

**Lucky Bill App,
Kerala University of Digital Sciences, Innovation and
Technology (Digital University Kerala)**

The implementation of the Goods and Services Tax (GST) System in India has presented opportunities and challenges in tax administration. However, the government has faced issues like tax evasion since its implementation. To address modern tax evasion techniques, the State GST Department sought a robust tracking and monitoring system. The quality of data for monitoring taxpayers heavily relies on business transaction records. A significant source of leakage was found to be business-to-consumer transactions without proper invoices. Digital University Kerala undertook extensive research and developed the user-friendly **"LuckyBill" app**, powered by artificial intelligence. This app encourages consumers to effortlessly submit their GST bills, simplifying tax compliance. It bridges the gap in data quality by involving consumers directly and fosters a culture of tax compliance. Through the app, consumers also participate in lucky draws, enhancing motivation for tax compliance and contributing to overall development. This initiative strengthens the bond between consumers and the GST department, promoting transparency in financial

transactions and supporting a fair business environment.

Research Methodology:

The research project is centred on the development of the LuckyBill mobile app, which serves as a catalyst for improving user experience and bolstering tax compliance efforts. A key aspect of this research involves harnessing machine learning and Optical Character Recognition (OCR) technologies within the app to automate the extraction of invoice data, thereby streamlining the bill uploading process and minimizing manual data entry. The app also introduces the Bill Locker feature, enabling users to efficiently manage and retrieve their invoices, simplifying activities such as returns, warranty claims, and expense tracking. Furthermore, the project places a strong emphasis on user-centric design principles, delivering an intuitive interface that requires minimal user assistance for optimal utilization. To engage users and foster participation, regular automated draws have been integrated into the app's framework. These draws not only incentivize user involvement but

also contribute to a more interactive experience. In pursuit of these goals, the research project combines methodologies such as experimental research, surveys, interviews, and observational research to continually refine the app, gather user insights, and ensure its efficiency and effectiveness in promoting tax compliance

Salient Features:

- **Machine Learning-Based Bill Data Extraction:** Using OCR and machine learning, the app extracts invoice content, including invoice number, date, GST identification number, and total bill amount. Users can effortlessly upload bills by capturing a photo with their mobile camera.
- **Bill Locker:** The app offers a "My Bills" section, allowing users to conveniently access and retrieve uploaded invoices. This eliminates the need to search for physical receipts or request duplicates, proving invaluable for returns, warranty claims, and expense tracking.
- **User-Friendly Interface:** The app boasts a menu-driven interface designed for easy

navigation, ensuring users can operate it with minimal assistance.

- **Automated Lucky Draws:** The system conducts automated daily, weekly, and monthly lucky draws. It identifies eligible bills, randomly selects winners, and publishes results after verification by an administrative officer.
- **Rewards:** Users stand to win gift hampers, discount coupons, cash prizes, and even a bumper prize of 25 lakhs. Continuous participation is rewarded through loyalty programs, milestones, and reward points.
- **Feedback System:** Users can provide queries, feedback, suggestions, or complaints to the GST department through the app.
- **Security-Certified:** The system undergoes rigorous security testing to protect critical data, meeting compliance and standards.
- **Cloud Deployment:** The LuckyBill system is deployed on AWS cloud using an IaaS model, utilizing auto-scaling/load balancing capabilities to adapt to varying demands.
- **Tax Data Analysis:** Machine learning-based analytics identify tax evasions and trade anomalies within invoice details

Impact:

The Lucky Bill App has revolutionized tax administration by providing a vast database of invoice data, including GSTIN, Invoice Number, Invoice Date, and Amount. This data enables efficient cross-verification of taxpayers' self-declared figures, exposing cases of illegal tax collection and non-remittance. It replaces the traditional "Test Purchase" process by consumers uploading bills, saving 100% of tax officials' time and effort. In just six months, the app collected 10 lakhs bills compared to 5000 bills in manual mode for the same period, resulting in substantial cost and time savings. Additionally, the app adds credibility to tax collection, as independent users validate uploaded bills. It fosters a culture of "Ask for Bills" among consumers, ensuring tax compliance and boosting confidence in tax payments. The research's impact primarily benefits the state of Kerala, with demographic implications on consumers and potential socio-economic development for the tribal and women population through strategic partnerships

Beneficiaries:

Consumers (Indian citizens): Experience enhanced tax transparency and are encouraged to request bills, fostering tax compliance.

State Government: Gains access to a vast database for cross-verification, improving revenue collection.



Central Government: Expresses interest in deploying the system nationally.

Tax Officials: Save time and effort as the app streamlines data collection, replacing the traditional 'Test Purchase' method.

Taxpayers: Benefit from a credible tax collection process.
