



A STUDY ON ROLE OF DIGITAL TRANSACTION ECOSYSTEM IN AUTOMATING TAX COMPLIANCES AND TAX EVASION AMONG START-UPS

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Abstract

In a fast-moving economy, digitalization plays a highly advanced and significant role for the government and also for entrepreneurs. The government has initiated automation in tax to benefit all tax payers in order to reduce time and human error. Automation has made tax compliance more effective by maintaining records, performing calculations, completing forms, submitting them to the government, and making payments. All these processes are carried out online. Digital systems also improve transparency and accountability in financial reporting, which strengthens trust between start-ups and tax authorities. The government initially encouraged digitalization but now digitalization has become the heart of most entrepreneurs for easy transactions. Most business transactions are carried out through digital platforms like UPI'S, Net banking etc. This enables enterprises to maintain accurate records of their financial activities and management. As a result, at the end of the financial year, enterprises find it easier to file their taxes.

The study aims to examine the relationship between digital transactions and automation tax compliance among start-ups. The study highlights that the use of digital transactions and automated tax compliance systems can significantly reduce tax evasion while encouraging start-ups to adopt more disciplined and compliant financial practices.

Keywords: Automation tax compliance, Digital transaction, Entrepreneurs, Financial management, Tax evasion, Transparency.

1. Introduction

In today's digital world, technology is growing fast and Automation is the key player. Digitalization helps to attain continuous progress and operational efficiency in shorter span of time. In India, especially in metropolis cities, both individuals and entrepreneurs have faced challenges in managing financial transactions and maintaining the records for tax filing. To regulate this situation, the government has initiated automated tax compliances for individuals and for entrepreneurs to make tax filing easy by E-filing. To bring awareness the government has initiated a centre for providing training regarding automated tax compliances. The main aim of automated tax compliance is to reduce paper work, to reduce time and to bring efficiencies. The government took this initiative among Small and Medium Enterprises (SME) in order to discourage tax evasion by shifting towards digital transactions. The digital transaction promotes greater transparency and maintains organized records, which obviously reduce tax evasion. However, it is a personal ethic of an enterprise to maintain accuracy in record keeping and pay tax. The study explores the relationship between digital transactions and automated tax compliance, which ultimately aims to reduce tax evasion. The study also focuses on the motive of entrepreneurs to stay tax compliant.

2. Review of Literatures

Dr. Anjali Agrawal, Ujjwal Soni (2025) The impact of digitalisation on tax compliance in India JAAFR –

journal of advance and future research -This paper explores the impact of digitalization on tax compliance in India, focusing on its role in reducing manual errors, curbing tax evasion, and increasing taxpayer participation. It also addresses challenges such as cybersecurity threats, digital literacy gaps, and infrastructure limitations that hinder its widespread adoption.

Mahendra Kumar, Dr. Anjali Gokhru (2025)- Factors influencing taxpayer compliance in India post-GST implementation: a behavioural analysis. Future-Ready Management Adapting to Industry 5.0- The study investigates taxpayer compliance in India after the implementation of GST from a behavioural perspective. It analyses how ease of compliance, trust in government, and technological challenges influence tax compliance behaviour. The findings indicate that simplified tax procedures and transparent governance enhance voluntary compliance. The study emphasizes the need to strengthen the GST system through better digital systems. It also contributes new insights into compliance behaviour in a digital tax environment and offers practical recommendations for policymakers and future research.

Muffasil Mohiuddin Syed, Mohiuddin Hussain Sohail Mohammed, (2024) “The Impact of Emerging Technologies on Entrepreneurial Ecosystems and Startup Growth” The study highlights that emerging technologies have a transformative impact on entrepreneurial ecosystems by enabling startups to innovate, scale, and compete globally with greater efficiency. It shows that technologies such as AI, blockchain, and cloud computing reduce entry barriers and support agile, data-driven business models. The study further explains that these technologies strengthen collaboration among startups, institutions, and investors, fostering dynamic innovation ecosystems. However, it also points out challenges related to regulation, ethics, and unequal access to technology.

Garbi, Thomas (2023/2024). “The role of startups in the innovative payments' ecosystem”, This study, conducted in collaboration with the Innovative Payments Observatory of Polytechnic University of Milan, is driven by the core belief that startups are the primary catalysts for transformative change in the payments sector. The method involved a systematic census and categorization of global startups into seven distinct groups of innovative payments. This work provides a replicable analytical model and a clear taxonomy, offering a structured baseline for subsequent annual reviews to track the velocity of technological adoption, shifting investment patterns, and the emergence of new payment paradigms within a continuously disrupted financial landscape.

Ashulekha Gupta and Shalini Singh (2022) Barriers of digital transaction in rural areas: an interpretive structural modelling and MICMAC analysis. The study investigates the barriers to digital transaction adoption in rural areas using interpretive structural modelling and MICMAC analysis. Their findings reveal that infrastructural gaps, digital literacy, trust issues, and institutional support are key constraints limiting effective digital transaction usage in rural economies.

Mikko Hanninen (2019) Review of studies on digital transaction platforms in marketing journals. It provides a comprehensive review of marketing literature on digital transaction platforms, highlighting how platform-based models transform market structures, value creation, and firm–customer interactions. The study emphasizes the strategic role of data and network effects in driving platform growth and competitive advantage.

3. Statement of the Problem

Despite the widespread adoption of digital transactions and the availability of tools automated tax compliances like ITR e-filing, tax evasion and non-compliance persist a significant issue within the startup's ecosystem. Many startups in their early stages face challenges such as limited financial expertise, unclear regulatory guidance, and the pressure to prioritize growth over governance. While the digital platform partially enhances transparency and record keeping, their actual effectiveness in curbing tax evasion is not fully understood. The gap exists in understanding start-up perception with an automated tax system. It is necessary for an entrepreneur to understand the automated tax system; otherwise, they can miss out potential growth and end up with an unsustainable tax environment.

4. Objectives of the Study

1. To examine the relationship between reliance on automated tax tools and factors that discourage tax evasion among start-ups.
2. To analyse the effectiveness of government digital tax initiatives such as E-invoicing, GST Portal, and Income Tax e-filing in promoting tax compliance.
3. To determine whether motivational factors for tax compliance and the effectiveness of digital tax systems influence the treatment of fully digitized businesses by tax authorities.
4. To identify whether there is an interaction effect between compliance motivation factors and digital tax system effectiveness.

5. Research Methodology

The research design used for this study is descriptive research where the characteristics of a population size and

sample size is described. There are two types of data: one is primary data and other one is secondary data. The primary data is collected from data collection techniques like surveys, questionnaires, also in person interviews. The questionnaires consist of both open ended and closed ended questions to get accurate surveys from the respondent. The secondary data for this study is collected from books, published articles and also from websites. The sampling technique used for this research is non-probability sampling where the respondents are selected within Chennai and also who are doing businesses (start-ups). The research uses convenience sampling initially and used snowball sampling techniques followed by convenience to make study more reliable. The population size is infinite as a greater number of start-ups are emerging nowadays. The sample size selected for this data is 127. The main aim of the study is to identify the relationship between digital transaction and automated tax system to avoid tax evasion, hence the questionnaires comprising these questions are important. To compare and get results a statistical tool like SPSS (Statistical Package for the Social Sciences) is used. The analytical methods used are correlation and Two-way ANOVA.

6. Data Analysis

A. CORRELATION

The study wants to analysis the relationship between government initiatives towards the digital tax innovative like E-invoicing, GST portal etc. with the factor that discourages tax evasion among starts-ups

Hypothesis

Ho – There is no significant relation between the reliance on automated tax tools and the factors that discourage tax evasions.

H1 – There is a significant relation between the reliance on automated tax tools and the factors that discourage tax evasions.

Correlations			
	Pearson Correlation	P VALUE	SAMPLE SIZE
Increase in reliance on automated tax tools	1	0.001	127
Factor that discourages tax evasion	-.292**	0.001	127
Significant at the 1% level			

INTERPERTATION

The analysis has negative correlation between reliance on automated tax tools and the factors to discourage tax evasion (if one variable increases the other variables decreases). If the enterprises rely more on automated tax tools, then tax evasion will decrease automatically. As the p value is <0.05 it indicates the correlation is significant.

B. TWO WAY ANOVA

A Two-Way ANOVA (Analysis of Variance) is a statistical test that determines how two categorical independent variables, simultaneously affect a continuous dependent variable, checking for individual effects and their combined influence on the outcome. The study uses two-way ANOVA for determining if there is an interaction between the two independent variables on the dependent variable.

Dependent variable: Tax authorities treat businesses that are fully digitized versus those that are not.

Independent variables are: Factors most motivate business to stay tax compliant, and effectiveness of current digital tax system such as GST portal, income tax e filling in reducing error

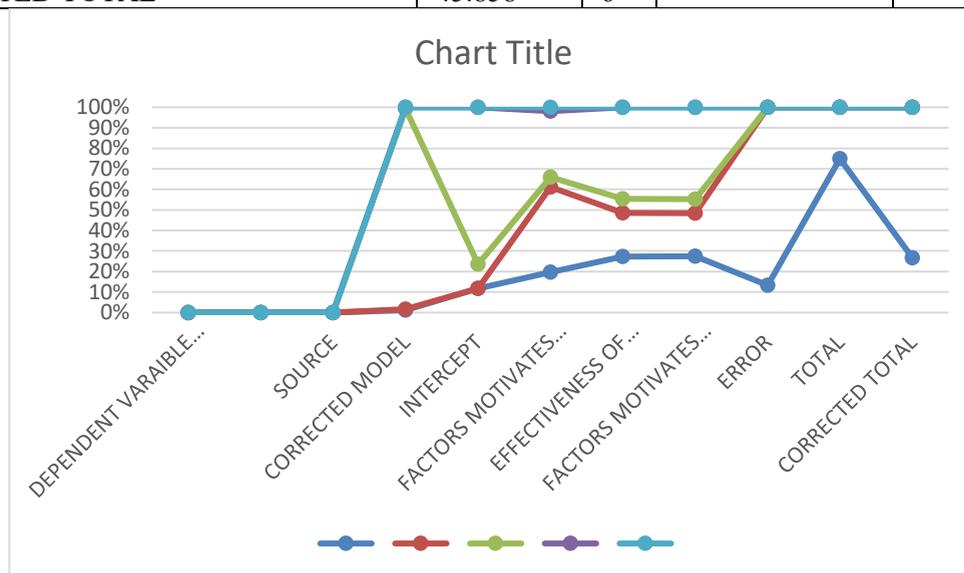
RESPONSES FREQUENCY ANALYSIS

FACTORS MOTIVATES TO STAY TAX COMPLIANT	AVOIDING PENALTIES AND LEGAL ISSUES	MAINTAININ G A GOOD REPUTATION	PERSONAL ETHICS STANDAR D	EASE OF COMPLIANCE S DUE TO DIGITAL SYSTEM	REQUIREMENT FROM PARTNERS OR CLIENTS
	30	24	49	14	10

EFFECTIVENESS OF CURRENT DIGITAL TAX SYSTEM	VERY EFFECTIVE	SOMEWHAT EFFECTIVE	NEUTRAL	SOMEWHAT INEFFECTIVE	VERY INEFFECTIVE
	47	48	12	10	10

DEPENDENT VARIABLE: Tax authorities treat businesses that are fully digitized versus those that are not.

SOURCE	SUM OF SQUARE	df	MEAN SQUARE	F	Sig.
CORRECTED MODEL	28.386	12	2366	15.434	<.001
INTERCEPT	155.716	1	155.716	1015.99	<.001
FACTORS MOTIVATES TO STAY TAX COMPLIANT	1.903	4	0.476	3.103	0.18
EFFECTIVENESS OF CURRENT DIGITAL TAX SYSTEM	5.132	4	1.283	8.372	<.001
FACTORS MOTIVATES TO STAY TAX COMPLIANT * EFFECTIVENESS OF CURRENT DIGITAL TAX SYSTEM	5.226	4	1.307	8.525	<.001
ERROR	17.472	11	0.153		
TOTAL	380	12			
CORRECTED TOTAL	45.858	12			



INTERPERTATION

From the above two-way ANOVA table, it is clear that p value is <0.05 hence the study is significant. There is an interaction between the factors that motivates businesses to stay tax compliant, and effectiveness of the current digital

tax system with the Tax authorities treating businesses that are fully digitized versus those that are not. Both the independent variables interact with dependent variables.

7. Findings

From correlation it is found that the analysis has negative correlation between reliance on automated tax tools and the factors to discourage tax evasion (if one variable increases the other variables decreases). If the enterprises rely more on automated tax tools, then tax evasion will decrease automatically.

From the above two-way ANOVA table, there is an interaction between the factors that motivate businesses to stay tax compliant, and effectiveness of the current digital tax system with how the Tax authorities treat businesses that are fully digitized versus those that are not. Both the independent variables interact with dependent variables. The findings suggest that the digital tax compliances and the effectiveness of the current tax system align towards the tax authorities' perspectives.

8. Conclusion

The findings state that there is a significant relation between the reliance on automated tax tools and the factors that discourages the tax evasions. The enterprises which rely on automated tax tools have effectively paid tax to the government instead of tax evasion. The finding also states that the factor that motivates business tax compliance and the current digital tax system has influenced business perception of start-ups among tax authorities. The government has good initiative in regulating tax compliances, however according to the survey the tax paying and evading completely depends upon the tax payer. Individuals or entrepreneurs must take tax paying as their personal responsibilities. Future work could evaluate specific policy interventions to determine which combination of motivation and effectiveness must improve taxpayer's perceptions and compliances behaviour.

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