

E-VAT Implementation in Nepal: Progress, Challenges, and Fiscal Implications

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Abstract

This goes especially in the case of developing countries, like Nepal which has over time become reliant on VAT as a central part of its domestic resource mobilization by ushering it in 1997. It aimed at making reforms in the existing tax administration and IRD; slowly started going for electronic systems (not compulsorily entered but e-VAT-movement for filing online returns, e-payments and establishment of a Central Billing Monitoring System (CBMS)). This descriptive and analytical work uses qualitative document analysis of official IRD reports, legislative frameworks, and peer-reviewed literature to establish the current state-of-play on administrative efficiencies and systemic roadblocks regarding e-VAT. The results indicate that digitalization has impacted input accuracy in all areas by decreasing input mistakes and expanding electronic submitting to more than ninety% of registrants in Fiscal 12 months 2080/81 but there is nonetheless a room for improvement. The structural issues also include recurrent systemic collapse of servers at high traffic hours, extremely high compliance costs for Small and Medium Enterprises (SMEs), low digital literacy and poor data integration across departments. Finally, the note concludes with limited but targeted policy suggestions on investing in modernizing IT systems, subsidizing compliance software to small businesses (especially those which are more vulnerable of being washed-out of business), and a plea for a common Framework for data sharing aimed at revenue growth across multiple environmentally-friendly modalities.

Keywords: Value Added Tax, e-VAT, Electronic Billing, Tax Administration, Revenue Transparency, Nepal.

1. Introduction

Value Added Tax (VAT) is the indirect type of tax, a multi-stage basis for consumption levied on value added at each stage in the production and distribution chain with payment due from the final consumer. Value added tax Act, 2052 B.S has been implemented on VAT in Nepal replacing different old and sectoral indirect Taxes (i.e Sales Tax, Hotel Tax) contract?? VAT implementation date: November 16, 1997 Cite this file as: Nepalese Value Added Tax_2060-arebeneficialonline.com (Aseem Sharma) P. a(15 March 2074). The main purpose of implementing VAT is to replace multiple old or other system based Sectorial based Indirect Taxes. Concerns around acyclic symptomatic structural transformations to broaden the tax base from weakness in several different levels compounding cascading effects across substantive multiple years leading to meaningful

increments along domestic resource mobilization. Over three decades, vat has grown to be the single largest source of domestic revenue in Nepal and a crucial means of financing public spending and national development (Inland Revenue Department, 2023).

But the VAT history in the country is not transformable, while reports that legislative changes and administrative changes are accompanied by legitimacy audit as a DUT type. Indeed, there was initial grievance to the imposition of VAT on the part of businessman class - not only incitement for lack of knowledge but also substantial compliance cost as well as bookkeeping. In contrast, taxpayer education, institutional reforms at tax office and increased focus on enforcement efforts facilitated compliance of the administrative type. Nepal has also imposed fiscal reforms of the same type and was able to build up a macroeconomic stability system with an extremely comprehensive multi-staged VAT replacing formerly steady stage sales duty (N.i.ch. IB. b.s.19. Memory et. al 2018).

The Digital Age (this expression is as good close to a class-weakly specific claim) has affected the architecture of public revenues. Nepal, aware of these challenges, decided to apply digital technologies in its basic fiscal structure-turning centuries-old workflows into a software system known as e-VAT. The Integrated Tax System (ITS) which is end to end online registration, e-filing (electronic filing of returns and documents), electronic payment gateways, real-time electronic invoicing (or simply e-billing) aimed at streamlining administrative inefficiencies thereby eliminating transactional costs. Only a reliable solution of e-filling substituting direct human interfaces via automated data exchanges during filing routines hardly mitigates the risk of corruption and in addition, promotes transparency by having transparent digital audit trails (OECD 2019). Moreover, automated cross-checking of input tax credit claims helps also mitigate fraudulent tax evasion with considerable rationalization in revenue collection.

These are tangible steps forward on the path to programmatic milestones within Nepal's pathway of e-VAT yet there are structural challenges in e-VAT technical design that need to be addressed. The complexity of the digital divide spasmodic broadband access in distant districts, extended power outages, and minimum regulation on digitization competence amongst micro entrepreneurs within the small serving population sector hollow that associated structure. Small and micro-enterprises also face the high initial and recurring cost of buying IRD- accredited billing software and hardware. Digital entry enters the strains of enormous behavioral modifications from tax inspectors to taxpayers who had fought on paper ledgers earlier than. Of note, sustained efforts to optimize the infrastructure, including resilience of cyber security and capacity building programs for domestic taxpayers that are locally relevant (IMF 2022), is essential in a developing economy digital tax transformation as taxpayer compliance is not only dependent on better infrastructure but also behavioral change. The paper evaluates the ground-level realities of Nepal's e-VAT system with a focus on areas of implementation that often lack coverage in one region or another and articulating pathways to strengthening the digital fiscal system.

2. Literature Review

2.1 Evolution of VAT and Digitization in Nepal

Need to begin the transition of several fragmented indirect tax systems in Nepal into a unified value-added system is at the origin of one of the most important breakthroughs in this public finance history. Previous literature on VAT in fact pointed out that the conceptual neutrality claimed by it is designed into a framework of orderly input tax credit with an overarching objective of removing the economic distortions costlier initial sale taxes yield (Shukla, 2014). Value Added Tax Act 2052 B.S. made the system obligatory to track transactions across the supply chain (Ministry of Finance, 1997). However, given some administrative weaknesses and paper-based compliance loops that facilitated invoice manipulation or under-reporting of income as well as acknowledging limited bookkeeping practice, digital modernization was overdue (Inland Revenue Department, 2023).

2.2 Global Digital Tax Reform and E-Invoicing

Digital interventions have been successful in bridging the internationally observed "VAT gap", or the difference between the VAT revenue that is expected and amount of revenue collected. Cross-country empirical courses of studies prove that relying on real-time digital tracking instead of retrospective, handbook reporting sharply lowers tax evasion. As one example, more sophisticated implementation models in South Korea and Brazil have shown that a requirement for e-invoicing creates verifiable, digital audit information traces, which can eliminate cash-based parallel economy activities (World Bank, 2021). As noted by the IMF (2022), a robust legal framework, clear data privacy conditions, and digitization of domestic private sector are foundational for this digital tax transformation to succeed. In many developing nations, geography matters with less developed areas found on the periphery away from central urban economic hubs and this is very much true within a decentralized Nepal.

2.3 Theoretical Framework

This study is grounded in three complementary theoretical models that explain tax compliance and technology adoption:

The first formalization of this model appears in Allingham and Sandmo (1972), an economic deterrence theory where individual taxpayers balance the financial gain of tax noncompliance against the expected costs associated with detection and punishment. offline – Structures Human Behaviors– e-VAT & Real-Time e-Billing (within Digital Frame) – structural deterrents, frozen by automatic detection through cross matching algorithms.

Fiscal Exchange Theory: Obedience is said to capture the social contract that exists between citizens and the state. Tax administration perceived by taxpayers to be transparent, fair and structurally efficient enhances voluntary compliance with tax requirements (Torgler 2007). This is supported by digital platforms who make the process simpler and easier to file with less red tape.

Technology acceptance model (TAM): The actual usage of the system derives from users' behavioral intention to use the system and consists of two constructs that are highly predictive for user adoption; perceived usefulness (to measure, how much a setting is enhancing one's alleviation or work performance) and perceived ease of use (to assess how much effort is at stake while using a particular outfit; Davis 1989).

Specifically, consistent with the theory that citizens find it easier to understand tax obligations through digital interfaces and encouraged to file them forthwith, Humagain (2021) provides empirical evidence from Nepal demonstrating strong positive correlation of e-filing access with voluntary compliance. This study evaluates whether the theoretical conditions of Nepal's economic value-added tax (e-VAT) system are being achieved in practice by examining the extent to which technical friction limits user experience, and thus access.

3. Statement of the Problem

Theoretically, e-VAT has a good structure for easy implementation, but practically there are hurdles in Nepal due to the socio-economic and technological landscape of the country. While the Inland Revenue Department has increased mandatory e-billing requirements for large taxpayers, small and medium enterprises (SMEs) have yet to overcome operational hurdles. This illustrates a stark divide between the top-down digitalization targets set by the government and what ground-level businesses have as infrastructure.

The present intervening study, therefore, examines contention between structural advances (in the form of portal implementations and statutory requirements) with ongoing systemic friction (such as outages in servers, procurement fees and low digital literacy). In order to enhance compliance and secure the sustainability of the revenue ecosystem in the long run, these dynamics must be evaluated.

4. Research Objectives

This study primarily seeks to assess and identify systemic bottlenecks in the functioning of e-VAT system in Nepal. The specific research objectives are:

This analysis aims to interpret the current status of e-VAT and e-billing implementation by Inland Revenue Department.

To identify the painful points of taxpayers in matrix of e-VAT infrastructures, finances and technologies.

To examine the impact of alternative digital tax system architectures on tax transparency and administrative costs.

To make recommendations based on findings to foster the efficacy and sustainability of DSS [Digital Value Added Taxation Systems] in Nepal

5. Methodology

This study uses a descriptive and analytical research design using qualitative document analysis to evaluate the e-VAT framework of Nepal. This study does not collect primary field data but instead compiles and cross-references legislative texts,

institutional datasets, and empirical research to assess the digital tax system. The data sources for secondary information fall into three broad categories:

Official Reports of the Government: Annual performance reviews, statistical profiles and strategic plans by the Inland Revenue Department (IRD) and the Ministry of Finance (MoF), Government of Nepal.

Statutory & Regulatory Frameworks: Value Added Tax Act, 2052 (1996), Electronic Billing Procedure, 2074 and relevant IRD administrative circular.

Peer-Reviewed Literature: This primarily consists of academic journals, economic reviews and research papers indexed in scholarly databases that focus on public finance digitization and tax compliance in developing economies.

Accordingly, data analysis would include a systematic document based approach and the use of thematic synthesis. Independent academic results are an important lens through which official government performance indicators are critically compared to assess the road between administrative targets and taxpayer experience coming together in time. Additionally, the methodology also includes a comparative analysis which looks at Nepal's digital tax evolution against wider regional frameworks in South Asia to help identify best practice next steps.

6. Results and Discussion

6.1 Implementation Progress and Milestones

The transition toward digital tax administration in Nepal has advanced through a series of planned regulatory and technological phases. The structural milestones of this process are outlined in Table 1.

Year	Milestone	Description
1997	VAT Implementation	Introduction of VAT via the VAT Act, 2052, replacing scattered indirect taxes.
2011	e-Filing Launch	Launch of online return filing and electronic registration via the IRD portal.
2017	e-Billing Mandate	First phase of mandatory electronic invoicing introduced for large-scale taxpayers.
2018	CBMS Launch	Deployment of the Central Billing Monitoring System for real-time transaction tracking.
2021	e-Payment Integration	Full integration of tax portals with retail payment systems, commercial banks, and digital wallets.
2024	Expanded e-Billing	Extension of real-time e-billing mandates to selected medium-sized enterprises.

The roll out of Integrated Tax System (ITS) created a seamless single point interface for registration, monthly filing and settlement of finances. According to data mentioned from its Annual Report (F/Y 2080/81) published over the website of Inland Revenue Department, more than 90% of total VAT registrants had filed their monthly return via e-filing channels. This has reduced the volume of physical traffic to local Inland Revenue Offices (IROs), enabling tax administrators to allocate fewer resources on routine data entry and concentrate on audit able entities with a higher risk profile.

There have been a lot of structural updates, but something that came about in 2018 would be the Central Billing Monitoring System (CBMS) where SBM and CBEs are going to centralize points for all BSF sectors. To facilitate this, the CBMS directly connects the billing software of a business point-of-sale to the IRD's core database using an Application Programming Interface (API). By transmission of real time data, when an invoice occurs, the transaction information will be transferred to the individual states database. These systems allow you to check instantly while transaction data was historically only accessible through month end filings or ad hoc physical audits. This is consistent with Economic Deterrence Theory because real-time tracking reveals opportunities for catching inconsistencies.

6.2 Structural Comparison: Traditional Vs. e -VAT

To illustrate the operational shifts brought about by digitization, Table 2 contrasts the legacy manual mechanisms with the modern e-VAT framework.

Table 2: Comparison of Traditional vs. e-VAT Systems in Nepal

Feature	Traditional Paper-Based VAT	Modern e-VAT System
Registration	Physical submission and verification at local IROs.	Online portal application with digital document uploads.
Return Filing	Manual delivery of paper forms; high processing delays.	Web-based data submission via the Integrated Tax System.
Billing	Handwritten or non-synchronized offline paper invoices.	Real-time synchronized electronic invoicing via CBMS.
Data Accuray	High vulnerability to calculation errors and ledger manipulation.	Automated calculation validation and error checking.
Audit Process	Retrospective, labor-intensive manual review of paper files.	Data-driven, risk-based digital auditing and cross-matching.
Payment	In-person visits to designated banks using physical vouchers.	Direct settlement via Connect IPS, corporate banking, or wallets.

6.3 Sectoral Impact Analysis

The structural impacts, and indeed the spread of e-VAT, are very sector-dependent:

Retail and Service Sector: The change is largely characterized by corporates in large retail and organized services which have adapted relatively without the catastrophe. The integration of their corporate POS systems with the CBMS allowed for simplification of accounting workflows, reducing manual reconciliation timelines and minimization of internal financial leaks.

Difficulty with Buyer Integration: With the sheer size of these supply chain setups, manufacturers are also having larger scale integration problems such as raw material imports and multi-stage internal processing along with tiered distribution channels. These workflows are often more awkward to conform into cookie cutter real-time e-billing loops.

The major advantage of automated billing is that it definitely offers a transparency in transactions but when customer checkouts during peak activity times, a slow network channel due to system latency or server drops creates a demand for high-reliable-network.

6.4 South Asian Comparative Context: Nepal vs. India and Sri Lanka

Decomposing regionally, Nepal stands on the moving scales of South Asia on digital taxes. The Goods and services tax network of India has a unique application in this context where they operate a digitally unified clearing model. For example, it has a system for obligatory e-way bills for logistics and an automatic GST invoice matching, which ensures a robust safeguard against leakages. This is because, while Nepal's CBMS offers the same kind of real-time visibility at the point-of-sale like India's tax collection system, it does not have end-to-end integration when it comes to interstate supply chains. In contrast, Nepal's phased and gradual implementation of e-filing handles daily transaction volumes with more uniformity, but still suffers from infrastructure challenges.

6.5 Critical Challenges and Systemic Bottlenecks

While the e-VAT framework has improved tax administration efficiency, it remains underutilized due to some systemic issues:

Insofar as massive processing of the amounts and throughput of data people have been, server instability continues to be a large bottleneck. The IRD central servers become very sluggish and the service downtime usually peaks days leading up to a month-end deadline. This infrastructure pressure, along with blackouts and lack of satisfactory broadband outside of major urban hubs is disabling compliance for those businesses based out side of urban areas.

Regressive Compliance Financial Burdens: compliance with e-billing rules forces businesses to procure IRD approved software packages, and upgrade hardware and secure point-of-sale systems. The fixed up-front and ongoing maintenance costs associated with these can place a considerable burden on smaller enterprises operating to tight margins, and may even distinctiveness compliance in an official sense.

Digital Literacy Gaps: The most obvious gap is in terms of the technical skills

required to use the ITS portal. It is common for a small business operator to have little formal technical training and instead hire an accounting consultant. This dynamic shifts the focus to a need for ongoing operating costs which are in deep contrast with the Technology Acceptance Model using perceived ease of use as an indicator of continued voluntary adoption.

Siloed Institutional Data Frameworks: The IRD stores a digital directory but this has yet to be fully integrated with to other critical state nodes such as the department of customs, or office of the company registrar. The inability to automatically share data between departments checks the states ability, in fact renders it incapable of cross-verifying import values vis-a-vis local sale invoices, allowing a certain kind of under-invoicing to continue.

Third-party cash transactions in retail continue to be common. Consumer demand for VAT invoices is very low, helping to perpetuate a cash economy and preventing the full penetration of digital tracers.

7. Conclusion and Recommendations

7.1 Conclusion

The e-VAT is the first major advance to modernize public finance administration in Nepal. Replacing paper ledgers with automated frameworks such as the Integrated Tax System (ITS) and CBMS has led to data accuracy, less routine administrative work, and a trusted digital audit trail. The structural changes can validate the fundamental concepts of Economic Deterrence Theory by improving the transparency in transactions.

Nonetheless, without the right technology no organization will achieve complete success. Server instability has prevented the digital transition from being fully completed in some regions, while others have incurred compliance costs that disproportionately hurt smaller enterprises. Though urban clusters such as Kathmandu are adjusting faster, the periphery remains entangled with basic connectivity concerns. If left unattended, this digital gap can worsen the current compliance inequalities. Long-term creation of compliance should focus on developing a tax environment viewed by users as fair, accessible and relatively stable. In the next years, there is a need for e-VAT to be seen not only as a technical upgrade or sophistication of the system but rather viewed more strictly as a structural reform that must always involve continued investments in infrastructure, legal upgrades and taxpayer-friendly development programs.

7.2 Policy Recommendations

In addition to these recommendations, the e-VAT framework can be further strengthened in fiscal policy, and should be complemented by measures to assist domestic resource mobilization.

Compliance Subsidies for SMEs: A lot of the financial impact on an SME will evaporate if Government delivered targeted (tax credits) or software subsidies to replace them with IRD-approved billing systems. Or the IRD can keep Ltd providing a free and fairly useless e-billing tool for low turnover micro-enterprises (which is an

online service).

Workshops for Technical Training Program: The IRD, with the support of local chambers and professional accounting associations in provinces should organize continuous workshops. At the same time, Mr Wilkins said most million-dollar grants generally work in areas of high-level science, so these programs need to leverage simple digital pipelines that bolster compliance capacity in areas beyond capital cities.

Establish a Common Data: Sharing Channel Between Departments and Inter-departmental data sharing is required between the IRD, Department of Customs and the Office of the Company Registrar (ACRA) in an automated, secure and seamless manner. Under-invoicing related revenue leakages at the border points could also be reduced through real-time cross-verification of imports with Corporate data.

Consumer invoice incentives roll out: To encourage formal invoicing, advertisement campaigns should be matched with fiscal support (e.g. a lottery framework for digital receipts or refund based on an amount (0.5% per invoice) paid to consumers who verify through mobile applications).

Review the legal and disputes framework: It helps to bring electronic transaction laws in line with the current landscape; clarify the formal status of digital signatures or invoices generated automatically by cloud service. In this work the establishment of an efficient digital dispute resolution mechanism, capable of quickly and effectively resolving administrative disputes to free up the overstretched traditional appeal system.

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