









Informal Sector Income Tax Identification and Registration

1. Executive Summary

As part of the GovTech Innovation Challenge, the Ghana Revenue Authority (GRA) is seeking innovative companies to develop solutions that address the challenge of identifying, registering, and collecting income tax from Ghana's vast informal sector. This call for proposals aims to identify and support innovative technologies that can transform how the GRA engages with informal businesses and sole proprietorships, bringing them into the formal tax system.

Challenge elements

- Innovative identification methods of informal sector businesses and sole proprietorships as eligible taxpayers
- Automated taxpayer bookkeeping and self-education
- Mobile-first solutions for low-tech environments of underserved remote communities
- Simplified digital registration and tax filing processes











2. Context and Problem Statement

Ghana's tax-to-GDP at 12.3% in 2020 is significantly lower than government targets, and its regional and income-level peers. Ghana's tax-to-GDP is lower than the average of the 30 African countries, and much lower than some other comparable lower middle-income countries in the region. Average tax revenue increase in Ghana has not matched the increase in public expenditures in recent years.

GRA faces difficulty in identifying eligible taxpayers in the informal sector. The informal sector (e.g. hairdressers, plumbers, artisans, small-scale farmers etc.) constitutes approximately 70% of the economy in Ghana. This means 70-80% of taxpayers in Ghana are micro and small businesses operating through cash transactions, word-of-mouth networks. 40% of those do not have formal addresses.

Traditional tax administration approaches are fundamentally unsuited to the informal sector's characteristics. Informal businesses operate with minimal documentation, irregular income patterns, and limited digital engagement. Current registration processes are cumbersome and discourage informal business from formalizing their operations and compliance. There is no legal framework that mandates official registration for informal sector taxpayers T Additionally, 40% of informal operators lack formal addresses, making systematic identification extremely challenging.

As a result, the GRA faces significant challenges in identifying eligible taxpayers, particularly those without a formal address or fixed place of operation. Consequently, the GRA has very limited data on the informal sector's economic activities and the scale of their turnover, making effective policy planning difficult.

Key characteristics informal businesses in Ghana constraining taxpayers compliance:

- low digital literacy of taxpayers
- lack of understanding of the tax system
- limited administrative capacity to comply with complex filing requirements
- inadequate record-keeping capabilities, no documented records of transactions

In this context the GRA's overarching strategic goal is streamlining the registration process, offering taxpayers simplified methods for filing taxes and making payments as well as potentially educating taxpayers on different aspects of the compliance process. Additionally GRA is looking into innovative ways to effectively identify and classify informal sector taxpayers, including those with and without fixed business locations.

Specific outcomes and KPIs that will define success and indicate resolution of the challenge:

- Increase registration of new informal businesses by 30% within the first year.
- Improve filing compliance rates among informal sector taxpayers by 35%.
- Contribute to increase total tax revenue from the informal sector by 25%.











3. Prior Experience & Lessons Learned

GRA has implemented several initiatives to engage the informal sector.

Currently, the GRA relies primarily on manual outreach, with tax officers physically visiting markets and other locations to interview individuals and collect registration information. This approach has proven difficult to scale due to both technical and financial constraints.

Additionally, the GRA sources information from registered companies that conduct business with the informal sector. Recently, efforts have been made to engage trade associations (e.g., hairdressers) to understand the type and quality of member data they maintain and to assess how this information can be leveraged by the GRA for taxpayer identification purposes.

In July 2025, the Ghana Revenue Authority (GRA) will introduce modified tax regulations aimed at simplifying tax compliance and revenue collection from the informal sector. Under the new framework, informal sector workers not currently registered with the GRA, but earning annual sales below GHS 20,000 will pay a fixed amount—GHS 25, GHS 35, or GHS 45. For those with turnover between GHS 20,000 and GHS 500,000, we'll apply a 3% tax on their turnover.

Over the past few years, the Ghana Revenue Authority (GRA) has established a data warehouse initiative to consolidate data from various state agencies. The GRA is using the national ID as a tax identification number and has access to 16 million static data entries from the National Information Agency. However, the occupational information in this database is outdated. The goal is to cross-reference information on self-employed taxpayers from multiple third-party sources to create a comprehensive 360-degree view of each taxpayer. Additional key data sources include:

- National Identification Authority (NIA)
- Office of the Registrar of Companies (ORC)
- Driver and Vehicle Licensing Authority (DVLA)
- Social Security and National Insurance Trust (SSNIT)
- Lands Commission

However, the initiative has not been scaled to its full potential due to several challenges, including limited technical and financial capacity, as well as outdated legacy systems that hinder integration with GRA systems.

The GRA also maintains APIs that provide access to all assets within its Total Revenue Integrated Processing System (TRIPS) database. These APIs allow third parties to retrieve and update data, subject to adherence to established protocols and data security measures. Access to the APIs requires formal approval from the Commissioner General.











4. Desired Outcomes and Requirements

GRA seeks Proof of Concepts that focus on one or all challenge key focus areas, including:

- 1. Taxpayer identification capabilities utilising GRA datasets, third-party data aggregators, and/or innovative techniques
 - a. The solution needs to effectively identify and classify informal sector taxpayers, including those with and without fixed business locations.
 - b. The solution should utilize GRA datasets and databases to retrieve relevant taxpayer information (see Section 3 - data warehouse initiative; more details available upon request).
 - c. Integrate with possible third-party data aggregators, or leverage innovative techniques such as automated OSINT/analysis of data from various sources (e.g. social media, geospatial data etc).
 - d. Build and maintain a secure, centralized database of informal sector businesses capturing key data points such as:
 Unique Identity of a Person
 - i. Type of Business Activity
 - ii. Location(s) of Operation/Person's Client Base
 - iii. Transaction amounts
 - iv. Distinction between one off activity and continuous operations
 - e. Flag potentially unregistered citizens engaged in Ghana informal sector, location(s) of operations or person's clients identifying probability its one off activity or continuous operations.
 - f. Simple workflows that allows authorized users (tax officers) to review and manage entities that were identified by the system.
- 2. Bookkeeping and self-education capabilities tailored for users with low digital literacy, cutting-edge user acquisition techniques ensuring subsequent high conversion rate into registering as actual taxpayers.
 - a. The solution should be a unified digital platform (a one-stop solution) with intuitive interface design and frictionless workflows.
 - i. Focus on Al-enhanced tools to help newly onboarded users track their income, expenses, and transactions, as well as get educational tips, best practices, relevant legislation references, ultimately automating compliant financial management.
 - ii. Provide a seamless, automated way for platform users to register as taxpayers and to file returns. The process should be easy to understand, has minimum steps to complete, and aligned with actual tax regulations. Where possible, it should leverage pre-filled fields using data from available databases to streamline the onboarding process.











- iii. Enable tax payments through commonly used methods in Ghana (e.g., mobile money, bank transfer).
- b. Provide real-time notifications, and dashboards with insights for tax officers (e.g. economic turnover segmented by type of business activity or location(s) of operation).

NB! This detailed description of key focus areas reflects GRA's perspective on the solution and is provided for reference. Innovative approaches and potentially more effective ways to achieve the target results are encouraged.

The following solution requirements will be essential at a later stage, should the Proof of Concept be approved for actual implementation:

- End-to-End Integration with GRA Infrastructure: Full compatibility with the GRA's legal framework and data governance standards. Seamless integration with the existing GRA TRIPS system to enable a unified, end-to-end registration process upon identification.
- Security & Scalability: Adhere to best-in-class security/privacy standards for all taxpayer and transaction data. Allow flexibility for future enhancements and regulatory updates.

5. Potential Impacts & Benefits

The proposed solution is expected to:

• For Ghana:

Increase registration of informal businesses. Improve filing compliance rates among informal sector taxpayers. Increase total tax revenue from the informal sector Increase Income Tax revenue collection from online businesses from 800 mil GHS to at least 1 billion GHS. Accrued penalties should not be taken into account as a 2-year grace period is planned.

For the Ghana Revenue Authority (GRA):

Establish a comprehensive database of informal sector businesses with key data points including business activity type, operation locations, and transaction patterns. Improve operational efficiency by decreasing time and resources spent on physical outreach and registration efforts of informal taxpayers. Also improve information security measures enhance the protection of taxpayer data

For Taxpayers:

Facilitate a digital, self-service taxpayer registration process, and self-education. Minimize cost of compliance on taxpayer side (e.g. transportation to tax offices, physical filing) potentially encouraging informal taxpayer compliance.











Potential risks

Behavioral Risks:

- Informal taxpayers may fear increased scrutiny, higher costs, or loss of flexibility
- Limited digital literacy may impede adoption of technology-based solutions
- Self-reported income and business information may be unreliable as informal taxpayers may be unwilling to accurately report income levels

Operational Risks:

- Business continuity due to the solution's complexity in handling high data volumes, compounded by a heavy reliance on third-party integrations
- Ensuring ongoing compliance without driving taxpayers back underground

Economic Risks:

- Formalisation may increase operational costs for small operators
- Rapid formalisation could disrupt existing informal sector ecosystems
- New systems may create administrative overhead for both taxpayers and GRA











Appendix

- Income Tax Act, 2015 (Act 896)
- Income Tax (Amendment) Act, 2013
- Income tax in Ghana FAQ
- GRA website
- Completed Challenge Canva [to be provided]
- API Documentation (if applicable) [to be provided]
- Application instructions [to be provided]