between the variables (independent : service quality, perception, Trustworthiness technical know how) and dependent (satisfaction) shown as below. Null hypothesis ( $H_0$ ) : The variables are uncorrelated

Alternative hypothesis ( $H_1$ ) : The variables are correlated

<b>Table 4.12 Correlations Matrix</b>						
		Quality	Perception	Technical Knowhow /Savvy)	Trustworthiness	Satisfaction of e-filling
Quality	Pearson Correlation	1	.980**	1.000**	.923**	.960**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	100	100	100	100	100
Perception	Pearson Correlation	.980**	1	.980**	.941**	.940**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	100	100	100	100	100
Technical Knowhow /Savvy)	Pearson Correlation	1.000**	.980**	1	.923**	.960**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	100	100	100	100	100
Trustworthiness	Pearson Correlation	.923**	.941**	.923**	1	.883**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	100	100	100	100	100
Satisfaction of e-filling	Pearson Correlation	.960**	.940**	.960**	.883**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	100	100	100	100	100
**. Correlation is significant at the 0.01 level (2-tailed).						

Decision: Under P value approach, independent variables (service quality, perception, trustworthiness, and technical know how) since p value is .000 i.e. less than 0.01, 0.05, the variables are correlated that is accept  $H_1$  and reject  $H_0$ . Likewise, their relationship is highly positive and near to perfect in perception and technical knowhow and perception and quality i.e.  $0.98 (= 0.98 \times 0.98) = 0.9604$  i.e. 96.04% . Similarly, dependent variable satisfaction of e-filing is also correlated (significant) in all independent variables since p value is less than significance level both 1% and 5%. Likewise, the portion of the service quality and technical savvy is higher i.e. explained by equal 92.16% ( $0.96 \times 0.96 = 0.9216$  i.e. 92.16%) and least explained by trustworthiness i.e. 77.96% ( $0.883 \times 0.883$ ) and remaining by other variables/factors (unexplained factors).

#### **4.8 Major Findings of the Study**

The major findings of the study have been presented in the following manner.

##### **i. Demographic factors for the satisfaction of e-filing**

- The result depicted that among 100 respondents, 60% are male and 40% are female respondents. However, while measuring satisfaction, 78.4% female are agree in this view i.e. satisfied whereas only 21.6% male agree in the same view.
- The moderate age group i.e. 40-50 and 50-60 are more satisfied i.e. equal 39.2% whereas the age group, 20-30 and 30-40 are more dissatisfied. The reason behind to satisfy the moderate age group is that they have more experience and trained in e-filing system.
- The higher education Bachelor and Master & above are more satisfied i.e. 58.8% and 39.2% whereas the moderate education intermediate and SLC are more dissatisfied i.e 51% and 20.4% respectively.
- Most of the e-fillers i.e. 58.8% average annual income ranges between Rs.20 lakh -25 lakh are more satisfied/agree this view whereas 25+lakh agree with 39.2%. In other words, higher taxpayers have more trained and used e-filing system.
- By testing hypothesis (cross tabulation), there is association between demographic factors (gender, age, education and average annual income) and satisfaction of taxpayers in the e-filing of tax services/E-VAT

## **ii. Quality factors for the satisfaction of e-filing**

### **a. Information quality**

- Among the respondents, 53% agree with the information quality of IRD in e-filing is high. It implies that IRD website is effective to satisfy them while filling their income tax (E-VAT). The result shows that if information quality of e-filing system is low, the satisfaction of taxpayer is also low (dissatisfied) with 93.9%.
- The heavy respondents respond and irritating their dissatisfaction in web log problem while borrowing the website whereas most of them agree with accessible website.
- Almost them agree that if the information quality is effective in website e-fillers can e-file quickly henceforth encourage us time and again or frequently check and correct profile (updated). Thus, effective website is the first door step of quality in e-filing return/tax.

### **b. System quality**

- Among the respondents, 55% agree with the system quality in e-filing is high for the quality services.
- The result depicted that if system quality of e-filing is low, the satisfaction of taxpayer is also low with 89.8%. In other words, only 10.2% of them satisfy if system quality is not effective.
- The heavy respondents disagree with accessibility of SQ whereas most of them agree with interactivity. In other words, interactivity positively affects online system quality by providing two-way communication and is associated with website success as they respond.

### **c. Service quality**

- Under it, researcher mainly considered reliability, responsiveness, and empathy and tangible.
- The result revealed that 52% agree with the satisfaction of e-filing in service quality is high as considering quality factor. Similarly, if service quality of e-filing is low, the satisfaction of taxpayer is also low with 95.9%.

- Most of e-fillers wanted the tangible services so that information is easily found with a minimum number of clicks, time and size of the downloadable file is displayed and relevant links are provided for the exchange of ideas.

### **Overall quality**

- overall quality to satisfy them while filling their income tax (E-VAT) is 51%. Similarly, if overall quality of e-filing is low, the satisfaction of taxpayer is also low (dissatisfied) with 98%.
- Hence, they also expressed that tax offices (IRD) mainly installed the system software for the effective interact to solve user request /response and dynamism in internet E-VAT services. This findings is similar to information, system and service quality, (intention to) use, user satisfaction, and net benefits as DeLone and McLean, 2003.

### **iii. Perception of taxpayers for the satisfaction of e-filing**

- If taxpayers of e-filing is unfavourable towards perception, the satisfaction of taxpayer is also unfavourable (negative) with 95.9%. Most of them dissatisfied/disagree (perceive negatively) towards Perceive Ease of Use (PEU) whereas favourable (positive) with perceive usefulness heavily by considering their respond.
- Similarly, most of e-fillers perceive security for technical Security (Sockets Layer protocol for Web communication) in e-return and IT security in their information as they expressed. Hence, taxpayer perceive value as convenient and equity mostly while asking in perceive value in depth. It implies that their feeling intend to use for e-return.
- Perceive usefulness is accomplished being used as benefit for easy application of a new technology.

### **iv. Technical Knowhow for the satisfaction of e-filing**

- Taxpayers technical knowhow/savvy positively towards satisfaction of e-filing. The majority of them not well with technical competence of the system and their satisfaction of e-filing whereas well with e-filing experience heavily.

- Similarly, if taxpayers technical savvy is not well, the satisfaction of taxpayer is also low with 98%.
- The result demonstrated that respondent's ICT training and education is low i.e. Yes respond is 46% launched by taxpayer service office with the joint collaboration of inland revenue office/department. Majority of them who have not participated in ICT training and education program, they got e-filing tax /services knowledge through self initiative.
- In conclusion, the highly problem faced by respondents is slow loading of web pages, network connection failure and low speed of internet.
- The result illustrated that almost e-filer respond as technical knowledge about download Pre-filled XML File (after Login feature) and Scanning files & system message.
- To sum up, their average time consumed is near to half hours-59 minutes while e-filing of income tax.

**v. Trustworthiness for the satisfaction of e-filing**

- Taxpayers trustworthiness is high towards satisfaction of e-filing with agree view of 55%.
- The majority of them low trust with both social influence and trust in Login in which social influence is higher rate. On the otherhand, communication and networking is prominent for trustworthiness for e-filing of income tax. Similarly, if taxpayers trustworthiness is low, the satisfaction of taxpayer is also low (dissatisfied) with 89.8%.
- Most of them satisfied or agree with trustworthiness of e-filing in communicating and networking is high. The concluding remarks the reason behind to be communicating and networking of e-filing for trustworthy depicted that e-fillers get quick conformitary (response) after submitting the return is 42% whereas time saving than from bureaucratic proceedings is 40% .
- To sum up, e-filing service make taxpayers happy and this react their satisfaction enjoyably.

- Under t-paired test, independent variables (service quality, perception, trustworthiness, and technical know how) since p value is .000 i.e. less than 0.01, 0.05, the variables are correlated. Likewise, their relationship is highly positive and near to perfect in perception and technical knowhow and perception and quality 96.04%. Similarly, dependent variable satisfaction of e-filing is also correlated (significant) in all independent variables since p value is less than significance level both 1% and 5%. Likewise, the portion of the service quality and technical savvy is higher i.e. explained by equal 92.16% and least explained by trustworthiness i.e. 77.96% and remaining by other variables/factors (unexplained factors).

## **CHAPTER-V**

### **SUMMARY AND CONCLUSION**

#### **5.1 Summary**

Satisfaction being an abstract concept cannot be measured directly in terms of quantitative terms. It can be measured indirectly by devising an attitude scale. An attitude scale for measuring the level of satisfaction of e-filing of income tax returns (E-VAT). To analyze the satisfaction of the respondents, some important components are identified and a comprehensive study has been made by measuring the level of satisfaction.

Today, consumer (taxpayer) satisfaction is very important that Winner or loser of organizations based on the percentage of customers who have retained. Establishing taxpayer assistance counters in easily accessible locations in the tax administration would significantly improve taxpayer services. Information communication and technology (ICT) is seen as a tool to support the work of governmental institutions and agencies with the objectives of delivering public services and information in a more convenient, citizen-centric and cost effective manner.

IRD provides online filing facilities such as income tax from personal E-PAN, e-Tax Deductable at Source (E-TDS), e-returns/(E-VAT), IMS and SMS systems. Likewise the varieties of information provided by the website of IRD are also e-services provided to the customers/taxpayers. However, the study does not consider all the e-services provided by IRD but rather it focuses on E-filing of income tax mainly E-return (E-VAT). E-VAT taxpayers must submit their return through online i.e. there is compulsion of e-filing provision.

The single standard rate of VAT was set at 10 percent at the outset and subsequently increased to 13 percent since 2005. The ever-changing nature and dynamics of service business is also a potential area for VAT administration. A policy of increasing threshold (Rs.5 million from 2 million effective 2015) and introducing annual turnover tax for the

non-registered taxpayer could be a viable option for structural reform in VAT. The ever changing nature and dynamics of service business is also a potential area for VAT administration. Apart from this, procedural simplification through application of e-based system, scaling up investment for ICT sophistication, restructuring and reengineering of the organization, decentralization of service delivery.

The department desired a system that would make the process of filing of Income Tax Returns (ITR s) easier for tax payer as well as reduce the time required for data entry at their end on receipt of ITRs. The e-filing is the new effective method of filing income tax return through online and make e-payment tax. Despite many benefits associated with e-filing, tax authorities face some major challenges towards the implementation of the e-filing system. One such challenge is the taxpayer's satisfaction in regards to quality, perception and trustworthiness of the e-filing system. After using an e-service over the Internet, the taxpayer may find that whether the e-service system is easy and useful or their expectation or not.

Inland Revenue Department had been introduced an e-System and had been motivating taxpayers to use it effective since 2010. Various donor agencies, the major two being Danida and GTZ, had provided technical and financial support not only for initiating the e-System but also for its strengthening and upgrading for almost one and a half decade ago. The most important tool for governments in this regard is tax collection and redistribution to maximize social welfare. In order to rapid response and achieving government to objectives are examined. One way to control outsourcing processes is assessment level of taxpayers's satisfaction.

The major challenge ahead is regarding system security, mass awareness is needed in order to make e-filing more successful. The taxation system is one of the initiatives of the government or ruler of a nation in ensuring the economic growth and distribution of wealth among the citizens. But the obstacles remain concerns the taxpayers who are really anxious about the technology, lacking of technical skills, or do not trust of any e-tax.

This study traces the satisfaction level of tax payer's in the e-filing of income tax(E-VAT) through case study of Kathmandu valley Internal Revenue Office Area No.2 (Taxpayer Service office , Kathmandu Area 2, Thamel).

For this, researcher have taken one dependent variable i.e. satisfaction of taxpayer and five independent variables Viz; demographic factors, quality, perception, technical know how and trustworthiness of respondents towards e-filing of income tax (E-VAT). The sample size of the research is 100 (4.24% of population) and method of sampling is non-random sampling convenience and purposive judgemental. The area thamel is the major business place/city of Kathmandu and also near location to the researcher for field visit/survey.Henceforth this site area has been taken by the researcher.

Dissonance Theory (Cardozzo, 1965, Oliver, 1977, Yin, 1990),Technological Acceptance Model (TAM) (Davis, 1989), Value Percept Theory (Westbrook and Reilly, 1983, Locke,1967, Spreng *et al* 1996) and DeLone and McLean's is success model (DeLone and McLean, 1992, DeLone and McLean, 2003, Hung et al. , 2006 and 2009) are the major theoretical aspects to conceptualize the research framework. Though the satisfaction is a psychosomatic aspects, researcher have used both philosophical aspects positivism and interpretive approach to acquire and generate knowledge to develop in depth questionnaire) and Mainly Linkert five Point scale (1-Strongly disagree to 5-Strongly Agree). This research is based on primary research data almost. The primary data is collection through both quantitative and qualitative data while using survey strategy. The quantitative data is gathered from the questionnaire (semi- structure) and qualitative data is drawn from informal interview and queries while visiting field survey with selected respondents on the basis of purposive judgement.

Similarly, secondary data are gathered from websites, journals of IRD, strategy plan of IRD, UNDP, UN, ICT development plan, books, MOF (Ministry of Finance), MOIC (Ministry of Information and Communication), previous scholar research and different websites. This research is desined in both descriptive and exploratory research approach. Likewise, as the nature of variables, data are analyzed descriptively with frequency and

percentage, mean, standard deviation, chi-square test, correlation and t-paired test for testing hypothesis using SPSS 18.0.

By considering demographic factors, 78.4% female are agree in this view i.e. satisfied whereas only 21.6% male agree in the same view. Simialarly, the moderate age group i.e. 40-50 and 50-60 are more satisfied i.e. equal 39.2% whereas the age group, 20-30 and 30-40 are more dissatisfied. Likewise, the higher education Bachelor and Master & above are more satisfied. Similarly, higher taxpayers have more trained and used e-filling system.

Quality fators with satisfaction of e-filling includes information quality, system quality and service quality. Under information quality, effective website is the first door step of quality in e-filling return/tax as e-fillers respond. Similarly, under system quality, the heavy respondents disagree with accessibility of SQ whereas most of them highly with interactivity. Similarly, most of the respondents agree that interactivity would promote in the system so that they could use easily.

Respondents emphasis on service outcome and service quality, which would suffer if a the use of self-service technology. Most of respondents wanted that the tangible services with a minimum number of clicks, time and size of the downloadable file is displayed and relevant links are provided for the exchange of ideas. In overall quality with satisfaction of e-filling, most of them respond about the information quality is low whereas the service quality is high by considering their respond.

By perception, most of e-fillers unfavourable (perceive negatively) towards Perceive Ease of Use (PEU) and whereas favourable (positive) with perceive usefulness heavily by considering their respond.

Under technical savvy, it is positively towards satisfaction of e-filling. The majority of them not well with technical competence of the system and their satisfaction of e-filling whereas well with e-filling experience heavily. Almost e-filer respond as technical knowledge about download Pre-filled XML File (after Login feature) and Scanning files &

system message. In conclusion, the highly problem faced by respondents is slow loading of web pages, network connection failure and low speed of internet.

The last independent variable trustworthiness also depicted that majority of them low trust with both social influence and trust in Login in which social influence is higher rate. On the otherhand, communication and networking is prominent for trustworthy. The concluding remarks is the reason behind to communicate and networking of e-filing for trustworthy depicted that e-fillers get quick conformitary (response) after submitting the return and time saving than from bureaucratic proceedings. To sum up, e-filing service make taxpayers happy and this react their satisfaction enjoyably.

## **5.2 Conclusion**

Satisfaction is a psychological aspects of individual /phenomenon. Satisfaction of taxpayers in the e-filing of Income tax (E-VAT) is also psychosomatic. E-filing is a system for submitting tax documents to the income tax department through the internet or direct connection, usually without the need to submit any paper documents. Various tax return preparation softwares with e-filing capabilities are available as standalone commercial use. Electronic filing implies the use of new technology, specifically the internet and some form of tax preparation software. Internet tax filing called electronic filing as part of its e-government initiative. The net presence and operation of e-taxation is depended heavily on composition of information system (IS), such as Internet, WWW, and network. When taxpayers accept and use e-taxation systems, They accept and use technologies and innovations i.e. their satisfaction level will increase. Taxpayers can complete tax filing quicker (perceived usefulness) when they perceive the ease of use of the system is higher. If taxpayers have more positive attitude toward the on-line tax filing system provided by the government, they believe that they can be benefited by the system (such as enjoying fast, accurate, convenient service without queuing and also having the tax refund quicker). It revealed that if e-fillers perceived that the system is easy to operate, they would have more positive attitude and increase their satisfaction level.

In this research, satisfaction is measured on three different levels: first there is the general satisfaction with the service; the e-service/e-filing of the IRD is concerned. Secondly, the satisfaction with areas of performance (sub departments) e.g. communication, information Technology (ICT) and finally satisfaction with processes within the performance areas/output of E-filing in income tax specially E-return (E-VAT), different detailed aspects e.g. reliability, empathy, convenience, perceive ease of use, perceive usefulness, security, service quality, technical know how and trustworthiness. Questions about general satisfaction are asked after the detailed ones, in order to give the respondent a clear framework to situate the service and service delivery.

In this study, By cross tabulation, there is association between demographic factors (gender, age, education and average annual income) and satisfaction of taxpayers in the e-filing of tax services/E-VAT (IRD e-file services after introducing ICT. Similarly, Satisfaction of e-filing independent variables (service quality, perception, trustworthiness, and technical know how) p value is .000 i.e. less than 0.01, 0.05, the variables are highly correlated.

In overall, quality of taxpayer's satisfaction in e-filing income tax (E-VAT) in Linkert Scale, respondents are satisfied (high) with information quality and service quality whereas dissatisfied (low) with system quality. This indicates respondents satisfaction with e-services system is very poor of IRD. In perception, perceive usefulness is major indicator as they respond favourable. This finding is similar to Zaherawati et al. (2009) as depicted perception towards e-Filing was influenced by the way they identify the usefulness of the e-filing system which was perceived usefulness. In technical factor also, e-filing experience and computer useage of e-fillers plays the significant role. This also similar to significant positive correlation between user satisfaction and computer usage by (Harrison & Rainer,1997). Lastly, for Trustworthiness, most of them high trust (satisfied) in e-filing through communicating and networking. The concluding remarks the reason behind to communicate and networking of e-filing for trustworthy depicted that e-fillers get quick conformitary (response) after submitting the return and time saving

than from bureaucratic proceedings similar as one factor defined by Chopra and Wallace (2003).

Hence, it promotes the business and government tax revenue by satisfying taxpayers i.e. taxpayers hurry to file their return/pay tax. Thus, Nepal should not miss the benefits of global economy and specially the benefits offered by Internet.

Therefore, the following points are suggested (recommended) for further researches:

- Under information quality, IRD taxpayer feel somehow unclear and difficult to file their return basically upto moderate /undergraduate education. Thus, IRD should upgrade their services /system to help in processing instruction.
- Similarly, system quality and interactivity is below the moderate level as respondent respond. Henceforth, service provider mainly should install the system software for the effective interact to solve user request /response and dynamism in internet E-VAT services .
- Internal efficiency of IRD i.e. e-filing services is needy to upgrade, similarly, in branch Inland Revenue offices (IROs ) also IRD should make the provision and complusion of IT desk and technical manpower to check and operated its system regularly and frequently.
- Government /IRD should allocate the budget annually for the taxpayer's education and ICT training in e-filing and other services so that taxpayers could participate in this collaboration program. for this, Service provider launch this program in Saturday, public holiday and off pick hour /evening and morning 2/3 hours in day or week package or whole one day every Saturday as taxpayers 'convenience.
- Similarly, tax awarness campaing must be launched by advertising specially daily newspaper, TV/Radio and in IRD website also as specifying the preplan and schedule so that taxpayer aware and mange time in preceeding manner.
- IRD should distribute e-form or print form in their taxpayer offices to fil general satisfaction factors and option basically in e-services/return so that they can adress their dissatisfaction and make the new policy and plans by the concerned authority towards satisfaction.

- Most of respondents depicted that technical problem is major in ICT strong infrastructure of IRD/tax offices. The respondents mostly pointed that due to power cut, software problem and hang, slow router, low connection/loading page/attachment are the major trouble faced by them. Thus, IRD should upgrade and install the system software, server and alternate energy sources battery, generator (both technical and financial) and so on to address and solve this problem.
- IRD/IROs should provide legal approaches for notification of tax documentations for real and legal entities through the Internet application; Tax certification issuing strategies using Internet capabilities.

### **Scope for Further Research**

It is the era of globalization not only in manufacturing of products but also in service industry. New technologies are emerging day by day with improved and fast speed in all the fields. Internet has changed the present scenario of working by reducing the work load from manual to sitting on chair. Electronic filing options include:(i) Online, self-prepared return, using a personal computer and tax preparation software, or (ii) Online submission of returns using a tax professional's computer and tax preparation software. The theory on e-commerce adoption reviewed leads to expect that people who e-file would perceive e-filing to be easier to use, to be more useful, to be less expensive and to pose a lower risk than people who do not e-file. An attitude scale for measuring the level of satisfaction of e-filing of income tax returns is psychosomatic task. However, researcher measured it in Linkert satisfaction Scale i.e. five point scale.

Since, E-filing is one of the most important and advanced e-government services. It provides to satisfy the taxpayers in many aspects such as convenience, perceive ease use, usefulness, perceive value, perceive security, service quality, information, 24×7 hours, time and cost saving, reduce paperwork and burden, file when and where one like to taxpayers. Similarly, it minimizes the tax calculation error. Under e-file return there are two types of return debit return and credit return. If taxpayer paid /file excess return then balance/ excess amount is credited and adjusted in their next return by the system. Hence,

system quality is effective mostly for E-return. Despite many benefits associated with e-filing, tax authorities face some major challenges towards the implementation of the e-filing system. One such challenge is the public perception of the e-filing system i.e satisfaction of taxpayers.

This research is carried out in order to investigate the Satisfaction of taxpayers in the e-filing of income tax (E-VAT). And this phenomenon is carried out from Taxpayers (Service seekers) with satisfaction of e-filing. It would be interesting to investigate this idea with satisfaction in e-file and involving people belonging to all age groups, income, education, gender (demographic factors). This would be interesting because the segment involved in this research belongs to these demographic factors of taxpayer can expect similar results/association with their satisfaction. But when there would be people from all age segments and also from different segments (fields of life) then one can check and compare the results of this research with that one. Similarly, researcher have taken independent variables quality factors (information, system and service), perception (perceive ease of use, perceive usefulness, perceive security and perceive value), technical know how(savvy) and trustworthines (social influence, Log in web and communication and networking). one can better analyze the Satisfaction of taxpayers in the e-filing of income tax (E-VAT)with reference to Kathmandu Area 2 Thamel by taking and comapring among different two or more variables in depth with another place/types e-filler. Furhter researcher would analyse comparative study of satisfaction of taxpayers in the e-filling nd non-filler in income tax or Satisfaction of both service sekeers (taxpayer) and servcie providers aspect after launching e-filling of income tax (E-return/E-VAT/E-PAN/). Further investigate the role of trust in the decision to e-file, particularly given the sensitive nature of tax information and increased concerns about security in the wake of media reports about recent security breaches.

This research would also be helpful for IRD to know about the point of view of e-file taxpayers about the market /business strategy and its stakeholders, income tax payers, tax authorities, researchers, financial software engineers, academicians, policy makers and Ministry of Finance of Nepal Governmen to solve the issue and problems arises in the e-filing.

Finally, this study might fruitful to service providers (Tax service office) in order to establish the technology related Customer Relationship Management (CRM) to solve the customer queries and grievances through network, system, server problem, slow connection, Complain Desk and also establish a distinct way of achieving taxpayer's satisfaction.

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# Questionnaire

## Dear Respondents,

I am going to conduct a survey on Satisfaction of Taxpayers in the E-filing of Income tax (E-VAT) in Kathmandu valley (Taxpayer office, Ktm Area 2, Thamel) for partial fulfillment of Master of Philosophy in Public Administration (Thesis). So I request you to take a few minute times and assure you that all your response will be kept confidentially and will be use only for my study. Likewise, it would great value for my research, if you help in filling up by tick- mark (√) one of the answer of these following questionnaires.

Name:-.....

Address:-.....

Contact No:.....

Email:.....

1. Gender: Male  Female

2. In which Age group do you belong?

- a) 20-30                       b) 30-40   
c) 40-50                       d) 50- 60   
e) 60 +

3. Please could you tick your educational background as mention below?

- a) Below SLC                       b) SLC   
c) Intermediate                       d) Bachelor   
d) Master & above

4. What is your annual income lies in an average as mention below (Rs)?

- a) less than 5 Lakh                       b) 5 Lakhs-10 Lakh   
c) 10 Lakh-15 Lakh                       d) 15 Lakh-20 Lakh   
e) 20 Lakh-25 Lakh                       f) 25 Lakh +

5. Would you say you are satisfied in general about the services after the introduction of the ICT in IRD (e-filing of tax)?

- 1 very dissatisfied
- 2 Dissatisfied
- 3 Neither satisfied nor dissatisfied
- 4 Satisfied
- 5 Very satisfied

6. Where you usually get the information about IRD (Internal Revenue Department) 's online tax services?

- a. Television
- b. FM radio
- c. Daily newspaper
- d. Hoarding –board
- e. Family and friends

7. Does tax processing online is a pleasant experience for you?

- 1 Strongly disagree
- 2 Disagree
- 3 Neutral
- 4 Agree
- 5 Strongly agree

8. Are you satisfied with all e-services from tax administration?

- 1 very dissatisfied
- 2 Dissatisfied
- 3 Neither satisfied nor dissatisfied
- 4 Satisfied
- 5 Very satisfied

9. Which is the most problem do you face while e-filing of tax ?

- a. Low-speed Internet
- b. Network connection failure
- c. slow loading of web pages
- d. slow transmission
- e. Low flexibility of the offered system

10. Are you satisfied with the Tax payers service center to address your queries/feedback?

- 1 Very dissatisfied
- 2 Dissatisfied
- 3 Neither satisfied nor dissatisfied
- 4 Satisfied
- 5 Very satisfied

11. What is your Intention of using the website?

- a. Using the website frequently
- b. I intend to use this website
- c. I intend to use this website only in case it is compulsory
- d. I intend to update my profile/services

12. Please mention how useful the information given with regard to the service that you are looking for?

- a. Never got the services
- b. Little useful
- c. Neutral
- d. Quite useful
- e. Very useful

13. To what extent do you agree about the information quality of IRD e-filing tax services ?

Tick one of them (1 -5) from each row.

E-filling/online income tax services (E-VAT)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) It gives complete information	1	2	3	4	5
b) it is easy to use	1	2	3	4	5
c) It saves my (taxpayers') time	1	2	3	4	5
d) It gives accurate result	1	2	3	4	5
e) It is safe to use	1	2	3	4	5
f) It help me in processing instructions	1	2	3	4	5

14. Please provide your opinion in the effectiveness of website.

Tick one of them (1 -5) from each row.

Effectiveness of website	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) It is useful	1	2	3	4	5
b) log in problem while browsing the website	1	2	3	4	5
c) Update and maintenance of website regularly	1	2	3	4	5
d) Accessible website	1	2	3	4	5

15. Please provide your opinion in System Quality (SQ) of IRD e-filing tax services

Tick one of them (1 -5) from each row.

System Quality	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) SQ is Accessible	1	2	3	4	5
b) SQ is interactive	1	2	3	4	5
c) SQ is ease of Use	1	2	3	4	5

16. In your opinion which factor is most important in online tax services (E-VAT)?

- a. access speed
- b. system availability

17. In your opinion, which is the best interactive way (interactivity) in system for tax-filing ?

- a. Interact with proxy of the tax agency
- b. Internet is interactive and dynamic
- c. Response to the user requests
- d. manipulate specific event outcomes by filling out a form

18. In which condition do you think system quality is most useful (ease of use)?

- a. online rectification
- b. verification of status
- c. Update for receipt of ITR
- d. processing status
- e. refunds for e-file return

19. Please provide your opinion in Service Quality (SeRQ) of IRD e-filing tax services

Tick one of them (1 -5) from each row.

System Quality	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) SeRQ is reliable	1	2	3	4	5
b) SeRQ is responsive	1	2	3	4	5
c) SeRQ is empathy	1	2	3	4	5
d) SeRQ is tangible	1	2	3	4	5

20. Do you satisfy with the reliability of IRD website services ?

- a. 1 very dissatisfied
- b. 2 Dissatisfied
- c. 3 Neither satisfied nor dissatisfied
- d. 4 Satisfied
- e. 5. Very satisfied

21. Which service quality is more responsive in e-tax have you feel?

- a. easy to open any document type
- b. correspondent software is available to proceed file download
- c. Minimize service disturption

22. Which service quality is more empathy in e-tax have you feel?

- a. It is easy to contact a help desk for technical questions
- b. Web site shows the most important contacts (address, phone, fax, e-mail)
- c. Web site has a clear and accessible language for me (Exchange of idea)

23. Which service quality is more tangible in e-tax have you feel?

- a. way on the web site is easy
- b. Information found with minimum number of clicks
- c. Web site design is attractive
- d. Information needed to fiscal obligations is easily found
- e. Time and size of the downloadable file is displayed

24. Please provide your opinion on the overall quality in online income tax services (E-VAT)

Tick one of them (1 -5) from each row.

Quality in E-VAT	Very (1) dissatisfied	Disstisfie d (2)	Neither Satisfied not dissatisfied (3)	Satisfied (4)	Very Satisfied (5)
a) Information Quality (IQ)	1	2	3	4	5
b) System Quality (SQ)	1	2	3	4	5
c) Service Quality (SeRQ)	1	2	3	4	5

25. To what extent do you agree about the perception in ease of use in e-filling tax services?

Tick one of them (1 -5) from each row.

E-filing/online income tax services (E-VAT)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Easier to use	1	2	3	4	5
b) Less complex	1	2	3	4	5
c) Target technology relatively free of effort	1	2	3	4	5
d) E-government web are easy to use	1	2	3	4	5
e) User friendliness (be positive)	1	2	3	4	5

26. To what extent do you perceive usefulness in e-filing tax services?

Tick one of them (1 -5) from each row.

E-filing/online income tax services (E-VAT)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Save money and times	1	2	3	4	5
b) easy application of ICT/new adoption	1	2	3	4	5

27. Which is the most concern as you perceived security in e-filing?

- a. Information required in system
- b. E- tools facilities
- c. Technical security for e-return (Sockets Layer protocol for Web communication)
- d. IT technologies security for my information (routers, firewalls, switches, and intrusion detection devices)

28. In which do you feel perceive value dimension in e-filing?

- a. I feel equity
- b. It is convenient for me
- c. I can avoid service personnel
- d. I can access the service wherever I want

29. As your attitude/feeling priority e-filing intend to use for E-return?

- a. Strongly Disagree
- b. Disagree
- c. Neutral
- d. Agree
- e. Strongly Agree

30. Please provide your opinion on the overall Perception in online income tax services (E-VAT). Tick one of them (1 -5) from each row.

Perception in E-VAT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Perceive Ease of Use (PEU)	1	2	3	4	5
b) Perceive Usefulness (PU)	1	2	3	4	5
c) Perceive Security (PS)	1	2	3	4	5
d) Perceive Value (PV)	1	2	3	4	5

31. Have you got ICT training & education in E-tax?

- a. Yes
- b. No

32. If yes, who provided the ICT training & education in E-tax?

- a. Office
- b. Self initiative

33. Do you rank the ICT training & education provided by the service provider (tax office) is sufficient in E-tax ?

- a. Poor (1)
- b. Fair (2)
- c. Moderate (3)
- d. Good (4)
- e. Very good (5)

34. If poor (or fair), what do you think is the major problem for not having strong ICT infrastructure in the Tax office ?

- a. Financial problem
- b. Technical problem
- c. Other, if any, please specify

35. Please provide your opinion on technical know how/knowledge in online income tax services (E-VAT) Tick one of them (1 -5) from each row.

Perception in E-VAT	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Computer Literate (efficacy)	1	2	3	4	5
b) Technical competence of the system	1	2	3	4	5
c) human operator's understanding	1	2	3	4	5
d) Processing / governing the system behaviour	1	2	3	4	5
e) E-filing experience	1	2	3	4	5

36. What is your average time consumed in filling e- tax form/return?

- a. Less than 15 minutes
- b. 15 minutes to 29 minutes
- c. Half hours to 59 minutes

- d. 1 hours to 2 hours
- e. More than 2 hours

37. What is your opinion on the following statements (trustworthiness on e-file)?

Tick one of them (1 -5) from each row.

Trustworthiness on e-filing income tax ( E-VAT)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) Social Influence	1	2	3	4	5
b) Trust in Login	1	2	3	4	5
c) Communication and Networking	1	2	3	4	5

38. In your opinion, tick the main reason that help to communicate and networking of e-filing for trustworthy.

- a. Time saving than from bureaucratic proceedings
- b. Reduce procedural fairness in the system
- c. get quick conformitary (response) after submitting the return

39. Are you feel e-filing tax enjoyment?

- a. Using the e-filing is exciting
- b. This service make me happy
- c. I have fun in using this service
- d. I found this service to be enjoyable

40. Please if any your comment/noted in e-filing income tax/ IRD e-services/specially E-VAT

.....  
 .....

.....  
**Researcher**  
 Raja Ram Adhikari

### **Interview Questions (Informal)**

1. Do you think higher education rises your satisfaction in e-filing?
2. In your opinion, IRD website is effective in regards to filling online tax?
3. Which is the major problem while borrowing the websites?
4. Do you know about the benefit of effective information quality?
5. Have you file your returns (e-filling tax) in timely manner?
6. If not, what is the reason behind to late filling income tax?
7. Do you feel IRD is curious to other tangible services?
8. Have you face hanging/server problem while e-file/download attachment?
9. How you perceive the technology in e-filling system?
10. Have you experienced in e-filling system?
11. Where you e-file the return?
12. What is the reason behind to delay in filling the e-return?
13. What is the reason have you taken longer time (more than 2 hours) in e-filling the tax?
14. Are you familiar about scanning files, upload files , download and pre-filed XML file (technical Know how)?
15. In your opinion, what might be the important attributes in regards to social influence?

## Annexture

### The role of information quality for Satisfaction of effilling

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4.00	4	4.0	4.0	4.0
5.00	2	2.0	2.0	6.0
6.00	1	1.0	1.0	7.0
7.00	1	1.0	1.0	8.0
8.00	21	21.0	21.0	29.0
9.00	7	7.0	7.0	36.0
10.00	9	9.0	9.0	45.0
11.00	1	1.0	1.0	46.0
12.00	1	1.0	1.0	47.0
13.00	7	7.0	7.0	54.0
14.00	5	5.0	5.0	59.0
15.00	5	5.0	5.0	64.0
16.00	21	21.0	21.0	85.0
17.00	3	3.0	3.0	88.0
18.00	4	4.0	4.0	92.0
19.00	2	2.0	2.0	94.0
20.00	6	6.0	6.0	100.0
Total	100	100.0	100.0	

### Satisfaction of effilling (By information quality)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	47	47.0	47.0	47.0
d Agree	53	53.0	53.0	100.0
Total	100	100.0	100.0	

**Satisfaction of efilling (By information quality) Cross tabulation**

		Satisfaction of e-filling		Total
		Disagree	Agree	
information quality	Disagree	46 93.9%	1 2.0%	47 47.0%
	Agree	3 6.1%	50 98.0%	53 53.0%
Total		49 100.0%	51 100.0%	100 100.0%

**ii) System quality**

**System quality**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.00	5	5.0	5.0	5.0
5.00	2	2.0	2.0	7.0
6.00	25	25.0	25.0	32.0
7.00	8	8.0	8.0	40.0
10.00	5	5.0	5.0	45.0
11.00	7	7.0	7.0	52.0
12.00	36	36.0	36.0	88.0
13.00	1	1.0	1.0	89.0
14.00	3	3.0	3.0	92.0
15.00	8	8.0	8.0	100.0
Total	100	100.0	100.0	

**Satisfaction of efilling (By System quality)**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	45	45.0	45.0	45.0
	Agree	55	55.0	55.0	100.0
Total		100	100.0	100.0	

**Satisfaction of e-filing by system quality Crosstabulation**

		Satisfaction of e-filing		Total
		Disagree	Agree	
System quality	Disagree	44 89.8%	1 2.0%	45 45.0%
	Agree	5 10.2%	50 98.0%	55 55.0%
Total		49 100.0%	51 100.0%	100 100.0%

**iii) Service quality**

**Service quality**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4.00	5	5.0	5.0	5.0
5.00	1	1.0	1.0	6.0
6.00	1	1.0	1.0	7.0
7.00	2	2.0	2.0	9.0
8.00	25	25.0	25.0	34.0
9.00	6	6.0	6.0	40.0
12.00	8	8.0	8.0	48.0
13.00	2	2.0	2.0	50.0
15.00	2	2.0	2.0	52.0
16.00	39	39.0	39.0	91.0
17.00	2	2.0	2.0	93.0
19.00	1	1.0	1.0	94.0
20.00	6	6.0	6.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filling (By Service quality)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	48	48.0	48.0	48.0
Valid Agree	52	52.0	52.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filling (by Service quality) Crosstabulation**

		Satisfaction of e-filling		Total
		Disagree	Agree	
Service quality	Disagree	47 95.9%	1 2.0%	48 48.0%
	Agree	2 4.1%	50 98.0%	52 52.0%
Total		49 100.0%	51 100.0%	100 100.0%

**iii) Overall quality in e-filling**

**Overall quality**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.00	7	7.0	7.0	7.0
4.00	1	1.0	1.0	8.0
5.00	31	31.0	31.0	39.0
6.00	1	1.0	1.0	40.0
7.00	9	9.0	9.0	49.0
8.00	3	3.0	3.0	52.0
9.00	6	6.0	6.0	58.0
11.00	10	10.0	10.0	68.0
12.00	21	21.0	21.0	89.0
13.00	3	3.0	3.0	92.0
14.00	6	6.0	6.0	98.0
15.00	2	2.0	2.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filing (by overall quality)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	49	49.0	49.0	49.0
Agree	51	51.0	51.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filing (by overall)**

		Satisfaction of e-filing		Total
		Disagree	Agree	
QUALity Check overali	Disagree	48 98.0%	1 2.0%	49 49.0%
	Agree	1 2.0%	50 98.0%	51 51.0%
Total		49 100.0%	51 100.0%	100 100.0%

**2) Perception**

**Perception**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 4.00	3	3.0	3.0	3.0
5.00	4	4.0	4.0	7.0
7.00	5	5.0	5.0	12.0
8.00	14	14.0	14.0	26.0
9.00	10	10.0	10.0	36.0
10.00	2	2.0	2.0	38.0
11.00	1	1.0	1.0	39.0
12.00	4	4.0	4.0	43.0
13.00	5	5.0	5.0	48.0
14.00	2	2.0	2.0	50.0
16.00	36	36.0	36.0	86.0
17.00	2	2.0	2.0	88.0
18.00	2	2.0	2.0	90.0
19.00	1	1.0	1.0	91.0
20.00	9	9.0	9.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filing (By Perception)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	48	48.0	48.0	48.0
Valid Agree	52	52.0	52.0	100.0
Total	100	100.0	100.0	

		Satisfaction of e-filing		Total
		Disagree	Agree	
Satisfaction of e-filing (By Perception)	Disagree	47 95.9%	1 2.0%	48 48.0%
	Agree	2 4.1%	50 98.0%	52 52.0%
Total		49 100.0%	51 100.0%	100 100.0%

### 3) Technical Knowhow (savvy)

**Technical knowhow/Savvy**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 5.00	4	4.0	4.0	4.0
6.00	1	1.0	1.0	5.0
7.00	2	2.0	2.0	7.0
8.00	1	1.0	1.0	8.0
9.00	3	3.0	3.0	11.0
10.00	21	21.0	21.0	32.0
12.00	2	2.0	2.0	34.0
13.00	1	1.0	1.0	35.0
14.00	1	1.0	1.0	36.0
15.00	4	4.0	4.0	40.0
16.00	1	1.0	1.0	41.0
17.00	4	4.0	4.0	45.0
18.00	4	4.0	4.0	49.0
19.00	4	4.0	4.0	53.0
20.00	33	33.0	33.0	86.0
22.00	2	2.0	2.0	88.0
23.00	5	5.0	5.0	93.0
24.00	2	2.0	2.0	95.0
25.00	5	5.0	5.0	100.0
Total	100	100.0	100.0	

**Satisfaction of effilling (By Technical Knowhow /Savvy)**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Disagree	49	49.0	49.0	49.0
Agree	51	51.0	51.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filing (by Technical Knowhow /Savvy)**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Technical Knowhow /Savvy)	Disagree	48 98.0%	1 2.0%	49 49.0%
	Agree	1 2.0%	50 98.0%	51 51.0%
Total		49 100.0%	51 100.0%	100 100.0%

**4) Trustworthiness**

**Satisfaction of e-filing (by trustworthiness)**

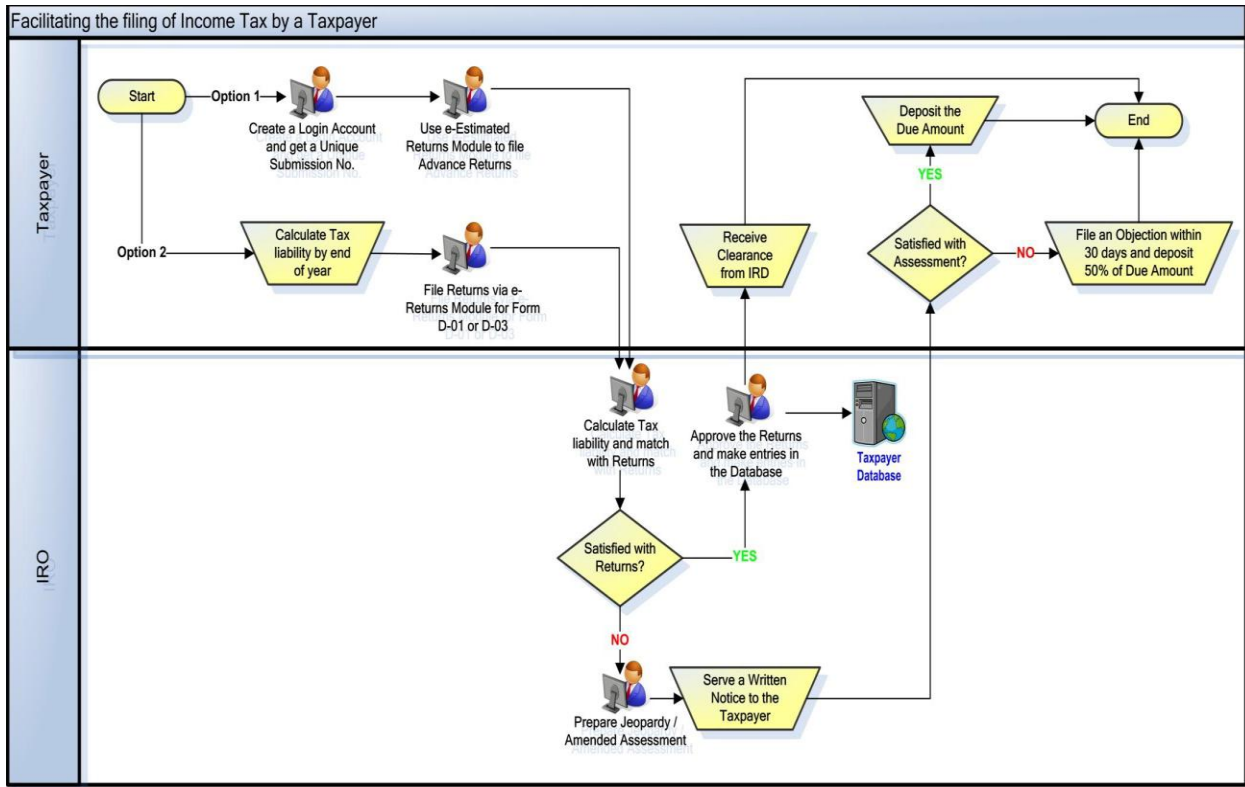
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 3.00	4	4.0	4.0	4.0
4.00	1	1.0	1.0	5.0
5.00	2	2.0	2.0	7.0
6.00	16	16.0	16.0	23.0
7.00	4	4.0	4.0	27.0
8.00	5	5.0	5.0	32.0
9.00	3	3.0	3.0	35.0
10.00	1	1.0	1.0	36.0
11.00	9	9.0	9.0	45.0
12.00	38	38.0	38.0	83.0
13.00	3	3.0	3.0	86.0
14.00	3	3.0	3.0	89.0
15.00	11	11.0	11.0	100.0
Total	100	100.0	100.0	

**Satisfaction of e-filing (By Trustworthiness)**

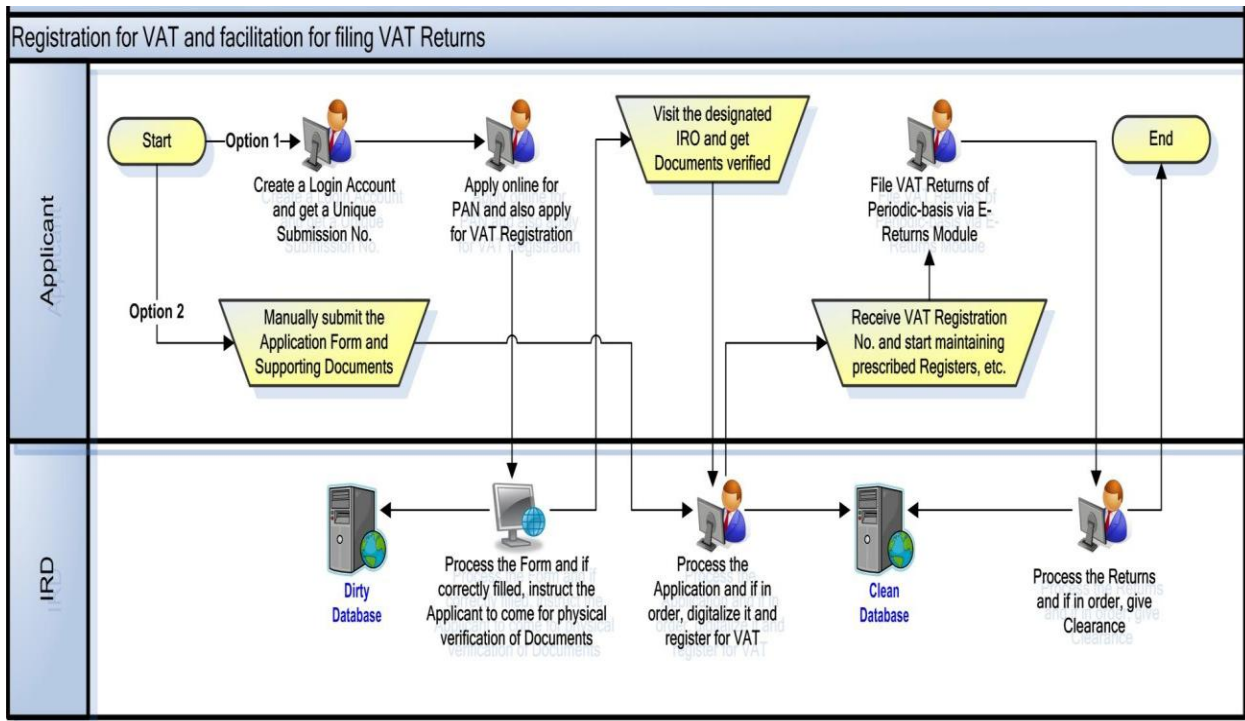
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	45	45.0	45.0	45.0
	Agree	55	55.0	55.0	100.0

**Trustworthiness \* Satisfaction of e-filing Crosstabulation**

		Satisfaction of e-filing		Total
		Disagree	Agree	
Trustworthiness	Disagree	44 89.8%	1 2.0%	45 45.0%
	Agree	5 10.2%	50 98.0%	55 55.0%
Total		49 100.0%	51 100.0%	100 100.0%



Source : Nepal GEA (2010). Current State Assessment Report for Short-listed Government Services p. 39



Source : Nepal GEA (2010). Current State Assessment Report for Short-listed Government Services p. 62