

Innovate X- Case Study 1

Problem Statement & Purpose

Filing income tax returns (ITR) can be intimidating for many individuals, particularly those who are unfamiliar with the range of deductions and exemptions available. This situation results in:

1. Errors & missed opportunities for tax savings.
2. Anxiety around tax filing & noncompliance.

To tackle this challenge, we propose developing an AI-powered income tax filing application tailored for individual users in India. The main objectives are:

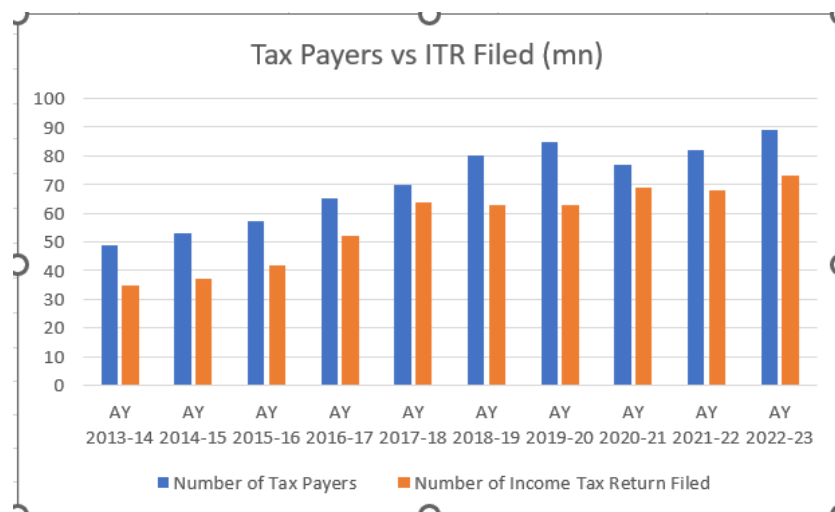
1. Educate the user on tax saving strategies/planning.
2. Simplify the tax filing process and provide personalized assistance.

Problem Discovery

Market Size of the Workforce / Tax Payers in India

Past Growth & Current State

The number of income tax returns filed in India rose from 35 million in the assessment year 2013-14 to 73 million in the assessment year 2022-23, marking a growth of 52%. Concurrently, the count of taxpayers identified by the Income Tax Department increased from 49 million in AY 2013-14 to 89 million in AY 2022-23, reflecting a growth of 45%.

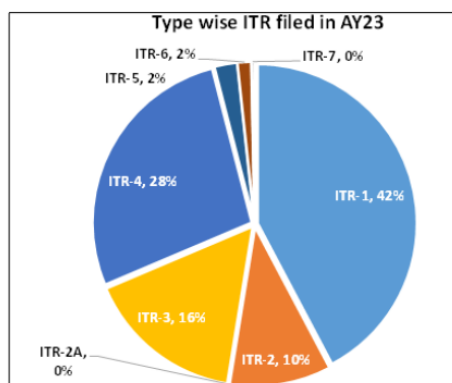


Geographic Distribution of Taxpayers in India

The following 13 states contribute approximately 90% of India's tax collection (both direct and indirect), indicating that a significant portion of economic activity occurs within these states.

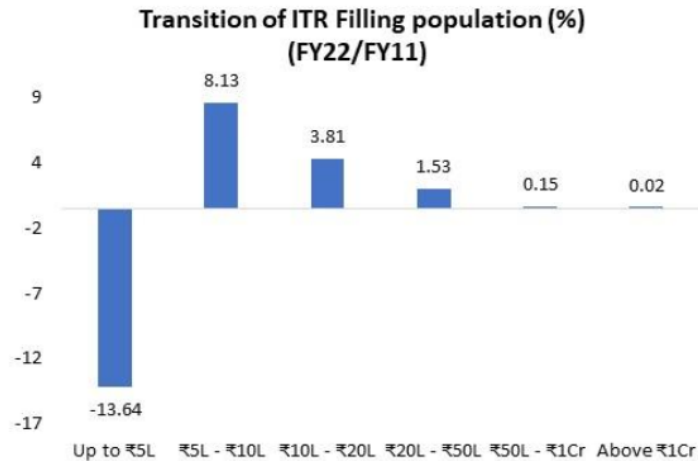
State	AY2021-22 (Amt in Cr)	AY2022-23 (Amt in Cr)
Maharashtra	5,24,497.65	6,05,268.35
Uttar Pradesh	34,719.83	37,983.05
Gujarat	71,642.27	85,018.91
Rajasthan	25,215.64	30,609.56
West Bengal	53,774.61	55,560.62
Tamil Nadu	88,438.33	1,07,063.82
Karnataka	1,68,678.09	2,08,168.88
Andhra Pradesh	56,663.27	57,324.09
Delhi	1,77,824.22	2,21,522.20
Haryana	37,729.33	45,649.85
Telangana	27,184.95	35,433.56
Odisha	15,587.24	19,590.40
Punjab	15,981.11	17,271.44

Distribution of tax payers by category



Different types of ITRs		
ITR type	Filed by	Income and its source
ITR-1	Resident individuals/HUF	Income <= 50 lakhs, salary, pension, one house property
ITR-2	Resident individuals/HUF	Income > 50 lakhs, capital gains, more than one house property, foreign income/foreign asset, crypto income
ITR-3	Individual or HUF, partner in a Firm	Earn money from the intraday stock exchange or futures and options trading, revenue from jobs, real estate, capital gains, company or trade (including presumptive income), and other sources
ITR-4	Individual, HUF, Firm	Income < 50 lakhs, salary, pension, one house property, presumptive income
ITR-5	Partnership Firm/ LLP	Profits from their businesses and professions, as well as some other sources of income
ITR-6	Company	report revenue from industry or occupation, as well as all other forms of income
ITR-7	Trust, scientific research association, and others who come under Section 139(4A), Section 139(4B), Section 139(4C), Section 139(4D), Section 139(4E), or Section 139(4F)	-

Last Decade Growth - Lower Middle-Income Class Move to Middle and Upper Class



India's income distribution is shifting upwards! A recent report by the State Bank of India (SBI) shows a positive trend:

- **13.6%** of people who filed income tax returns in AY23 (assessment year 2022-23) were in a higher income bracket compared to AY12 (assessment year 2011-12).
- The biggest jump, **8.1%**, was seen in the Rs. 5 lakh to Rs. 10 lakh income group.

The report also breaks down the increase across different income categories:

- Rs. 5 lakh - Rs. 10 lakh: **8.1%** increase
- Rs. 10 lakh - Rs. 20 lakh: **3.8%** increase
- Rs. 20 lakh - Rs. 50 lakh: **1.5%** increase
- Rs. 50 lakh - Rs. 1 crore: **0.2%** increase
- Above Rs. 1 crore: **0.02%** increase

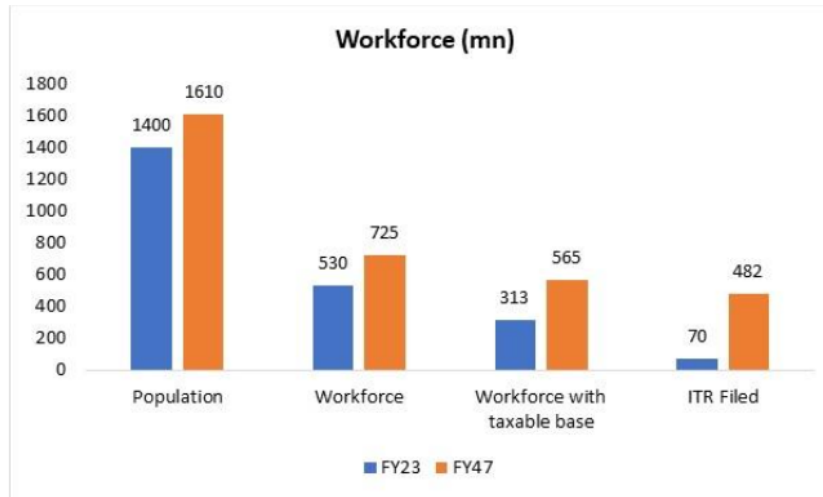
This suggests a growing middle class in India, with more people moving into higher income brackets.

Future Prospects

Indian population is expected to increase to 1610 million in FY47 from 1400 million in FY23. Correspondingly, our workforce is expected to increase to 725 million in FY47 from 530 million in FY23.

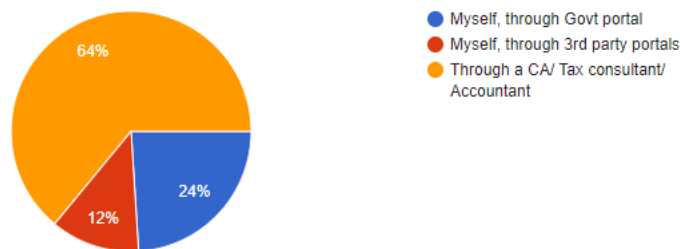
Workforce with taxable base is expected to increase to 565 million in FY47 from 313 million in FY23, increasing its share from 59.1% in FY23 to 78% in FY47

ITR filers are expected to increase from 70 million in FY23 to 482 million in FY47, increasing its share in workforce with taxable base from 22.4% in FY23 to 85.3% in FY47.



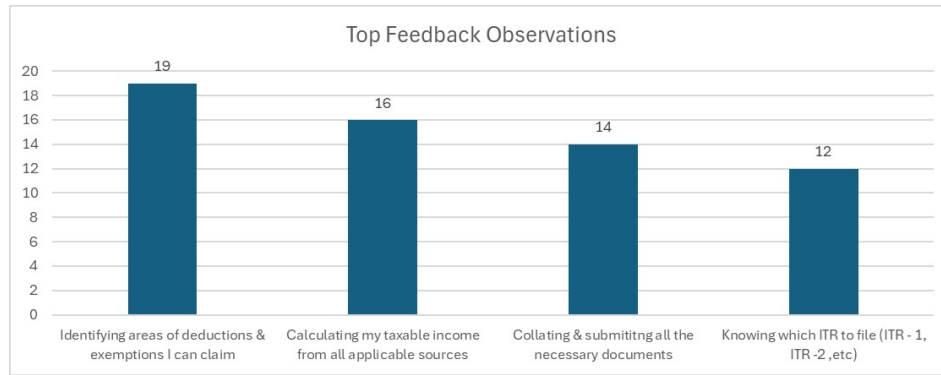
Based on the data forecasts the market size of ITR filings is projected to grow multifold in the years to come.

Primary Research - User Feedback



Based on our primary research of 25 responses, 64% of respondents file their taxes through a CA, tax consultant, or accountant. Meanwhile, 24% use the government portal, and 12% rely on third-party portals.

Over 40% of taxpayers report finding the tax filing process challenging. This difficulty arises from various factors. Based on the primary research conducted, out of 25 responses, the top three challenges the users face are:



1. Identifying areas of deductions & exemptions - Many taxpayers are unaware of the full range of deductions and exemptions available to them, including numerous lesser-known benefits provided under various sections of the tax code. This lack of awareness can result in missed opportunities for significant tax savings.

2. Calculating my taxable income from all applicable sources - Under the heads of income, several types of income are tax-free, and certain deductions and exemptions apply to others. Accurately computing taxable income in such scenarios becomes challenging. For instance, you may receive income from multiple sources such as fixed deposit interest, rental income from property, savings account interest, and short-term/long-term capital gains. Keeping track of these various income sources to compute taxable income can be quite complicated.

3. Collating & submitting all the necessary documents - Gathering and organizing income proofs, investment documents, receipts for deductions, and other tax-related documents is a demanding task. Ensuring timely submission and adherence to regulations is crucial to avoid penalties.

Additional Feedbacks

1) **Inclusion in Education System** : Tax Payers feel that the tax planning should be mandated as a part of education system.

2) **Simplifying Tax Norms**: A constant request was to super simplify the taxation laws for ease of understanding and filing purposes.

Competitor Analysis

COMPETITOR ANALYSIS			
Competitor Analysis	ClearTax	TaxBuddy	Tax2Win
Registered Users	60Lakh+	10Lakh+	10Lakh+
Type of Services	Assisted & Expert Guided	Assisted & Expert Guided	Assisted & Expert Guided
Pricing	Rs 499 - Rs 6999	Rs 499 - Rs 3799	Rs 499 - Rs 7499
Popular Features	Expert Assistance	Buddy Engagement	Notice Management

Features	Cleartax	TaxBuddy
Live chat support	✓	Standard BOT engagement
Dedicated relationship manager	✓	-
Response within an hour	✓	-
Revised ITR return - ITR U filing	✓	-
Live End to End filing over video call	✓	Live filing not supported
Multi-channel document collection	✓	✓
Curated ITR plans for all kinds of income	✓	✓
Follow up emails	✓	✓
Follow up calls	✓	✓
Tax notice management	✓	✓

Negative Experiences captured

Clear Tax

1. Ineffective call center response.
2. Limited availability of optional services.
3. Inability to access past data after subscription expiry.

TaxBuddy

1. Delayed processing of refund claims.
2. Unresponsive customer support.
3. Integration issues affecting comprehensive tax filing.
4. Insufficient expertise among customer service representatives.

Tax2Win

1. Unresponsive customer service.
2. Inconsistent follow-up with customers/active users.

User Personas

Below is the set of users that we have identified to baseline our solution proposition.

User Persona



Name	Attharv Sardesai	Arjun Hariharan	Akanksha Garg	Unnati Nakra	Shravan Tickoo
Age	23	26	31	40	51
Gender	Male	Male	Female	Female	Male
Occupation	Software Developer	UX Designer	Technical Lead	Sr Operation Manager	Director Of Strategy
Educational Qualifications	CDAC	BTech	MCA	MBA-Operation	INSEAD - ExMBA
Location	Non Metro	Non Metro	Metro	Metro	Metro
Salary	11 LPA	17 LPA	23 LPA	35 LPA	55 LPA
Earning Sources	Salary	Upwork, Cash, \$ Earnings	Salary + MFs +Rental Income	Salary + Land Sale + Stock Sale	Salary + Dividends on Company Shares + Stock Sale + MF + AirBnb rentals
General Profile	An avid social media user, Loves to be trendy and fashionable, Believes in living in the moment and a high spender	Living in a rented apartment, Paying of Educatoin Loan (10 Lakhs)	Married, Recently became a mother	Married and has 2 Kids	Divorced
Goals	Wants to buy the latest PS 5 (50 k)	Planning to establish his own creative agency in the coming year	Plans to buy a home	Wants to minimize Tax liabilities	Esablished Airbnb host
Behaviour/Belief System	Does not believe in savings/investments	Focused on building wealth, Tech Savy	Believes in saving money more than building wealth, Does not trust anyone with money matters	Investment Enthusiast, Always looking out for high yield investment opportunities,	Recently invested in a startup which is growing by 230 %
Pain Point	Suddenly taken aback by the tax liability and is unprepared to handle the ITR process	Focused on increasing earnings, revenue. Not aware of tax regulations/implications	Regular tax payer, understands basics of tax payments but gets stuck beyond salary taxes	Trying their hand at stocks and faced huge losses	Planning retirement from job environment and about to setup a hospitality unit for managing lucury airbnb units. Does not have the patience to perform manual tax filings

User Pain Points:

Benefits Ladder Approach (Explained in descriptive tables)

From our qualitative and quantitative research, we have identified and grouped the pain points into related issues and challenges that users commonly face.

Theme 1: Streamlining Your Taxes: Proactive Tax Planning

Real Life Use Case

Success brought Sarah, a marketing manager, a whirlwind of income: salary, freelance gigs, dividends, and rent. Yet, tax season was a storm. Estimating taxes was a guessing game, leaving her stressed and unprepared. Deductions and exemptions were a mystery, and whispers of NPS and PPF offered hope, but their details were unclear. Tax time: a yearly headache for Sarah, longing for simpler financial seasons.

Feedback	Customer Benefit	Strategic Solution of Theme
1. Difficulty estimating tax liabilities: Many users struggle to predict their tax bills, leading to financial stress and poor preparation. Managing income from various sources (salary, freelance work, investments, etc.) adds complexity. 2. Limited knowledge of tax-saving strategies: Users often miss out on deductions, exemptions, and government schemes like NPS or PPF due to a lack of awareness. Understanding optimal tax-saving strategies based on individual circumstances is a challenge.	1. Accurate Tax Liability Forecasting: Benefit: Users can predict their tax liabilities with confidence, allowing for better financial preparation and reduced stress. 2. Personalized Tax-Saving Strategies: Benefit: Users can identify and leverage all applicable deductions, exemptions, and government schemes, maximizing their tax savings. 3. Ongoing Tax Education and Awareness: Benefit: Users gain increased knowledge of tax laws and strategies, enabling them to make informed financial decisions. 4. Engagement and Rewards for Tax Planning: Benefit: Users stay motivated and actively engaged in proactive tax planning through reminders, rewards, and a supportive community. 5. Access to Expert Advice: Benefit: Users can receive personalized guidance from tax consultants, enhancing their tax planning and ensuring compliance. 6. Community and Continuous Learning: Benefit: Users can continuously improve their tax	1. Feel Confident: Users will feel confident in their tax planning and filing capabilities. 2. Stay Engaged: Continuous engagement through reminders, rewards, and community interaction will ensure users stay active in their tax planning. 3. Become Knowledgeable: Personalized learning paths and educational content will help users become more knowledgeable about taxes. 4. Get Support: Access to private tax consultants and a supportive community will provide users with the necessary assistance and motivation.

Feedback	Customer Benefit	Strategic Solution of Theme
	planning knowledge through access to educational content and interaction with a supportive community.	

Theme 2: Navigating the Maze: Tax Filing Challenges

Real Life Use Case

April's arrival brought dread, not delight, for Sarah. Marketing campaigns were her forte, tax forms her Vulnerability. ITR? Old regime or new? Reconciling income with cryptic codes (AIS, TIS?) felt like defusing a bomb. Mountains of receipts, confusing portals - tax season was an annual battle against chaos, leaving Sarah yearning for a simpler tax time.

Feedback	Customer Benefit	Strategic Solution of Theme
1. Choosing the right ITR form and tax regime: The variety of ITR forms based on income type and other factors needs to be clarified. Deciding between the old and new tax regimes, with their differing deductions and rates, requires careful analysis. 2. Reconciling income and investments: Ensuring records align with data from tax documents like AIS (Account Information Statements), TIS (Tax Information Statements), and Form 26AS is a complex and time-consuming process. 3. Document collating and submission: Gathering and organizing income proofs, investment documents, receipts for deductions, and other tax-related documents is a demanding task. Meeting deadlines and adhering to regulations are crucial to avoid penalties.	1. Accurate Form Selection - Ensure the correct ITR form and tax regime are chosen based on personal financial circumstances. Benefit: Minimize errors and confusion when filing, ensuring compliance with the correct tax regulations. 2. Streamlined Document Reconciliation - Seamlessly align income and investment records with official tax documents. Benefit: Save time and reduce the risk of discrepancies and errors. 3. Simplified Document Submission - Easily gather, organize, and submit all necessary tax documents. Benefit: Avoid penalties and ensure timely filing with a more manageable process.	1. Simplified Tax Filing Process Implement AI-Powered Insights and Guidance 2. Enhanced User Experience Introduce Automated Document Handling 3. Error Prevention and Correction Deploy AI-Based Error Detection 4. User Education and Empowerment Introduce Interactive Guidance Tools 5. Customer Support and Assurance Provide Expert Consultation 6. Data Security and Compliance Implement Secure Document Management

Theme 3: Beyond the Finish Line: Post-Filing Considerations

Real Life Use Case

Relief turned to worry for Sarah after submitting her taxes. Days of panicking over notifications led to a dreaded "Non-Compliance Notice." Research and a resubmission later, relief finally arrived with an "Acknowledgement." A stressful lesson: planning saves heartache.

Feedback	Customer Benefit	Strategic Solution of Theme
1. Uncertainty after filing: Users often experience anxiety after filing their taxes, frequently checking portals for confirmation of submission and tracking refunds.	1. Check the accuracy of my tax return Benefit: Receive automated updates via email, SMS, and notifications about the status of tax returns, ensuring peace of	1. Enhanced Post-Filing Confidence Automated Status Updates: Stay informed effortlessly with timely notifications on tax return status via email, SMS, and app alerts.

Feedback	Customer Benefit	Strategic Solution of Theme
2. Dealing with filing errors: Errors in filing can result in compliance notices with unclear explanations. Users need guidance on understanding errors, resubmitting their ITR if necessary (Income Tax Return), and correcting mistakes to avoid penalties.	mind and reducing uncertainty post-filing. 2. Reduce my Audit Risk Benefit: Receive step-by-step guidance on responding to audit requests, including assistance in gathering and submitting necessary documents, thereby reducing the risk of compliance issues.	2. Timely Compliance Management Personalized Deadline Reminders: Never miss a filing deadline with proactive reminders tailored to your tax obligations. 3. Streamlined Audit Readiness AI-Powered Audit Assistance: Navigate audit requests confidently with AI-guided support for document submission and compliance management.

Assumptions

Below are the assumptions that we are taking:

Assumption 1: Taxpayers often underestimate their tax bill due to limited knowledge and lack of financial literacy.

Hypothesis 1: By aggregating income sources, understand the user goals and estimating the users tax liability, a personalized tax-saving recommendation system will lead toward the increased utilization of platform which helps user to understand tax planning, estimate their possible deductions, how to avail exemptions and do the tax saving via financial planning.

From the research out of 1068 respondents 63% of respondents strongly disagreed that income tax compliance has been simplified over the time. This shows the disagreement with simplification of tax planning and suggests that taxpayers struggle with understanding aspects of their taxes like tax estimation, available tax-saving strategies etc.

Assumption 2: Confusing ITR forms & tax regimes make filing time-consuming & error-prone, hurting user adoption for existing tax platforms.

Hypothesis 2: An AI-aided platform that automatically fetches information from various tax filing documents in one click and aligns this information under the correct sections of the tax filing forms will eliminate the chances of errors during filing. Automating the tax filing process with manual review and edit options, AI recommended insights during filing for tax saving will help users to fast tax filing experience, early tax returns maximize the tax saving in case user have not done the proper financial planning will leads for attract customer in platform.

Cleartax	Tax2win
Customer base=20,00,000+	Customer base = 1,000,000+

Total tax filer in India are 7.4 Crores. And combined customer base of these two platforms is over 30 lacs which is still is approximately 4.05% of total tax payers population in India.

Assumption 3: Third-party tax filing platforms gain user trust, competing with traditional methods like ITR websites, CAs, and tax firms.

Hypothesis 3: Market analysis of existing 3rd party filing platforms in India shows that existing customers base of these platforms have good user experience of tax filing despite the limitation of AI powered features for tax planning and filing. This indicates if users switch from traditional filing options to 3rd party platforms helping for tax filing have good user experience. And this can be further enhanced by AI powered intelligent tools.

Cleartax	Tax2win
Android App Rating: 4.5 starts Total Review: 14.9K + iOS App Rating: 4.7 starts Total Review: 800 +	Android App Rating: 4.7 starts Total Review: 8K + iOS App Rating: 4.3 starts Total Review: 300 +

Assumption 4: Users struggle and feel stressed with non-compliance notices.

Hypothesis 4: Due to lack of trained AI model, which can analyse the user's financial documents for understanding their income sources, accurately calculate their tax liabilities, and help them filing tax with mandatory needed documentation leads towards the post tax file non-compliance notices. Our trained AI model will identify the gaps between submitted documents and assist users to use the right documents to avoid post file non-compliance notices.

Assumption 5: Gamification boosts engagement.

Hypothesis 5: Celebrate the milestones like learning a tax and financial planning via watching a lesson/series of video content, reading blogs, successfully filled the tax, received the return etc. with rewards like leaderboards, coupons, cashback, badges, free access to some paid features for limited time, in app currency etc.

- In 2019, Gpay's gamification boosted app traffic by a whopping 40%.

Additional Assumptions

Pricing

Pricing will play an important role in competing with the traditional competitor like CA's due to the human touch factor. For the 3rd party portal like ours price can be kept premium with advanced AI enabled features.

Keep Tax Planning Simple

Users should not lose interest while using the platform due to overburdened of the tax planning options. This can lead to losing user interest from tax planning because of confusion about what to choose.

Earn User trust

User trust should be earned via following the government mandate for user data protection policies, data encryption, not storing user sensitive information insecurely.

Keep AI models improved

Government rules and regulations, form formats etc. keep changing. Ensure to adapt the new rules and keep AI model training according to these factors is must.

Do not eliminate human expertise

AI can perform a better job in some aspects of our life's but it can't replace human expertise as of now. Don't make user feel AI is controlling everything by eliminating the manual editing options, connecting with experts etc.

Technical Limitations

3rd party API's unavailability, change in their policies like data storage etc, end of support for technology used impact the AI models pipeline and disturb the user experience.

FOSS

Identify security vulnerabilities in free and open-source software and keep them updated.

Solutions:

Tax planning

Solution Point	Description	Workflow
AI-Powered Tax Forecasting	AI assistant to engage with user and enlist earning GOALS for current year (Give suggestive categories like - salary, MF capital gains, Stock investment gains, Land Sale, Other commissions etc) - Our trained AI models will compute and share your tax liability forecast.	1. Introduction and Greeting: • Hi [User Name]! I'm your friendly AI assistant, here to help you with your finances. 2. Goal Setting: • Let's get a head start on the year! Would you like to set some earning goals for 2024? 3. Earning Categories: • To personalize your tax forecast for India, let's break down your potential income sources. If you can share, what amount of money are you planning to earn in the below categories I can help you with various categories like: ◦ Salary/Wages ◦ Mutual Fund Capital Gains ◦ Stock Investment Gains ◦ Land Sale Proceeds ◦ Other Commissions (freelance work, side hustles) ◦ (Optional) Any additional deductions specific to your situation (e.g., HRA, medical insurance) Other Commissions (freelance work, side hustles) (Optional) Any additional deductions specific to your situation (e.g., HRA, medical insurance) • Alright, let's review your projected earnings for 2024: ◦ Salary/Wages: ₹21 lakhs ◦ Mutual Fund Capital Gains (estimated): ₹1 lakh ◦ Stock Investment Gains (estimated): ₹3 lakhs • Please note: This is under the assumption you'll be filing under the old tax regime. There's also a new tax regime available, and you can explore which one might be more beneficial for you.

		Does this look accurate? If not, let's adjust anything that needs updating.
AI-Powered Investment Recommendations	Create a bucket of personalized investment portfolios based on interest and also those which will help user to get more return compared to traditional investments and minimum risks vs high risk and high return with pros and cons.	Leverage AI for Tax Forecast (Old Regime) and Proactive Tax Saving Tips: - Fantastic! Based on your projected income, estimated capital gains, the old tax regime appears to be the best choice, our trained AI models will generate a preliminary forecast of your potential tax liability for 2024 in India. Here are 2-3 potential ways you can save on taxes under the old regime: Maximize Deductions under Section 80C: You can invest in tax-saving instruments like PPF, ELSS Mutual Funds, NPS, etc., up to ₹1.5 lakhs to reduce your taxable income. Explore Other Deductions: Claim deductions for medical insurance premiums, housing loan interest (HRA), education loan interest, etc., to further lower your tax burden. Capital Gains Optimization: Consider holding your mutual funds for over a year to benefit from Long-Term Capital Gains tax with lower rates compared to Short-Term Capital Gains. Smart Shopping for Tax Savings: AI would suggest Did you know strategic purchases can help you save on taxes? Let's explore some options: x x-saving Investments within our Marketplace: We offer a curated selection of tax-saving investment options like ELSS Mutual Funds and PPF schemes directly within our platform. You can seamlessly invest and potentially reduce your taxable income under Section 80C. (This would link to a marketplace page within your portal) Track Future Purchases for Tax Benefits: Thinking of buying a new home or making charitable contributions? Let us know! We can track your upcoming expenses and remind you about potential tax deductions associated with them when the time comes to file your taxes.
Make You Tax Savvy	Generate Monthly reminders to engage user into building a habit for routine updates to the tax planning by updating their goals and planned vs actual expenses/gains	Enable AI-powered Reminders: Based on your income, investments, and filing deadlines, I can suggest personalized reminder schedules for: - Updating income estimates throughout the year. - Making tax-saving investment contributions (e.g., Section 80C) before key deadlines. - Gathering receipts and documents for deductions. - Important tax filing dates. You can customize the frequency and notification methods (email, SMS, in-app) for these reminders.
Stay Engaged	In the case of disciplined users with tax planning etiquettes, reward them with brownie points - cashbacks - offers -	Be Rewarded for Staying on Track: We recognize staying on top of taxes can be challenging. As you consistently meet your reminder deadlines (e.g., updating income or

	discount/refund on subscription cost % (show on community leaderboard). In case of low engagement - share offer of a private tax consultant chat/call service on the house to spike interest	making tax-saving investments on time), you'll earn points redeemable for exclusive rewards within our platform. These rewards could include: Free tax consultations with financial advisors. Discounts on tax filing services
Build AI Enthusiasts Community	Create investment and tax filing content(Videos, blogs, games etc). AI will regularly generate blogs based on its interactions to support problem areas (patterns of problems)	Community Forum: Share and Learn Together! Example: The community forum is a secure platform within the app where users can interact with each other. Details: Users can ask questions about specific tax situations, share tips on maximizing deductions, and discuss tax-related news. By helping others in the community, users earn reputation points that contribute to their leaderboard ranking.
Personalized Learning Paths	Based on user interests and financial situations, the AI recommends relevant articles, videos, and other educational materials including gamified quizzes	Personalized Learning Paths with AI Guidance: Example: Imagine a user shows interest or weakness in understanding capital gains tax implications. The AI tracks their performance in quizzes and learning modules. Details: Based on this data, the AI recommends a personalized learning path focused on capital gains. This path might include additional quizzes, explainer videos, and case studies related to capital gains tax. The user can also choose to explore topics of personal interest, like deductions for medical expenses.
Gamified Learnings	Rewards for good tax planning game scores for maintaining top streaks with point-based redemption systems. Monthly/Quarterly tournaments with leaderboard rankings	Level Up and Earn Badges: Example: As users complete learning modules and answer quizzes correctly, they earn points and badges. Details: Badges can be specific to a learning module (e.g., " Deduction Master ") or general knowledge (" Tax Savvy "). Earning badges unlocks new levels within the academy, with higher levels offering more challenging content and exclusive rewards. Leaderboard Recognition and Exclusive Rewards: Example: The leaderboard displays the top users based on points earned through learning activities and community engagement. Details: Leaderboard leaders are recognized within the app and might be featured on the platform's social media channels. These top users are also eligible for exclusive rewards, such as: Premium access to in-depth tax guides and resources. Free consultations with tax advisors. Early access to new features and functionalities within the platform.

Tax filing

Solution Point	Description	Workflow
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1 - Click Uploads	Simply bulk upload all your tax-related documents - for AI-driven data extraction to generate your tax profile. Our powerful AI will analyze your documents, automatically extracting income, deductions, and exemptions for you. Sit back and relax – we'll handle the heavy lifting and map your profile data!	User Workflow: 1. Registration & Profile Creation: Users sign up and create a secure profile. 2. Document Upload: Users are presented with a clear interface to upload tax-related documents in bulk: Form 16 Investment proofs (80C, etc.) Rent receipts (HRA) Other income proofs (interest, capital gains, etc.) Accommodate various formats (PDF, images their ITR processing. Once uploaded, the document would be processed by the AI engine. The AI would be trained on a vast dataset of various tax-related documents, including salary slips, investment statements, and receipts. The AI would then extract key data points from the uploaded documents. This could include: Salary details (income, deductions) from pay slips. Investment amounts and gains/losses from investment statements. Dates, amounts, and categories from receipts for potential deductions (medical bills, rent payments, etc.). Extracted details would be pre-populated within the user's income and expense sections of the tax planning platform.
AI-Powered Insights and Guidance	Recommend the right option of a regime based on user profile, along with personalized tax saving options (right mix of deductions & exemptions). Ex- Married/ Dependents (kids/parents) – sections like (school allowance, parents insurance, medical expenses for parents/family or suggest insurance expense & benefit)	Step 1: User Profile Collection Marital Status: The platform asks the user to select their marital status (single, married, divorced, etc.). Dependents: If the user is married, the platform further inquires about dependents (spouse, children, parents). Income Details: Users provide details about their income sources (salary, investments, rental income, etc.). Investment Details (Optional): Users can optionally provide details about existing tax-saving investments (PPF, NPS, ELSS funds, etc.). Medical Expenses: Users can optionally enter details about medical expenses incurred for themselves, dependents, or parents. Step 2: Tax Regime Analysis AI Analysis: The platform utilizes AI to analyze the user's profile and income details. Regime Comparison: The AI compares the potential tax liability under the old and new tax regimes, factoring in relevant deductions and exemptions available to the user based on their profile. Step 3: Personalized Recommendation Recommended Regime: Based on the analysis, the platform recommends the most suitable tax regime (old or new) for the user to optimize their tax savings. Explanation: A clear explanation is provided highlighting the reasons behind the recommended regime (e.g., higher deductions available under the old regime are beneficial due to dependent children).

Review & Refine with AI	In case of manual inputs - AI assistant to identify and highlight potential errors and suggest corrections as per applicable tax norms	Step 1: User Input & Data Capture Users manually enter their income details, deductions, and other relevant tax information into the platform. The platform captures this user-provided data and prepares it for AI analysis. Step 2: AI Error Detection Rule-Based Analysis: The AI assistant employs pre-programmed rules based on applicable tax regulations and common filing errors. These rules might include: Income Verification: Checking for inconsistencies between income sources and reported amounts. Deduction Eligibility: Identifying deductions claimed that are not applicable to the user's profile (e.g., claiming HRA deduction without paying rent). Calculation Errors: Detecting mathematical errors in user-entered values like income totals or tax calculations. Missing Information: Highlighting mandatory fields that haven't been filled or crucial documents not uploaded. Data Comparison: The AI compares user data against tax authority benchmarks or historical data (if anonymized) to identify potential discrepancies. Step 3: Error Flagging and Correction Suggestions Real-time Flagging: Potential errors are identified and flagged in real-time as the user enters data. This allows for immediate correction and minimizes the risk of inaccurate submissions. Explanation & Guidance: Each flagged error provides a clear explanation of the potential issue and relevant tax norms for reference. Suggested Corrections: The AI assistant suggests potential corrections based on the identified error. For example, it might recommend selecting a different deduction category or adjusting a calculation based on relevant tax rates. Step 4: User Review and Action Users receive a consolidated overview of all flagged errors and suggested corrections. They can review each error, understand the explanation, and choose to accept the suggested correction, provide a different correction, or ignore the flag if they believe it's a valid entry. Step 5: Data Validation & Filing Support Upon user confirmation of corrections or acceptance of the AI's suggestions, the platform validates the data against tax regulations.
Advance AI Tax Savings Insights	While calling out potential tax saving options, share context - Eg:- If you invest X amount in ELSS your Y amount of tax can be saved - but also share the word of caution - i.e this is only suggested if you are okay locking away your money for a period of 3 years.Give an option for voice-enabled walkthrough where AI would talk to the user asking	This workflow outlines a user-friendly system that offers tax saving suggestions accompanied by contextual details and voice-enabled walkthroughs for personalized guidance. Step 1: Tax Saving Opportunity Identification AI Analysis: The platform analyzes the user's income, deductions claimed, and existing investments (if provided).

	conversational questions like - I see that you can still save some tax (Rs X)in category 80 D if you increase your health insurance amount from 15k to 25 k and this will also potentially give you a larger cover - would you be interested to do so.	Tax Code Matching: The AI identifies potential tax saving opportunities by matching the user's profile with relevant sections of the tax code (e.g., Section 80C for investments). Step 2: Contextual Recommendation Generation Benefit Breakdown: For each identified opportunity, the platform generates a clear and concise recommendation. This includes: Savings Estimate: The estimated amount of tax that can be saved by utilizing the option (e.g., "Invest X amount in ELSS to potentially save Y amount on taxes"). Actionable Steps: Clear instructions on how to benefit from the opportunity (e.g., "Invest in an ELSS mutual fund before the end of the financial year"). Word of Caution: The platform provides clear disclaimers and explanations about any limitations or risks associated with the option. This might include: Lock-in Periods: For investment options like ELSS, the platform highlights the lock-in period (e.g., "ELSS funds typically have a 3-year lock-in period, consider your investment horizon before investing"). Eligibility Conditions: If specific eligibility criteria exist for certain deductions (e.g., medical insurance for parents), the platform clarifies these requirements. Step 3: Optional Voice-Enabled Walkthrough User Choice: Users can choose to initiate a voice-enabled walkthrough for a specific tax saving recommendation. Conversational AI Interaction: The AI assistant engages the user in a conversation, asking questions and providing explanations. This could include: Savings Potential: "I see you can potentially save Rs. X on taxes under Section 80D by increasing your health insurance premium." Benefit Expansion: "Increasing your health insurance coverage from Rs. 15,000 to Rs. 25,000 could provide broader coverage and maximize your tax deduction." User Confirmation: "Would you be interested in exploring this option and learning more about health insurance plans?" Step 4: User Action and Support Users can choose to accept the recommendation, explore additional options, or decline based on their needs and financial goals. The platform offers further support by: Providing resource links for detailed information about specific tax saving options. Connecting users with investment platforms or insurance providers (if applicable). Assisting with calculations and tailoring recommendations based on user input
The Human Touch	If you're still unsure, you have an option to contact with an expert at any point during the filing process	Seamless Integration with Expert Support (Optional) "Ask the Expert" Feature: At any point during the filing process, users have the option to connect with a qualified tax expert through the platform.

		Real-Time Chat or Video Consultation: Users can choose between real-time chat or video consultations with the expert to discuss specific questions or complex situations. Expert Review and Guidance: Tax experts can review the user's filing details, offer personalized advice, and ensure compliance with relevant tax regulations. The choice between the normal flow and the "Ask an Expert" feature depends on the user's specific needs and comfort level. While the normal flow provides a user-friendly and independent experience, the "Ask an Expert" toggle offers valuable personalized guidance for complex situations or when users seek expert reassurance. A qualified tax advisor can clarify doubts and ensure compliance with regulations, potentially saving you from costly mistakes.
Secured Document Storage	API integration with DigiLocker/Document Repository within platform to store all important financial docs	Step 1: User Onboarding and Consent Users create a profile on the tax filing platform. During onboarding, users are presented with the option to integrate their DigiLocker account with the platform. A clear explanation is provided highlighting the benefits of integration, such as secure document storage and easier access during tax filing. Users grant explicit consent for the platform to access relevant documents within their DigiLocker account via a secure API connection. Step 2: Secure API Integration with DigiLocker The platform establishes a secure connection with DigiLocker's API using secure protocols and user-specific access tokens. This connection allows the platform to retrieve a list of documents authorized by the user within their DigiLocker account. Step 3: Automated Document Selection for Tax Filing The platform identifies documents relevant to tax filing based on pre-defined criteria (e.g., PAN card, salary slips, investment proofs). This identification can be achieved through: Document Classification: The platform utilizes document classification algorithms to analyze document titles and content, automatically identifying relevant tax documents. User-Defined Tags: Users can optionally apply custom tags to documents within their DigiLocker for easier retrieval during tax filing. Step 4: Secure Document Access and Display Upon user authorization, the platform retrieves the identified documents from DigiLocker through the secure API connection. Downloaded documents are stored locally on the platform's secure servers with user-specific encryption for enhanced security. Users can view and access these documents within the platform for reference and verification during tax filing. Step 5: Streamlined Tax Filing Process Users leverage the pre-populated information from retrieved documents to expedite tax filing. For example, income details from salary slips or investment proofs can be automatically populated into relevant tax filing sections, minimizing manual data entry.

		Step 6: Secure Document Management and User Control Users retain complete control over their documents within the platform. They can choose to: View retrieved documents at any time. Download a local copy of a document for personal records. Revoke access to specific documents or disconnect their DigiLocker integration altogether.
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Post tax filing

Solution Point	Description	Workflow
Automated Reminders	Trigger auto updates via email, SMS and application notifications about status of tax returns.	Workflow: This will be automated background workflow of the application. After the user files the ITR successfully, we will keep user posted with the updates below. - Any updates on user tax filing status. - Acknowledgement receipt is received. - After tax season, suggest tips for next year's tax planning. - Any new tax planning suggestion for user portfolio.
AI Reconciliations	Get step-by-step guidance on how to respond to an audit request, including help with gathering and submitting the necessary documents.	Workflow: - User login into the application. - Check ITR status and if any action is needed. - AI will review the audit notice to understand the reason for the audit and the specific information the IRS needs and inform the user. - If still unclear, let user use expert advice options to consult with CA's too and help user to interpret the notice. - After taking needful action and submit the discrepancy opened.
Continuous Learnings	Mark case for review as a part of feedback loop to improve the computation model for AI assistant	Workflow: - If discrepancy reported by the IRS and RCA for the discrepancy is related to AI pipeline. Re-train the AI model. - If any government rules, third party API's etc. get changed keep our system updated with the changes.
Celebrate With Rewards	Celebrate milestones with rewards like coupons, cashback, badges, free access to few features for limited time, in app currency etc.	Workflow: Celebrate user milestones with rewards like coupons, cashback, badges, free access of few features for limited time, in app currency etc. in case of - User completed learning activity. - User successfully completed a purchase. - User successfully completed the tax file journey.

User Journey

User Journey:

TARGET DATE	MILESTONE	DESCRIPTION	EXIT CRITERIA
Q1-2025	🔴 Launch	All customers in current markets	Measure and monitor

Success Metrics

Some key metrics which we can monitor are:

Type of Metric	Key Metrics	Description
NSM	Completion Rate	The percentage of users who successfully complete their tax filings using the AI tool.
Business	Number of Active Users	The total number of users actively using the tool within a specific period
Business	Churn Rate	The percentage of users who stop using the tool over a given period
Business	User Acquisition Rate	The rate at which new users are signing up to use the tool
Business	Revenue per User	The average revenue generated per user
Business	Net Promoter Score (NPS)	The likelihood of users recommending the tool to others
Product	User Retention Rate	The percentage of users who return to use the tool after their initial use
Product	Session Duration	The average time users spend on the tool per session
Product	Error Rate	The percentage of filings with errors detected after submission
Product	Tax Calculation Accuracy	The precision of tax calculations performed by the tool compared to manual calculations or standard benchmarks
Product	Time to File	The average time taken by a user to complete the tax filing process using the tool
Product	Processing Speed	The time taken by the AI to process user data and generate tax filing recommendations or reports
Product	Response Time	The time taken by the tool to respond to user inputs or queries
Product	Drop-off Rate	The rate at which users abandon the filing process before completion
Product	Recommendation Accuracy	The accuracy of AI-generated recommendations for deductions and credits

Risks/Pitfalls & Mitigations (Compliance, Data security, Trust Factor) Assumptions

1. Compliance with Regulations:

Risk

- Non-compliance with tax laws and regulations
- Regulatory changes: Sudden changes in tax policies can render the AI algorithms obsolete
- **Incorrect filings:** If the AI misinterprets tax data, it could lead to incorrect filings, resulting in penalties for users.

Mitigation Strategies

- Regular updates and audits
- **Expert consultation:** Maintain a team of tax experts to oversee and validate the AI outputs.
- **User education:** Provide clear instructions and FAQs to help users understand their obligations and the AI system's functionality.

2. Data Security

Risks

- **Data breaches:** Personal and financial data can be highly sensitive and a prime target for cyberattacks.
- **Insider threats:** Employees or contractors could potentially misuse the data.
- **Inadequate encryption:** Weak encryption methods could lead to data leaks during storage or transmission.

Mitigation Strategies

- **Advanced encryption:** Use state-of-the-art encryption protocols for data at rest and in transit.
- **Regular security audits:** Conduct regular security audits and penetration testing to identify and fix vulnerabilities.
- **Access controls:** Implement strict access controls and monitor access logs to detect and prevent unauthorized access.

3. Data Accuracy

Risks

- **Incorrect data input:** Users might input incorrect data, leading to erroneous filings.
- **AI inaccuracies:** The AI might make mistakes in interpreting data or applying tax rules
- **Integration errors:** Issues with integrating data from different sources (e.g., bank statements, investment records) can lead to inaccuracies.

Mitigation Strategies

- **Data validation checks:** Implement multiple layers of data validation checks to ensure accuracy.
- **User verification steps:** Include steps for users to review and verify the data before final submission.
- **Continuous improvement:** Use machine learning to continuously improve the accuracy of the AI based on user feedback and data trends.

4. Legal Liabilities

Risks

- **Liability for incorrect filings:** The company could be held liable for penalties resulting from incorrect filings.
- **User disputes:** Users might dispute the results generated by the AI, leading to legal complications.
- **Intellectual property issues:** Potential legal issues related to the use of AI algorithms and data.

Mitigation Strategies

- **Clear terms of service:** Draft clear and comprehensive terms of service that outline the company's and users' responsibilities and liabilities.
- **Liability insurance:** Obtain liability insurance to cover potential legal claims related to incorrect filings.

- **Legal consultations:** Regularly consult with legal experts to ensure compliance with all relevant laws and to address any emerging legal issues.

Appendix:

1. https://www.researchgate.net/publication/373628292_Determinants_of_Behavior_of_Payers_of_Personal_Income_Tax_An_Empirical_Study_from_Indian_Context
2. [Clear Tax data for customer base](#)
3. [THE DIGITAL PERSONAL DATA PROTECTION ACT, 2023](#)
4. [Taxpaying Patterns](#)
5. [TaxBuddy : https://www.taxbuddy.com/](#)
6. [Tax2Win : https://tax2win.in/](#)
7. IncomeTax Department, Ministry of Finance : <https://incometaxindia.gov.in/Pages/taxpayers-charter-reports.aspx>
8. <https://sbi.co.in/documents/13958/25272736/170823-The+Ascent+of+Indian+Middle+Income+Class.pdf/Oe5d0d78-fd9e-b84b-3d64-11c62ac12f63?t=1692256905027>