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ANALYSIS ON DEVELOPMENT OF CASHLESS ECONOMY AND DIGITAL TRANSFORMATION IN AUDIT AND TAX FUNCTION.

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Abstract

With the internet boom in the 1990s there has been a digitalization of many sector, be it entertainment, healthcare, or anything else. But the sector which has been mostly affected by this is financial services. Although the term *FinTech* has existed since the mid-1880s with the invention of the telegraph, railroads, and steamships, there has not been any major transformation until the late 2000s when there has been a major digitalization of these services. One such service is the calculation & payment of income tax through tax automation software.

This paper focuses on how Indian citizens have adopted the change in the scenario of paying income tax through automation software, if they are using this software to pay taxes, or are, they still preferring to do this with the help of CAs, Lawyers, etc. And the needs of the working-class Indians in case of income tax filing & return. Based on the statistical analysis we found that people below the age of 35 are more likely to use automation software compared to people above the age of 35.

Keywords: Digitization, Global, Taxation, Compliance, Financial Technology (FinTech), Regulation Technology (RegTech).

I. Introduction

I.I. Digitalization of Tax & Audit System:

Financial auditing is significantly impacted by innovations in the field of digital, automated bookkeeping in audited businesses. Innovative audit tools, emerging technical possibilities, and the demand from addressees to access audited financial figures sooner after the balance sheet date necessitate adjustments in annual audit results. The digital wave has become stronger post demonetization. Hence, the adoption of new technologies in tax management has gained further momentum. The range of audit tools available on the market, as well as the deployment of document management systems, actively contributes to this development. Digitalization of auditing, on the other hand, is not limited to electronic audit work documents. Data sharing with audited businesses are also moving to the digital realm. The sharing of documents between audited organizations and audit firms is transitioning to web-based data storage facilities, which has the benefit of improved efficiency and cost savings. Data-exchange networks have arrived in the field of data synchronization, and they now provide auditing and fiduciary services. The transition from paper to electronic working papers would necessitate the use of powerful tools such as Excel-based analytical testing procedures. In the age of "big data," it's time to get rid of the critical attitude toward data analytics that still exists in the audit profession. Only by efficiently managing data can the future tax role be efficient. Prioritize significantly enhancing the data quality that the tax feature needs. To help tax processes, technology plays a critical role. New and improved tax technology solutions are constantly being developed, and being able to adapt tax processes to take advantage of technology will be critical to achieving the required efficiencies and managing tax risk.

I.II. Fintech & India:

FinTech innovations, products, and technology India's FinTech sector is very young but is growing very fast, fuelled by a large market base, an innovation-driven start-ups landscape and friendly government policies and regulations. Several start-ups have populated this emerging sector, while both the traditional banking institutions and the non-banking financial companies (NBFCs) are catching up. This new disruption in the banking and financial services sector has had a big impact. In India, FinTech has the potential for providing workable solutions to the problems faced by traditional financial institutions which include low penetration, a cash-driven transaction economy, and scarce credit history. If there is collaborative participation of all the stakeholders, the Indian banking and financial services sector can change dramatically. FinTech service firms are redefining the way the companies and consumers conduct transactions on an everyday basis.

II. Research Methodology:

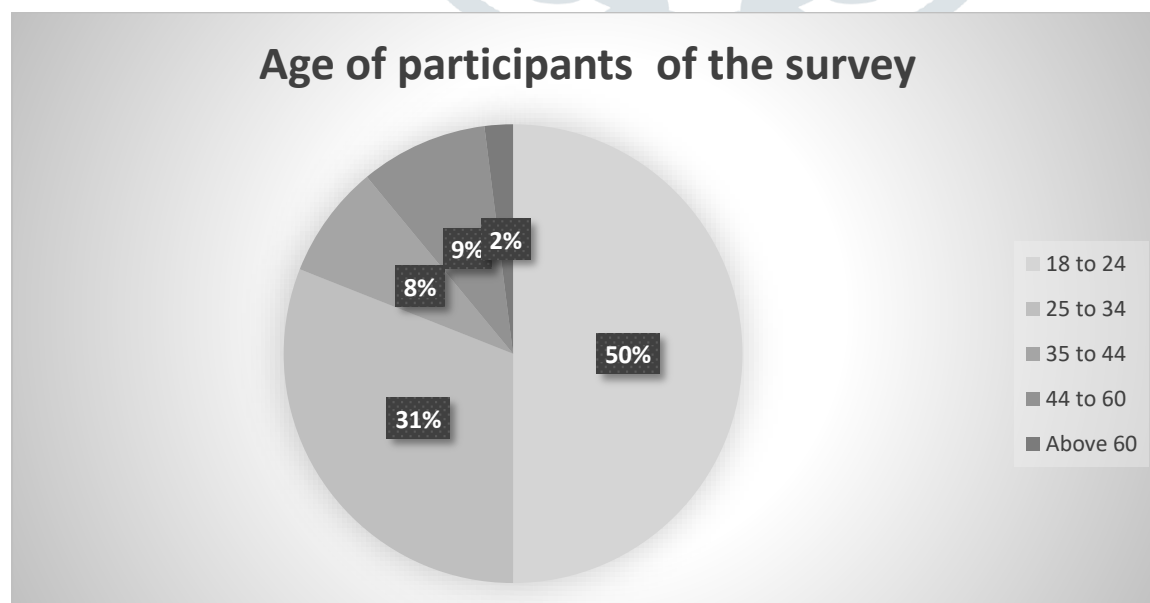
A PESTEL Analysis of FinTech & RegTech sector in India and SWOT Analysis of audit & tax automation software was done, Statistical analysis was done using the primary data to find out which age group of participants are more likely to prefer Tax & Audit automation software over Using other modes like taking help from a CA or Lawyer.

III. Data Source & Data Collection

The survey was done in April-May, 2021 to know how have people accepted the digitization of tax and audit systems. The Survey was done online with the help of *Google Forms* where some basic questions were asked to people about Income Tax and what's their attitude towards the audit & Tax automation software. The questions were multiple choice questions and participants could select more than one option.

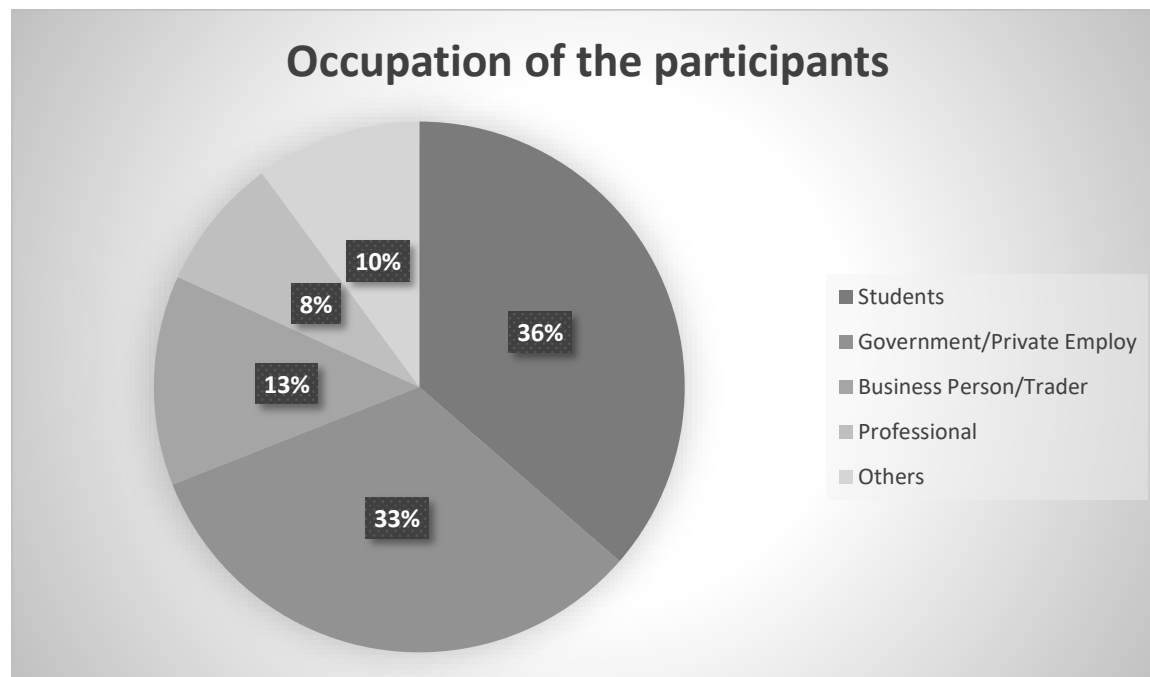
This report received answers from all around India. The overall number of responses received was **2344**, with Delhi and Uttar Pradesh receiving the most, followed by Maharashtra and West Bengal state. The chart below shows the age-wise breakdown of the respondents. Maximum respondents are in the age group 18 to 24, and correspondingly, most of the respondents are students.

CHART I: Age of participants of the survey



Considering the occupation of the participants, 39.72 percent of respondents do not file an IT return. Because it is easier to file taxes with the help of professionals such as CA/CMA/CS/Advocates, 31.87 percent of respondents do so.

CHART II: Occupation of the Participants



IV. Literature Review

Literature review on how India is adapting to the digital world in the case of online transactions.

Author(s)	Objective	Conclusion
Pardhasaradhi Madasu (2015)	Study to assess and report about the progress made by the Reserve Bank of India in moving towards a cashless economy.	According to the findings, India does not have a position in the top 16 non-cash markets of the world. Although, In comparison with credit cards, there had been an increase in the usage of debit cards at ATMs. Non-cash services such as Immediate Payment Services or M-Wallet had not made a significant impact
Bappaditya Mukhopadhyaya (2016)	Study to estimate the impact of demographic profile on the usage of the digital payment system. An analyze the growth of various non-cash methods.	The study shows that there is an extremely small correlation between cashless payments and education level, and, between cashless payments and income earned. It also shows that a very high positive correlation exists between the people who get the payments in their bank accounts and those who are engaged in cashless payments. Prepaid cards and mobile payments have shown maximum growth
Dr.M Sumathy and Vipin KP (2017)	The research aims to study the determinants of safety perception and the attitude, awareness level of people towards digital payments.	There was no significant difference between the level of awareness towards digital payment systems between males and females. Also, there exists no relationship between the education of the respondents and their level of awareness towards digital payment systems.

Dr. N. Rakesh, Dr. K. Suresh Kumar, Dr. S. Satheesh Kumar (2018)	Research for examining the present scenario of electronic payments and study the range of service facilities that UPI technologies offer.	Electronic transactions have increased in India over the past few years. This could only happen when there is extensive recognition and acceptance of popular instruments such as net banking, credit and debit cards, and e-wallets by the Indians. UPI came out to have a real distinct advantage.
İkram Daştan and Cem Gürler (2016)	This study aims to examine the factors that affect the adoption of mobile payment systems by consumers.	A negative relationship was found between the environmental risk and the perceived trust whereas a positive relationship was found between firm reputation and perceived trust. Perceived usefulness and perceived ease of use are the factors that do not have any effect on the Adoption of a Mobile payment system. Perceived Trust, Perceived Mobility, and Attitude have a positive effect on the adoption of MPS.
Dinesh, T. M., Kiran Kumar Reddy, and Suhasini, K. (2018)	Study for assessing how demonetization has impacted digital payments in India.	The study revealed that there had been a considerable positive effect of demonetization on accepting digital payments which are more visible in RTGS and mobile transactions.
Sevgi Ozkan, Gayani Bindusara and Ray Hackney (2010)	Through theoretical constructs and empirical analysis, this study aims to inspect the critical factors that can ensure consumer adoption of e-payment	The study revealed that three of the critical factors were necessary (security, advantage, web assurance seals) and three were relatively sufficient (perceived risk, trust, and usability) through customer intentions to adopt an e-payment system.
Maryam Barkhordari, Zahra Nourollah, Hoda Mashayekhi, Yoosof Mashayekhi, Mohammad S. Ahangar (2017)	This study investigates the actors influencing trust in e-payments systems	Findings had revealed that technical & transaction procedures and access to security guidelines are some of the significant factors for improving consumers' perceived security, while the most important factors influencing trust are access to security guidelines and security.
Alaknanda Lonare, Anukriti Yadav, Samiksha Sindhu (2018)	This paper aims to understand the variety of factors that are affecting the increase in user proportion and its significance in the adoption of e-wallet and the disparity in user proportion in tier-1 and tier-2 cities.	The study has revealed that the proportion of users in tier-1 cities is more than in tier-2 cities. 'Simplicity' or ease of use turned out to be the only significant variable for e-wallet adoption. Looking from the vendor point of view, the adoption of e-wallet is considerably less than expected.
Subho Chattopadhyay, Payal Gulati, and Indranil Bose (2018)	This study aims to evaluate the awareness of the small retailers for the cashless transaction and its modes. And also aims to understand their difficulties and perceived convenience with it.	No significant difference was found in inconvenience for cash and cashless modes of transactions. Also, it was found that, according to the retailer, it is easier for them to deal with cash compared to the cashless instruments. Efforts are going on towards changing this behavior and attitude towards cashless than to scarcely make awareness.

V. Research Analysis

V.I. PESTEL Analysis of FinTech & RegTech in India

Political	The Government of India has reaffirmed its commitment to the development of India's FinTech Ecosystem. For promoting the adoption of technology innovation, GOI has launched initiatives like Start-ups India, Digital India Program, and Jan Dhan Yojana; over the last five years, the government has launched 50+ schemes to aid the growth of start-ups in India. Eight states have started to foster RegTech startups.
Economic	In India, UPI is vastly active in shifting mobile payment volumes away from wallets. The rise in UPI volume is primarily attributed to third-party payment apps which are working in collaboration with major banks. Paytm, PhonePe, and Google Pay are a few of the top UPI-powered mobile apps that are at forefront of the UPI ecosystem in India. The market share of the government's in-house UPI app: BHIM has continued vastly to be overshadowed by these engineering behemoths. As a result of all of these factors, a positive environment is created for online transactions, with constant development.
Social	For better quality of service, ease of access service, and service diversity, society has more confidence in FinTech/Regtech companies rather than the conventional institutions. people's mindset, on whether they support the changes in society as a whole, is a key player.
Technological	In the Indian payments landscape, UPI is a game-changer, with transaction volume increasing day by day. UPI is driving the growth of mobile payments in India, with 60+ member banks and other major financial institute including third-party players (e.g., Google, WhatsApp, etc.) offering payments through their network. these factors created a favorable environment with constant development.
Environmental	FinTech/Regtech growth has positive effects on the environment as older services that pollute the environment are being replaced by newer ones, which are more environmentally friendly. Because of the large number of start-ups and conventional financial institutions in the FinTech industry, service quality is also improving and filling holes and allowing it to take over niche markets. Essentially, meeting all the development targets sustainably.
Legal	Patents and innovation licenses have made it easy for slow-moving business entities to operate. Consumers expect strict safety regulations for financial services for ensuring the protection of personal information and money. Industry digitalization necessitates advanced authentication, safe access tools, and biometric data adaptation.

V.II. SWOT Analysis of audit & tax automation software

Strength	The entire platform operates in a cloud platform so the audits can be performed remotely from anywhere, anytime. Controlled audit workflow and audit-related activity handled in a single unified platform facilitating a controlled auditing process
Weakness	Bugs, as of now, remains a common source of software security issue. Unfortunately, almost all software generally contains bugs of different types. These can be relatively minor, like the incorrect rendering of print output or an improperly formatted message. Or, they can be of high significance, like impacting a user's ability to log in or even causing complete system failure. Some software and web applications do not protect sensitive data which includes, financial data, health information, and other critical data such as passwords and usernames, making this information available to hackers.
Opportunities	Cloud-based solutions, and more specifically cloud accounting software, is widely present around for the last decade, and are seeing significant growth due to a variety of reasons; most notably due to a shift and prioritization of resources from hardware to cloud.
Threats	Consumers Have Reduced Visibility and Control: When transitioning assets/operations to the cloud, organizations lose little visibility and control over the operations. When using external cloud services, the responsibility for some of the policies and infrastructure moves towards CSP. The actual shift of responsibility varies and depends on the cloud service model used, leading to a paradigm shift for the agencies about security monitoring and logging.

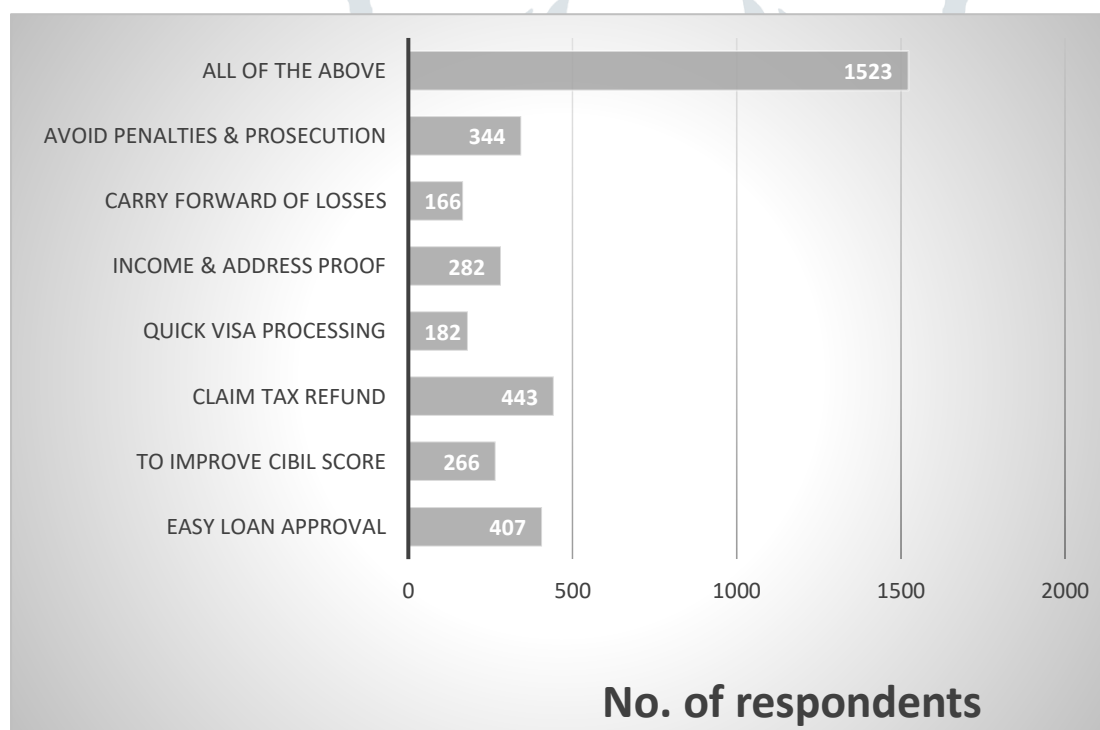
VI. Result Analysis

When participants were asked what are the benefit, they get by filing IT Return, Claiming Tax refunds on top of the list followed by Easy loan approval, which is a big issue for the Indian middle class. contrary to that Quick Visa Processing and Carry forward of losses are at the bottom of the Priority list and the reason behind this is that only 5.5% of Indians have a passport and thus visa is not a priority in the country. It is also important to note that 42.2% of people went for all the above options which implies that most of the population are enjoying multiple benefits of filing ITR.

TABLE I: Benefits Participants get by filing IT return

Answers	No. of responses	percentage
Easy Loan Approval	407	11.2
To Improve CIBIL Score	266	7.3
Claim Tax refund	443	11.9
Quick Visa Processing	182	5
Income & Address proof	282	7.8
Carry forward of losses	166	4.6
Avoid penalties & prosecution	344	9.5
All of the above	1523	42.2
Total	3613	100

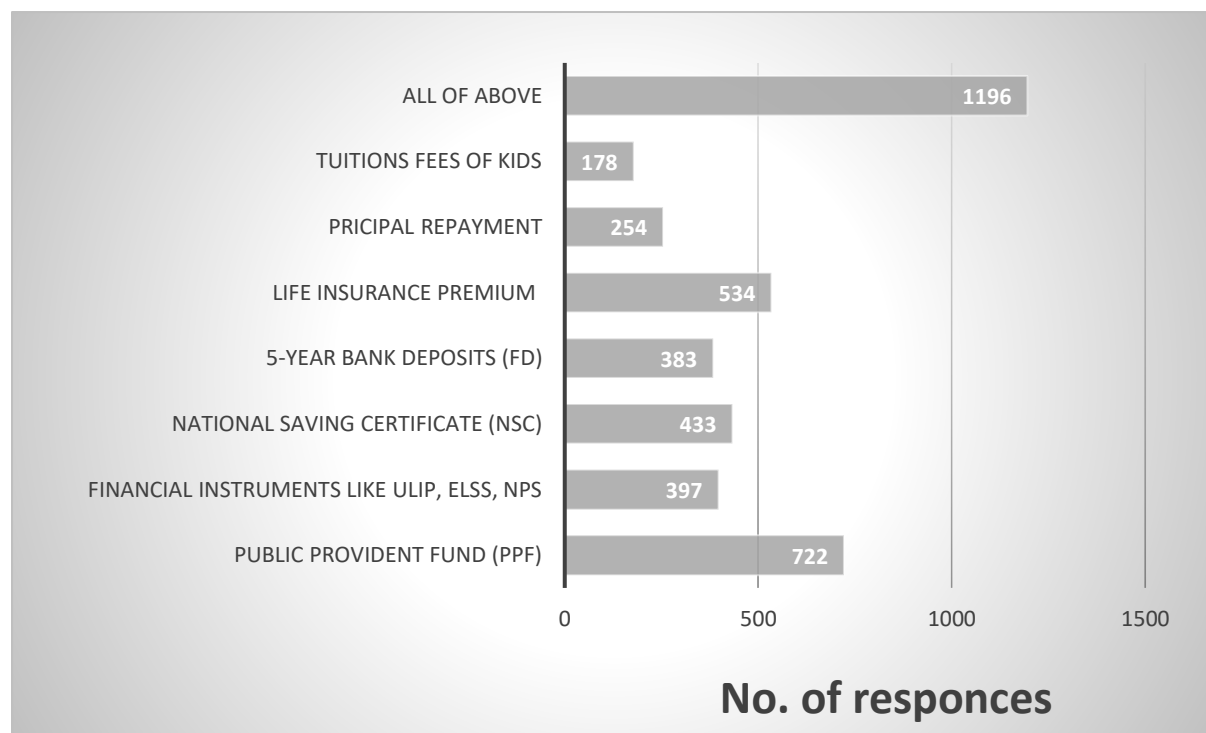
CHART III: Benefits Participants get by filing IT return



When participants were asked what method, they prefer for getting a tax deduction, people mainly choose PPF as a tax deduction investment with 17.6% of people is going for PPF followed by NSC by only 10.5%. and the main reason is throughout the timeline, PPF had a much higher interest rate compared to NSC. It is also important to notice that only 4.3 percent of people use "tuition Fees of kids" to get an income tax deduction, and the main reason is not that people are not showing the investment but they are putting it with all other investments as survey shows 29.2% people have opted for "all of the Above" option and we can also conclude from it that majority of people don't only depend on one type of investment to get the tax deduction.

TABLE II: Preferred methods for getting a tax deduction

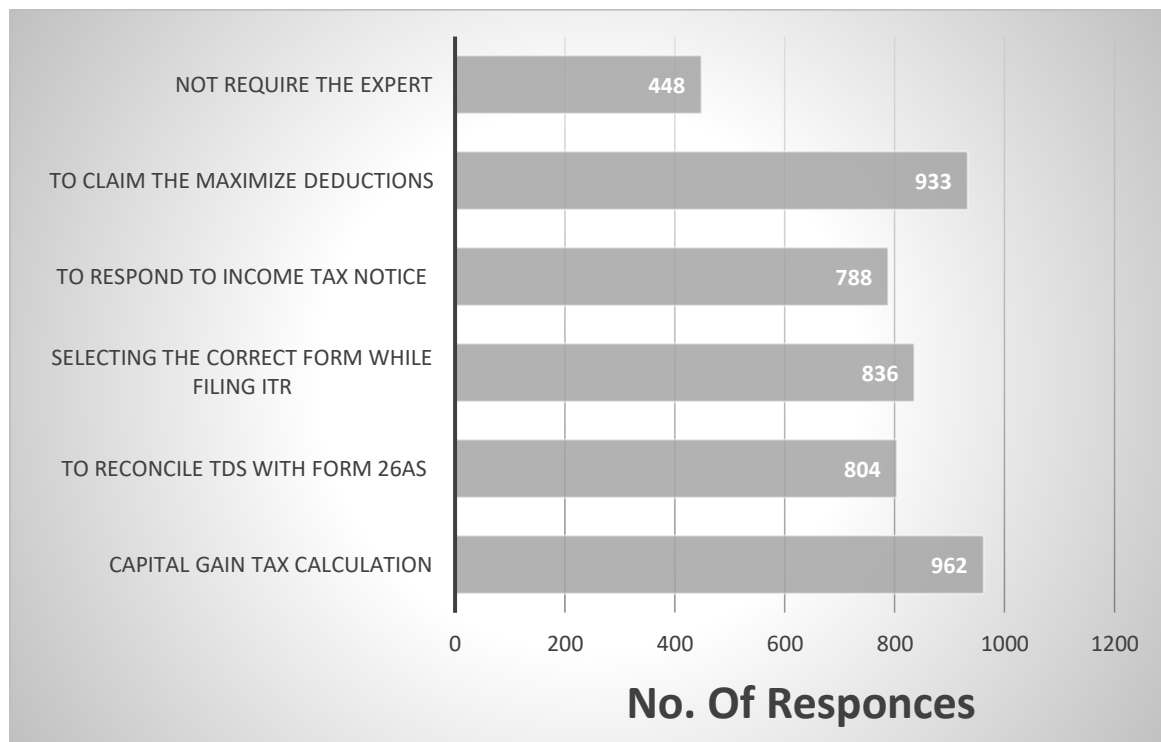
Answers	No. of responses	Percentage
Public Provident Fund (PPF)	722	17.6
Financial Instruments like ULIP, ELSS, NPS	397	9.6
National Saving Certificate (NSC)	433	10.5
5-year Bank Deposits (FD)	383	9.35
Life Insurance Premium	534	13
Principal payment	254	6.2
Tuitions Fees of Kids	178	4.3
All of Above	1196	29.2
Total	4097	100

CHART IV: Preferred methods for getting a tax deduction

When submitting income tax forms, consumers appear to be more concentrating on capital gain tax calculations and claiming maximum deductions. Only 10.3 percent of respondents stated that specialists are not required for consulting purposes

TABLE III: Concerns while filing IT return

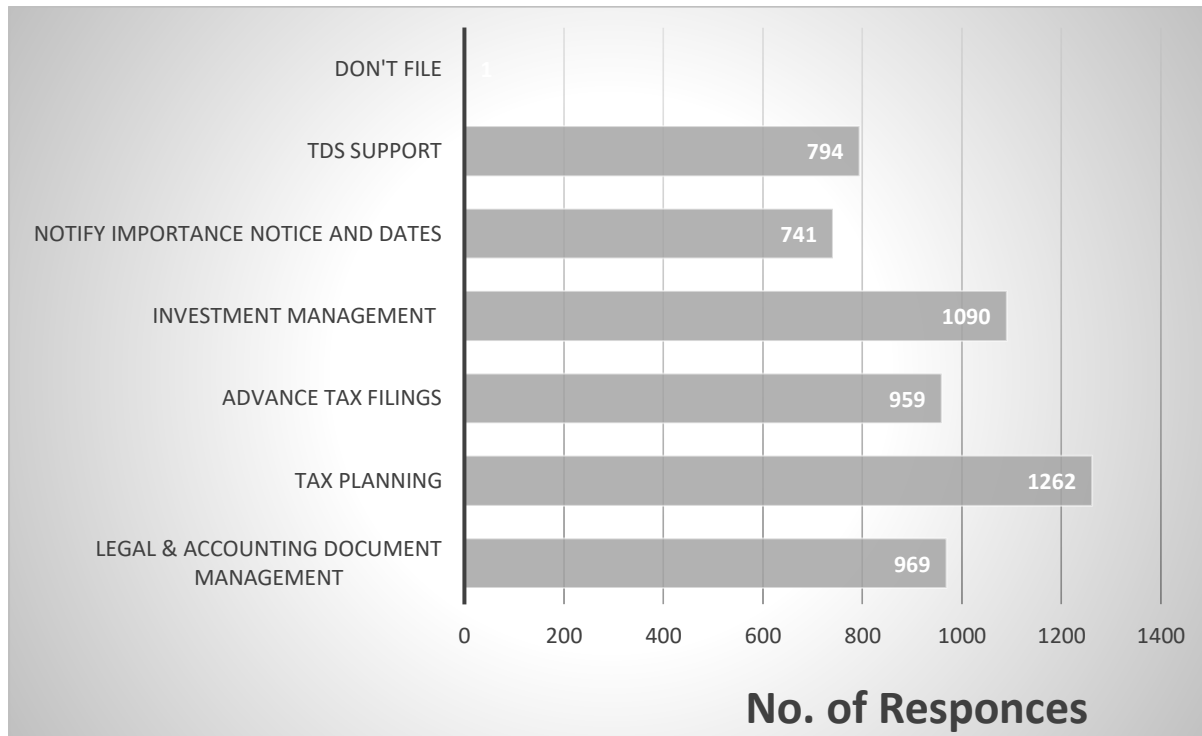
Answers	No. Of Responses	Percentage
Capital Gain tax calculation	962	20.1
To Reconcile TDS with Form 26AS	804	16.8
Selecting the correct form while Filing ITR	836	17.5
To respond to the income tax notice	788	16.5
To claim the maximized deductions	933	19.5
Not require the expert	448	10.3
Total	4771	100

CHART V: Concerns while filing IT return

Customer preferences in the case of tax filing are represented by the below chart, with a primary focus on tax planning and investment management, followed by advance tax filings and legal and accounting document management. TDS Support & Notify important notices and dates are the least popular options among respondents.

TABLE IV: Customer preferences in case of tax filing

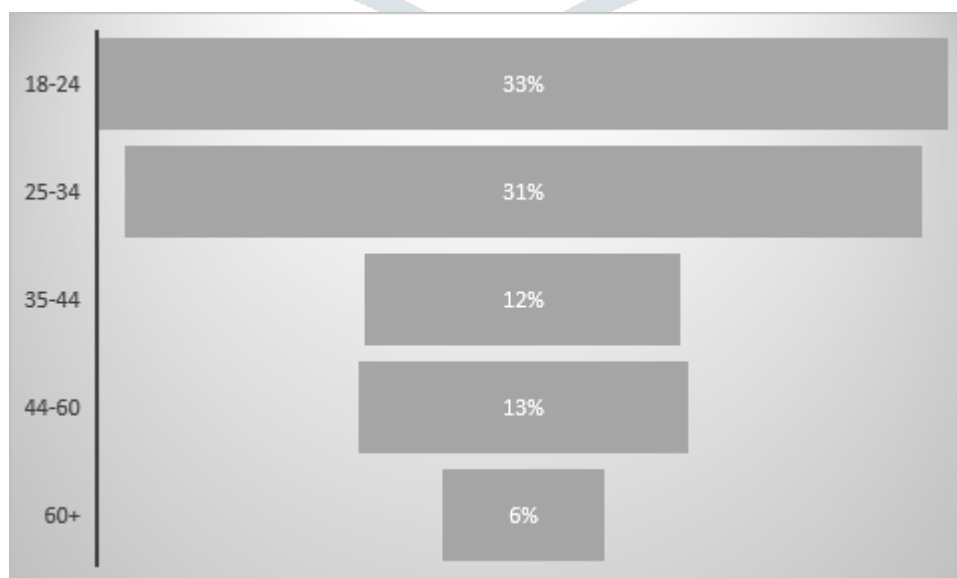
Answers	No. of Responses	Percentage
Legal & Accounting Document Management	969	16.6
Tax planning	1262	21.7
Advance Tax Filings	959	16.4
Investment Management	1090	18.75
Notify Importance notice and dates	741	12.75
TDS support	794	13.6
Don't file	1	0.0001
Total	5816	100

CHART VI: Customer preferences in case of tax filing

Data given in the below table shows the attitude of people of a particular age group towards online payment systems. It was found that people between the age of 18-24 are more likely to use automation software compared to people of other age groups

V: Attitude of Participants of a particular age group towards automation software

Age Group	no of participants	prefer automation software	Percentage
18-24	1172	387	33%
25-34	727	225	31%
35-44	187	23	12%
44-60	211	27	13%
60+	47	3	6%

CHART VIII: Attitude of Participants of a particular age group towards automation software

We perform a test to see whether people of every age group have a higher approach towards the tax automation software:

For this test, we considered two hypotheses:

H0: People Below the age of 35 has lower chances of using a Tax automation software as people above (and equal) the age of 35

H1: People Below the age of 35 have a significantly higher chance of using Tax automation software compared to people above (and equal) the age of 35

TABLE VI: Statistical Analysis

Column1	Below 35	Above 35
Mean	0.32	0.103333333
Variance	0.0002	0.001433333
Observations	2	3
Hypothesized Mean Difference	0	
Df	3	
t Stat	9.01387819	
P(T<=t) one-tail	0.00144142	
t Critical one-tail	2.35336343	
P(T<=t) two-tail	0.00288284	
t Critical two-tail	3.18244631	

As P-value is greater than T- Critical two-tail, we Reject **H0** we conclude that: People Below the age of 35 have a significantly higher chance of using a Tax automation software compared to people above (and equal) the age of 35

VII. Conclusion

India is no longer lagging behind other countries in joining the digital payment revolution. Digital payments have taken off in India and it's unlikely to slow down in the future. With the demonetization of the highest currency notes in the country by the government of India and the incentives provided for the adoption of digital payment systems by lowering fees and waiving taxes, Indian people are embracing digital payments enthusiastically. Alternatively, as demand for digital payments increases, so will anxiety for security. It is eventually up to the government and companies promoting digital alternatives to cash to provide enough security for their services, furthermore, consumers to maintain good security habits. There are numerous factors including simplicity to use, perceived Usefulness with digital payment systems, convenience (i.e. payment anywhere and anytime 24*7), the fast-growing smartphone penetration in the country, growth of non-banking payment institutions (payments bank, digital wallets, etc.), progressive regulatory policies and escalating consumer readiness to the digital payment platform which lead to the exponential growth of the Digital payments in India. UPI, Aadhar linked electronic payments, and improvement of the digital infrastructure are the others key drivers of Digital payments and are being game-changer.

From the PASTEL analysis, we have found that the policies of the Government of India are smoothing the way for the digitization of the financial sector. The introduction of BHIM & UPI and the rapid widespread of the internet has paved the way for the digitalization of the Fintech & RegTech sector.

SWOT analysis of audit & tax automation software reveals that with the help of cloud-based technology present in automation software tax returns can be filed from any place using any device but bugs and hackers remain a big concern which is expected to improve with time with the development of new and improve security technology. Although government policies and people's attitudes towards this software can be a barrier to the growth of the sector.

Based on the statistical analysis we found that people below the age of 35 are more likely to use automation software compared to people above the age of 35. This indicates that the young generation is quickly adapting to digital technology.

VIII. Acknowledgement

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IX. Reference

- AxiomSL. (2019). About AxiomSL. Retrieved from <https://www.axiomsl.com/company/>
- Associates. (2020). RT Directory. Retrieved from <https://www.directory.com>
- <https://corporatefinanceinstitute.com/resources/knowledge/finance/fintech-financial-technology/>
- <https://www.investopedia.com/terms/f/fintech.asp>
- Alaknanda Lonare, Anukriti Yadav, Samiksha Sindhu (2018)
- Agarwal, S., Chen, V. Y., and Zhang, W. (2016), 'The information value of credit rating action reports A textual analysis', *Management Science* 62 (8): 2218–2240.
- Akerlof, G. A. (1978), 'The market for "lemons": Quality uncertainty and the market mechanism', *The Quarterly Journal of Economics* 84 (3): 488–500.
- Allen, F., Gu, X., and Jagtiani, J. A. (2020), 'A survey of fintech research and policy discussion', FRB of Philadelphia Working Paper No. 20-21, available at SSRN: <https://ssrn.com/abstract=3622468>.
- Alvesson, M. and Deetz, S. (2000), *Doing Critical Management Research*, SAGE Publications.
- Balyuk, T. (2019), 'Financial innovation and borrowers: Evidence from peer-to-peer lending', Rotman School of Management Working Paper No. 2802220, available at SSRN: <https://ssrn.com/abstract=2802220>.
- Bappaditya Mukhopadhyaya (2016), *Understanding cashless payment in India*.
- Balyuk, T. and Davydenko, S. A. (2019), 'Reintermediation in FinTech: Evidence from online lending', available at SSRN: <https://ssrn.com/abstract=3189236>.
- Bao, Y. and Datta, A. (2014), 'Simultaneously discovering and quantifying risk types from textual risk disclosures', *Management Science* 60 (6): 1371–1391.
- Berg, T., Burg, V., Gombović, A., and Puri, M. (2018), 'On the rise of fintech—Credit scoring using digital footprints', NBER Working Paper No. w24551, available at SSRN: <https://ssrn.com/abstract=3170770>.
- Biais, B., Bisiere, C., Bouvard, M., and Casamatta, C. (2019), 'The blockchain folk theorem', *The Review of Financial Studies* 32 (5): 1662–1715.
- Biais, B., Foucault, T., and Moinas, S. (2015), 'Equilibrium fast trading', *Journal of Financial Economics* 116 (2): 292–313.
- Brogaard, J., Hendershott, T., and Riordan, R. (2014), 'High-frequency trading and price discovery', *The Review of Financial Studies* 27 (8): 2267–2306.
- Brummer, C. and Yadav, Y. (2019), 'Fintech and the innovation trilemma', *Georgetown Law Journal* 107 (2): 235–307.
- Buchak, G., Matvos, G., Piskorski, T., and Seru, A. (2018), 'Fintech, regulatory arbitrage, and the rise of shadow banks', *Journal of Financial Economics* 130 (3): 453–483.
- Budish, E., Cramton, P., and Shim, J. (2015), 'The high-frequency trading arms race: Frequent batch auctions as a market design response', *The Quarterly Journal of Economics* 130 (4): 1547–1621.
- Buehlmaier, M. M. and Whited, T. M. (2018), 'Are financial constraints priced? Evidence from textual analysis', *The Review of Financial Studies* 31 (7): 2693–2728.
- Burtch, G., Ghose, A., and Wattal, S. (2013), 'An empirical examination of the antecedents and consequences of contribution patterns in crowd-funded markets', *Information Systems Research* 24 (3): 499–519.
- Burtch, G., Ghose, A., and Wattal, S. (2016), 'Secret admirers: An empirical examination of information hiding and contribution dynamics in online crowdfunding', *Information Systems Research* 27 (3): 478–496.
- Butler, A. W., Cornaggia, J., and Gurun, U. G. (2017), 'Do local capital market conditions affect consumers' borrowing decisions?', *Management Science* 63 (12): 4175–4187.
- Cambridge Centre for Alternative Finance (2020), 'The Global Alternative Finance Market Benchmarking Report', available at https://www.jbs.cam.ac.uk/fileadmin/user_upload/research/centers/alternative-finance/downloads/2020-04-22-ccaf-global-alternative-finance-market-benchmarking-report.pdf.
- Chaboud, A. P., Chiquoine, B., Hjalmarsson, E., and Vega, C. (2014), 'Rise of the Machines: Algorithmic trading in the foreign exchange market', *The Journal of Finance* 69 (5): 2045–2084.
- Chava, S., Paradkar, N., and Zhang, Y. (2017), 'Winners and losers of marketplace lending: Evidence from borrower credit dynamics', Georgia Tech Scheller College of Business Research Paper No. 18-16, available at SSRN: <https://ssrn.com/abstract=3178322>.
- Chemla, G. and Tinn, K. (2020), 'Learning through crowdfunding', *Management Science* 66 (5): 1783–1801.
- Dinesh, T. M., Kiran Kumar Reddy, and Suhasini, K. (2018), Dinesh, T. M., Kiran Kumar Reddy, and Suhasini, K. (2018)
- Dr.M Sumathy and Vipin KP (2017), *Digital payment systems: Perception and concerns among urban consumer*
- Dr. N. Rakesh, Dr. K. Suresh Kumar, Dr. S. Satheesh Kumar (2018) *UPI-THE GROWTH OF CASHLESS ECONOMY IN INDIA*
- İkrām Daştan and Cem Gürlü (2016), *Factors Affecting the Adoption of Mobile Payment Systems: An Empirical Analysis*.
- Maryam Barkhordari, Zahra Nourollah, Hoda Mashayekhi, Yoosof Mashayekhi, Mohammad S. Ahangar (2017), *Factors influencing adoption of e-payment systems*
- Pardhasaradhi Madasu (2015), *India's progress towards a cashless economy*
- Sevgi Ozkan, Gayani Bindusara and Ray Hackney (2010), *Towards successful e-payment systems: An empirical identification and analysis of critical factors*
- Subho Chattopadhyay, Payal Gulati, and Indranil Bose (2018) *Awareness and Participation of Small Retail Businesses in Cashless Transactions: An Empirical Study*