

# VAT and ICT based Service Delivery in Nepal: An Empirical Review

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**Abstract:** *The used of ICT also presents many benefits for revenue departments, including faster processing of information and data, requiring fewer resources and reducing the collection cost. The government of Nepal also implemented the income tax and VAT friendly policy towards service recipients and simplified the procedures and adds the adequate infrastructure and logistic support. The income tax and VAT policy was also modified and tried to simplifying the procedures consequently. This study aimed to examine the empirical review regarding VAT and ICT in Nepalese scenario. However, GON should focus on implementation of policy and practices in VAT, encourage the taxpayers (service recipients), two way communication, taxpayer's education and system based /web based service recipient's feedback. I would like to thank University commission Grant, Nepal for providing me PhD fellowship and to motivate in the research.*

**Keywords:** ICT, VAT, IRD, ACT, Policies and service delivery

## 1. Introduction

The application of the VAT system to electronic commerce is now considered to be the most significant VAT challenge” (Doernberg et al., 2001). The use of informatics, computers and networks brings as a consequence that many goods are transformed into ‘virtualized’ and ‘dematerialized’ goods. Value Added Tax (VAT) is a general consumption tax on the consumption of goods and services. VAT is an indirect tax which is to be paid by the end-consumers. It is included in sales prices, and VAT revenue is paid to the state. VAT is levied on the value added at each stage of the production and supply chain. The level of VAT included in consumer prices is determined by the VAT rate and equals the total tax paid for value added. VAT can be paid in the country where the company is situated, rather than in the respective countries of its customers, unless the annual revenue generated in a particular foreign country crosses a certain threshold. These thresholds differ as per the country.

- The European Commission has proposed to simplify the VAT rules for e-commerce. This proposal has been accepted, and the changes will take effect by 2021. The most important changes are as follows:
- VAT will not only apply for digital services, but also for other services and products.
- The different thresholds will be lowered to one general threshold of €10, 000.
- The VAT exemption for deliveries below €22 will be removed.
- Providers of online platforms (such as an online market place), that facilitate distance sales, will also be held responsible for VAT under certain conditions.
- If the products are charged within the EU and the value of the products is no more than €150.

(<https://energia.gob.es/bono-social/Paginas/derechosconsumidores-bono-social.aspx>)

The Republic of Korea became one of the world’s earliest adopters of value-added tax (VAT) when it introduced a uniform 10 percent invoice-credit, VAT as a general consumption tax in 1977. Since then, VAT has grown to become a mainstay of the government’s tax revenues, reaching KRW58.9 trillion or 29 percent of the entire tax revenues for 2013 (Chul & Hyung, 2016). ICT application is to communicate and provide various services to the people said as e-governance. The tax administration and the Ministry of Social affairs in the areas of fraud policy, client approach and collection process in Netherlands. Similarly, in Spain and Portugal, the tax processes of registration and collection are integrated with commercial banking processes – taxpayers send their returns and pay their tax to banks. Likewise, Caribbean and Pacific countries, fresh start can be made to set up management, legal and technological systems without prioritizing them with existing tax regulations ([www.ibfd.org](http://www.ibfd.org)).

## Value Added Tax

Value-added tax as “a broad-based tax levied at multiple stages of production and distribution with crucially taxes on inputs credited against taxes on output. VAT or the more recently favored Goods and Services Tax (GST) may cover a variety of taxes in different countries. Like the personal income tax, VAT was not so much a single tax as a set of taxes that share certain characteristics. VAT now place in most developing and transitional countries (Bird & Pascal, 2009, 48-69). VAT may be payable for goods or services which are given away for no sales revenue (essentially ‘free’). IT Governance and Service Management is a framework which aligns an organization’s IT strategy with the overall business strategy in tax administration. The success of a tax technology enabled tax function should be developed IT skills (KPMG, 2018). It is a transaction based tax on consumption of goods and services borne by the final consumer. VAT applies on the majority of transactions. The correct VAT treatment needs to be determined at a transaction level and should not slow down transactions. It

is a transaction based tax on consumption of goods and services borne by the final consumer (EUVAT Forum Subgroup, 2018).

E-commerce is the main challenge for both tax administrations and businesses from a VAT perspective. Simplifying the registration and compliance process should have a positive impact on the challenge of undeclared VAT/non-registered traders as to encourage traders to register. Value added tax is an indirect percentage tax to be paid on all goods and services supplied either to the consumer or to other businesses (Infor, 2020, 16). VAT fraud constitutes not only nonpayment of taxes due, but also theft of taxes paid by law-abiding taxpayers (Chul, Lee, 2016). The tax authorities of developing countries generally work to verify VAT refund claims before payment in accordance with their domestic laws and regulations, while those of developed countries employ risk assessment mechanisms to administer VAT refund claims without verification. According to an IMF survey, 33 out of 36 countries that were surveyed responded that they had a statutory deadline, generally within 30 days, for payment of VAT refunds (Harrison & Krellove, 2005). Yilmaz and Coolidge (2013) analyzed the effect of e-filing on tax compliance costs in developing countries and showed that if policy implementation of e-filing were improperly managed (e. g., requiring taxpayers to report both e-filing and paper filing), the tax compliance cost might raise the total compliance costs.

OECD (2019) the OECD's most recent work on VAT/GST policy and administration has focused primarily on the design of rules and mechanisms for the effective collection of VAT/GST on digital sales of goods, services and intangibles, including sales by offshore digital sellers. VAT is the primary form of consumption tax for the most countries around the world. While similar to the sales tax, it is imposed on consumption, but contrary to single-stage levy imposed on the final consumer. ICT/telecommunication sector was recognized as an engine of economic growth and social development, the burden of taxation borne by the sector was larger than that of other industries (Katz, 2015). The modernization of Government, as a means towards: enhancement of transparency, accountability and good governance; making the Government more result oriented, efficient and citizen centered. Similarly, it enables easy access to citizen and business effectively through the use of internet and other channels of communication in service delivery (ROK, 2014). This research states the question regarding major tax (VAT) policies and ICT based service delivery in Nepal.

## Objective

The main aim of the study is to empirical review of VAT and ICT based service delivery especially in Nepal.

## 2. Literature Review

### 2.1 Conceptual Review

#### 2.1.1 VAT Administration and ICT based service delivery in Nepal

Automated process of VAT administration and control over the occurrence of tax liabilities and VAT payment. The system allows for the depositing the amount of VAT that shall be paid or refunded. Under USAID technical assistance, Nepal was planned to introduce VAT in 1995 and the first basic system to track returns and payments was written in FoxPro for DOS. Due to elections the VAT implementation was delayed until 1997. In 2001, the original FoxPro system was re-written with donor assistance in an Oracle platform. Similarly, the computerization of the income tax was initiated in 1998 with the development of the tax registration module in FoxPro. The Inland Revenue Administration was created in 2001 following the merger of VAT and Income Tax Administrations and responsibility for Excise tax was transferred from Customs to the new tax administration. By 2001 there was a fully computerized VAT administration with a common registration module for VAT and income tax (Blume & Bott, 2015, 168). The income tax collection module was implemented in 2003 and the income tax assessment module came into force in 2004. Web-based applications for taxpayer registration and filing tax returns have been developed with a growing number of taxpayers submitting their tax returns online. Similarly, a large taxpayer section and an internal monitoring section were also created in this department. Similarly, Window office was converted into taxpayer service office in 2010. Nepal was introduced VAT as 3<sup>rd</sup> country in SARCC (After Pakistan and Bangladesh). In SARCC also, the VAT is another named GST (goods and Service tax) like India effective from July 1, 2017. Presently, Inland Revenue administration has Inland Revenue department as the Headquarter and 1 large taxpayer office, 1 middle level taxpayer's office, 38 (22) Inland Revenue offices and 26 taxpayers service office in Nepal. Revenue investigation administration is the third wing of the revenue administration that has one department, four regional offices and six check posts (Bhattarai, 2015 B. S.).

VAT is a successful tax system in Nepal. All the interaction related to VAT between taxpayer and Inland Revenue Office (like-registration, return filing, payment, assessment, appeal, refund, penalty etc.) are entered into e-Revenue system and the system automatically calculates and generates the latest statement and taxpayer's due. VAT is levied on almost all goods and services. Any person, firm or company having an annual turnover of NPR 5 million or more has to register for VAT. VAT is levied at a flat rate of 13% and the taxpayers (intermediaries) can claim input credit on VAT paid during procurement. VAT is not levied on exports, which means that they can claim for input tax credit. However, no input credit claim can be made for non-VAT-able goods and services, as VAT is levied at the point of sale (or import) (p.22) (MOI, Investment summit report, 2016). **IRD has put more than 30 goods and services** in the mandatory list of value added tax (VAT). This means VAT will be imposed on the listed goods and services regardless of the turnover. They include products like

furniture, hardware, software and automobiles, among others. Currently, business firms need to pay 13 percent VAT only if their turnover exceeds Rs 5 million annually. Businesses firm that take loans more than Rs 1 million annually have to register for VAT. Likewise, any person who imports goods worth ten thousand or more for business purposes has to get the transaction registered for VAT. Under the new provision, any of these specified businesses will have to pay VAT even if their turnover is below the prescribed threshold and its weight is 29% average in GDP (IRD, 2018/19 annual report).

**2.1.2 VAT Act and Revenue Policy Review of Nepal**

VAT Act 2052 B. S an Act Made to levy and recovery Value Added Tax Preamble that: Whereas, it is used to increase the mobilization of revenue needed for the economic development of the country, by making the process of revenue recovery effective and to levy the revenue in effective manner by systematizing the process of recovering the Value Added Tax on all kinds of transaction including sale, distribution, transfer, import and export of goods and services and to realize the tax. This Act also defines the goods and services as "Goods" means both movable and immovable property and "Service" means anything other than goods. Similarly, this Act defines "Recipient" means the person who receives

any goods and services. (q) "Taxpayer" means the person involved in the taxable transaction. This act 2052 B. S. Sec (5) depicted that Value added Tax to be levied: (1) Notwithstanding anything contained in this Act, the value added tax shall be levied on the following transactions:-(a) On goods and services supplied within Nepal, (b) On goods and services imported into Nepal, (c) On goods and services exported outside of Nepal. (2) The tax shall be levied on the value of each taxable transaction. Similarly, for tax payment: Sec (19), (1) A taxpayer shall pay the tax for each tax period within twenty five days of the completion of that period. (2) If a taxpayer does not pay the tax within the time limit specified under Sub-section (1), an extra charge of 15%, five percent shall be imposed on the due tax until the last day of the next month from the date (month) that the tax first becomes due. (3) If the tax is not paid even within the time specified in Subsection (2) another additional of 16%, five per cent shall be imposed on the tax due at that time. (4) If a taxpayer submits an application to the Director General for the exemption of the additional charges imposed by 17Sub-section (2) or (3) stating the reason that the failure to make a timely payment was caused by extraordinary circumstances beyond the taxpayer's control (force majeure), the Director General may, if he/she finds the reason reasonable, exempt such charges (VAT Act 2052 B. S, 14).

**Table 1:** Short Sketch of VAT Act Amendment in Nepal

VAT Act 2052 B. S. (1996) Act	Published / Implementation
Financial Ordinance, 2059 (2002)	2059.3.24 (8 July 2002)
Financial Ordinance, 2059 (2003)	2059.9.22 (6 January 2003).
Financial Ordinance, 2062 (2005),	2062.10.1 (14 Jananuary2005)
Financial Act, 2063 (2006)	2063.7.20 (6 Nov.2006),
Financial Act, 2064 (2007)	2064.3.28 (12 July, 2007)
Financial Act, 2065 (2008)	2065.6.3 (19 Nov.2008),
Financial Act, 2066 (2010)	2066.3.29 (13 July 2009)
Financial Act, 2067 (2011)	2067.11.03 (15 Feb.2011)
New Provision introduced by Finance Bill 2077	FY 2077/78 Budget

Source: www.lawcommission.com, VAT Act, 2052, MOF (2020)

**2.2 Empirical Review of ICT and VAT**

The Asian Development Bank (ADB) published its ICT Strategy in 2003, which focused on three main goals: Create an enabling environment through policy improvements, public institution strengthening and relevant infrastructure provision; build human resources for ICT literacy and professional skills and Develop ICT applications and information (ADB, 2003). Hence, ICT based service delivery also ensured transparency. The challenge was to put a digital cap on the whole economy and start matching transactions. The legislation was changed to require full mandatory e-filing of VAT tax returns, VAT invoices and primary. **Digital services make taxpayers’ compliance easier and more effective; at the same time a data-driven strategy enables the tax administration to meet current and future strategic goals.**

**Table 3:** Summary of Key Donors agencies in ICT tax administration

Donors	Summary
ADB	Global ICT strategy ICT in tax administration included within strategy but varies between individual countries.
AFDB, Former CIDA	ICT was part of reform programmes decentralized strategy Down to individual country offices to design programmes (decentralized) and changed in the administration
BMZ (KfW + GIZ)	Key donor in tax administration reform KfW – Provided financing for ICT as part of its programmes. New programming in the area of ICT in tax administrations GIZ – Employs ICTs in developing countries as a tool to enhance effectiveness in various fields including tax administration. Currently researching the development of a global ICT strategy that would also look at automation within tax administrations.
DFID	Key donor in tax administration reform programme through ICT and decentralized approach.
IDB	Key donor in tax administration reform Supports automation in several Central and South American countries, No centralized strategy approach but uses lessons learned from other work in the region to support its projects.
USAID	ICT was part of reform programmes No centralized strategy/approach Down to individual country officers to design programmes.

<b>WB</b>	Key donor in tax administration reformed focused on purchase of ITAS solutions including hardware and software Size of programmes considerably greater than those of other donors Utilized lessons learned and exchange of information between country programme.
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Source: Blume, J. & Bott, M, 2015, 130

**2.2.1 Empirical Review of ICT based service delivery and VAT in Nepalese Context**

**Table 4:** Review of Nepal Reform Strategy in ICT and Tax system

<b>Reform</b>	<b>Descriptions</b>
IT reform/ e-government strategy or specific integrated tax reform project	VAT was first introduced in 1997 with full automation. New version of VAT system was implemented in 2001 on Oracle platform. Since then Joint Registration System for VAT, Income Tax and Excise Duty was implemented. Income Tax system was implemented in 2009. Now more than 95% of filing was done via Internet. In March 2013, an integrated web based Tax System was developed. This system integrates more than 14 applications, developed in the last fifteen years, into a single web based application.
Institutional environment and supervision framework	IRD administered Income Tax, VAT, Excise Duty, other taxes/fees and non-tax revenue. IRD was centrally located in Kathmandu. IRD has a Deputy Director General (ICT), under whom there are 2 Directors and 8 IT Officers. ICT section monitors and supervises two outsourced companies, one for hardware and another for software/applications.
Objectives and targets of the reform	At present, the automated system manages around 70, 000 VAT Payers and 700, 000 Income Tax Payers. ICT has been achieved by the fact that at present more than 95% of returns are filed via Internet.
Type of system introduced or expanded	VAT system, Joint Registration, Income Tax System, Revenue Accounting System, E-filing of TDS, E-filing of VAT, E-filing of Income tax, E-filing of Income Tax Self-Assessment, E-filing of Excise return, Excise Sticker Management System, Internal Monitoring System, Diplomatic VAT refund System applications were custom-built by local vendors in Nepal. The Oracle 10 G platform was used (previously Oracle 8 and Oracle 9i were used). Originally Oracle was used in Windows, but as they started to move to web application it started to demand more and more memory to manage concurrent access (more than 1000 sessions at a time).
Investment costs (software and hardware, training) and maintenance	US\$15-20 million around US\$100, 000 for maintenance of the application and a similar amount for hardware. There was no licensing cost except for anti-virus and other fringe applications, since the system is owned by the IRD.
Cost-benefit relation of the reform (broad qualitative comparison)	Very high benefit. Automation has enabled IRD to administer the increasing number of taxpayers and the increasing amount of revenue with very little increase in staff numbers.
Customer focus including usability / user friendliness with respect to internal and external clients.	IRD is the most e-savvy government office in Nepal. All functions are performed using IT system. All VAT returns are submitted using e-system (around 80000 returns per month). All Income Tax estimated returns are submitted using e-System. (Around 100000 per year). All Income tax returns are submitted using e-system (around 200000 returns). Registration for all VAT, Income Tax and excise is done via e-system.
Degree of decentralization	All tax administration functions are decentralized and done through field offices via a single centralized system.
Security of data operating systems, privacy	OS Linux and Windows had been used and are considered secure.
Level of transformation	High level of e-service available to taxpayers. All functions of IRD performed using Application. Increase in analytical capacity, monitoring capabilities, efficiency, taxpayer's confidence and decrease in error.
Sustainability of the system.	Regular maintenance and necessary up-grading of all aspects of the system had been outsourced to local vendors, which improved the sustainability of the system.
Impact on promoting transparency.	Reduced physical contact between taxpayers and tax officers, automated case analysis and selection etc. have resulted in increased transparency and less corruption.

Source: Blume, J. & Bott, M, 2015, 169-171

**ICT based service delivery and VAT related studies in Nepal**

Bhatnagar, S. (2014) depicted that ICT increased the efficiency, speed, and transparency in service delivery. Methods of service delivery had not changed for decades, making them inefficient and corrupt. Well-designed e-governance projects with process reform enhanced transparency, accountability, reduce discretion and

enhanced efficiency. MOICT (2016) the major challenges of ICT were: high cost and unreliability of Telecommunication), lack of standardized systems, wide internal digital divide between rural and urban areas as well as low bandwidth, inadequate competent, skilled human capacity, inadequate policy and legal framework. Sharma (2015 B. S.) highlighted that the key issues and challenges were supporting for investment friendly policies, national tax laws or system and maintaining



transparency. Similarly, taxpayers was not proper technology used and banking facilities, tax consult and expert this led to lack of trustworthiness. Nearly two third of revenue in Nepal was come from 690 large taxpayers barely. Besides, almost 55% of internal VAT was collected by large taxpayers. The threshold is Rs 800 million and more annual turnover to be the large taxpayers in Nepal.

Koirala (2015 B. S.) depicted that ICT facilitated and advised government in tax policy formulation and reforms. Around 57.8% taxpayers were on timely-filter, 35.5 percent taxpayers were filling VAT returns and 6.8 percent taxpayers were not submitting tax returns and only 14% return tax due. It was a positive outcome of past reform initiative undertaken by the IRD in general and e-based tax system in particular. As per voluntary compliance, VAT return around one-third taxpayers were not submitting tax returns. Mallika, et al. (2018) highlighted the access to the internet today by several sectors had created a global market for Internet service and had declined an increased productivity in the technological communication field. Dhonju & Shakya (2019) depicted that the lack of strategic plans, change management, budget constraint, weak infrastructure, literacy, lack of construction knowledge, lacks of leadership supports, security and privacy were the most problematic challenges regarding implementation of e-service in municipality. MOIC (2019) Nepal e-commerce revenue by 2023 expected to cross US\$192 million annually at current growth. A shift to service economy had the potential to add another US\$ 4 billion in the fifth year of implementation, with potential cumulative impact of close to US\$ 10.5 billion across 5-years. Digital Nepal project expected to help grow Nepal's GDP by 3.2% at the end of initial implementation period.

### 3. Conclusion and Implication

ICT can increase services to taxpayers (for example, by providing a range of e-services and e-payment option) so that the process of paying taxes/fees becomes simpler, faster and easier to understand. The government of Nepal also implemented the income tax and VAT friendly policy towards service recipients and simplified the procedures and adds the adequate infrastructure and logistic support. Though the GON and different agencies also supported e-tax/e-VAT filling system and software but it's not sufficient as competitive manner. Henceforth, GON more focused on implementation of policy and practices in VAT, encourage the taxpayers (service recipients), two way communication, taxpayer's education and system based /web based service recipient's feedback also should enhance and different video and jingles should be updated in IRD sites and should motivate service users rather than afraid regarding service delivery.

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