



Digitalisation of local revenues in Malawi

Lennart Fleck, Dyson Jangia, and Victoria Delbridge

- Revenue collection of City Councils in Malawi is far below potential ranging between 10 and 40% for different cities and revenue streams.
- Digitalisation of revenue administration at the local level has the potential to bring large improvements in revenue generation. This paper takes stock of the successes and challenges of the introduction of 'revenue management systems' (RMSs) in four cities in Malawi.
- The reforms have had mixed results. On the one hand, there have been some operational improvements, increasing the efficiency of the administration, and increasing public hope in reduced revenue embezzlement and corruption.
- However, the full benefits have not yet been realised. This is due to difficulty with RMS software vendors, insufficient investment in enabling infrastructure and capacity, and poor preparation for integration with other systems.
- The RMSs were also built 'on top' of somewhat dysfunctional pre-existing processes, and accompanying reforms in taxpayer registration, enforcement and tax collector management would be needed to fully leverage the potential of technology.







Introduction and context

Malawi is one of the poorest, but also most rapidly urbanising countries in the world. To accommodate this growth, substantial investments in urban infrastructure will be needed. Currently, Malawi's cities are largely dependent on Own Source Revenues (OSR), generated through the various taxes, licenses, and fees.

Central government transfers are low and other grants and loans are largely absent. Where grants and loans are received, there is often insufficient revenue to repay the debt, or to maintain the investments for long term. Increasing OSR is therefore the most reliable way to meet service delivery needs. Increasing OSR also has the advantage of also directly improving the ULGA's creditworthiness, or overall ability to take up external credit.

All four ULGAs in Malawi – Lilongwe, Blantyre, Mzuzu and Zomba - have engaged in various digitalisation initiatives in the past few years in the hope of improving OSR collection (see Figure 1). Among other benefits, digitalisation can reduce the cost of compliance for taxpayers (enhancing voluntary compliance), as well as decrease the costs of administrating local revenues. It also increases transparency and efficiency within administrations.

The objective of the study was to better understand what role the use of digital technologies has or can play in improving local revenue mobilisation from identification to billing and collection. The study focussed on the introduction of Revenue Management Systems (RMS) in all four cities since 2013. The paper attempts to assess the impact from various vantage points, drawing on:

- Stakeholder interviews with local governments, national agencies, and RMS software vendors.
- Surveys of taxpayers and tax collectors to gauge their view of the impact
 of digitalisation. This was across the key revenue streams of market fees,
 city rates and business licenses.
- Analysis of government documents which indicate the overall changes in revenue. These included budget documents, collection & compliance analysis, reports from revenue administration systems, annual revenue and expenditure reports, and audit reports.
- 4. Estimations of the revenue potential of 3 main revenue sources using budgetary data and stakeholder estimates of tax base size and comparing that with existing estimates of compliant taxpayers.

Key findings

Calculations of **actual vs potential revenue** collection give us an indication of how well the City Councils are doing in fully leveraging their existing revenue generation options.

- For City Rates, Blantyre is collecting around 38% of their potential revenue, Lilongwe 26% and Mzuzu 39%. In Blantyre, City Rate Arrears were 2.2x as large as annual revenues, in Lilongwe 5.6x and in Mzuzu 3.12x as large.
- For Business Licenses, Blantyre is collecting 32%, Lilongwe is collecting 22% and Mzuzu 14%.
- For Market Rates, there was only data to estimate revenue potential in Mzuzu, which indicated that the City Council is only collecting around 22% of its potential revenue. However, the per capita collections in Mzuzu are higher than most of the other cities, suggesting other cities will have a similar or worse collection rate when compared with potential.

Reasons for poor collection include:

- · Poor identification and updating of tax registers.
- Poor tax collector management. Base salaries are low with 63% of tax collectors earning less than \$300 per month. In the event of strong performance, tax collectors also not do receive financial incentives with 93% of tax collectors answering that they have never received a 'commission' or bonus payment. Additionally, there are few sanctions in place in the event of non-performance. 62% of tax-collectors answered that tax collectors are hardly ever fired for poor performance. At most tax collectors tend to have an investigation into their performance or be relocated to a different revenue stream or location within the city.
- **Pilferage**. Survey results show that only 3% of respondents believed that no money was lost due to corruption from City Rates and Business Licenses; while only 8% believed that no money was lost from Markets.
- Weak voluntary compliance due to poor government expenditure. 62% of taxpayer respondents did not think their tax contributions were being used well and a further 33% believed that tax contributions were effectively used "sometimes". Only 5% of taxpayers were able to name a particular project that the city invested in. Similarly, when asking about the priorities for tax reform, 49% of respondents were wishing for better tax usage, even more so than reducing the tax burden or reducing corruption.
- Lack of enforcement. For example, while the Local Government Act does allow the Council to take action against the owner and seize the property if

the latter has not made any property tax payments for three consecutive years, the property owner only needs to make a small partial payment to avoid any further legal sanction. Furthermore, even if no payment is made after 3 years, the City Council often needs to pass through a cumbersome court process before being able to take definitive legal action.

The introduction of RMS's in Malawian cities has helped to digitise some important aspects of own source revenues, with the aim of improving revenue collection, as well as efficiency and transparency of tax administration, such as:

- The automation and digital verification of demand notices and business license – increasing the speed and accuracy of billing processes.
- The reporting and analytical functions of the RMSs systems have allowed revenue departments to develop more targeted and strategic sensitisation approaches to e.g. target high-income tax defaulters.
- The effective linking of taxpayer data with compliance records and physical location have supported in reaching taxpayers and enforcing payments.
- Improved audit trails which dis-incentivised malpractice and highlighted the need for stricter internal controls.
- RMS systems with cloud-based storage such as those in Lilongwe and Mzuzu (REMOP) have put limits on the ability to tamper with system data.
- Facilitating digital payment options and increasing the trust of citizens in the tax administration.
- Expedited compilation of annual final accounts, ensuring timely auditing and good corporate governance that can increases public trust and financial creditworthiness.

However, there were also several implementation challenges, including:

- Lack of capacity to take full advantage of technologies
- Lack of willingness to change practices by tax officials
- Malfunctions with the software
- Inability to integrate RMS's with the IFMIS and other systems and processes, such as bank payments
- Insufficient hard infrastructure to operate systems including insufficient internet service and servers

Given the relatively short timelines since their implementation, as well as the fact that several reforms were introduced at a similar time, it was not possible to isolate the impact of the reforms on revenue collections. However, initial evidence suggests negligible impact on city rates and business license collections from RMS.. In some cases, RMS may have even detracted from collections in the short term. For market fees, the introduction of Point of Sale (POS) devices appears to have positively impacted revenue generation.

The surveys highlight that tax collectors think that ease of payment and efficiency of collection are the greatest benefits that digitalisation brings (see Figure 1). 85% of taxpayers support further digitalisation, with the main benefits cited to be the management of tax collectors and corruption and improving the ease of timely billing and payment. However, Figure 2 shows that there are still significant problems that digitisation cannot address – particularly other forms of corruption, and inability to pay.



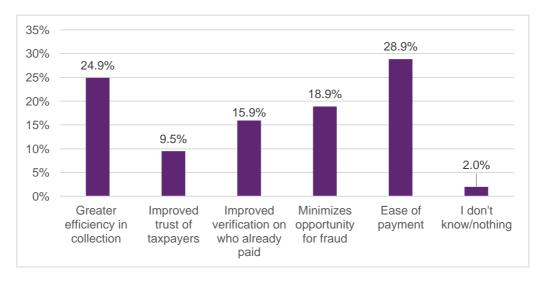
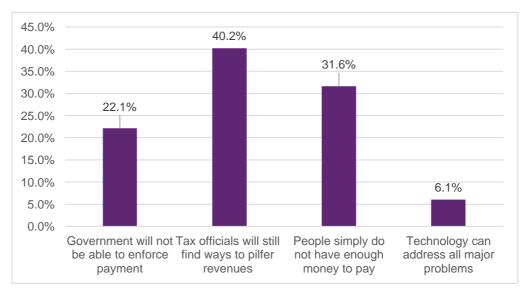


Figure 2: Taxpayer view of the problems that digitalisation cannot address



Overall, the results suggest that while the RMS have introduced specific operational improvements and potentially increased revenue in some instances, the cities have not yet been able to fully leverage the potential of the RMS and other technology solutions at large. There are also more fundamental issues, such as registration and enforcement, that need to be addressed, while also tackling vested interests and tax collector fraud.

Policy recommendations

ULGAs should not focus only on digitalisation, but also reforming the underlying processes and practices. Important revenue drivers, such as registration and enforcement, may in fact deserve more attention than digitalisation efforts. If tax collector management and overall expenditure processes do not change, it will indeed be difficult for local governments to fully leverage the potential of technology.

Areas to focus on include:

- Identification and registration of taxpayers was the largest contributor to increased tax revenues. A comprehensive database of taxpayers is necessary to develop and maintain both to increase revenues, and to act as baselines for inspections and auditing that would narrow the revenue loss gap. Without establishing and maintaining tax registers, implementing RMS's will have little impact. Digital maps can support this process by using GIS to identify new properties or markets quickly and affordably. Digitalized data can also be used in simpler and more cost-effective valuation methods. Registers of regular market vendors per market zone can inform tax collectors of the number of expected payers per day and provide a base-level to observe variances for follow-up.
- Tax collector management. Digitalisation of data can be used to set targets and monitor performance of tax collectors, but this requires that there is the authority, will, and process in place to sanction poor performance and give bonuses for good performance. Other mechanisms to ensure honesty might involve tax collector rotation through different zones and the introduction of regular random inspections.
- Improving expenditure and encouraging voluntary compliance.
 Citizens are far more willing to pay taxes when they feel that they are receiving goods and services in return. City governments need to first improve expenditure and second, ensure expenditures are visible and effectively communicated to residents. ULGAs need to scale up the information dissemination of annual budgets and financial reports, as

mandated by the Public Finance Management Act (PFMA) and Local Government Act, in order to keep their citizens updated of progress. RMSs should also be better leveraged to **make tax payment more salient and convenient**, including by incorporating more payment options, and creating automated tax payment reminders.

• Aligning incentives for reform. In some cases, there were reports that certain stakeholders resisted reform. Aligning incentives requires both carrots and sticks. National government officials may consider introducing performance-based grants and or conditions on the intergovernmental fiscal transfers based on OSR performance, as already started under the Local Authority Performance Assessment (LAPA) administered by NLGFC. Such incentives should be cascaded to the lower ranks up to ticket sellers.

However, where technology can help, it should be used to maximum benefit, including through:

- Improved digital integration. ULGAs should ensure that the RMS are integrated with the IFMIS and banks to assist with reporting and accounting reconciliations. Any enabling agreements, such as integration with national government systems or local banks, need to be put in place in advance of engaging external service providers. Without this, RMS software vendors are unable to enact the full extent of digitisation.
- Improved management of RMS Software vendors. Better RMS software deals and options should be sourced and negotiated at national level by NLGFC for consistency and better local commission rates for ULGAs.
- Improved configuration and ownership of security related functions.
 ULGA's should find ways to ensure data security by creating fraud-proof processes that do not deprive the ULGAs of the ability to own their own data and make system changes.
- Mass sensitisation. RMS should be used for taxpayer sensitisation via mass communication systems to encourage compliance.
- Creating a more comprehensive IT strategy and associated investments. City governments need to have the necessary in-house skills and reliable internet infrastructure with sufficient coverage to enable operations of new technologies.

Overall, there is scope for better coordination across ULGA's and with national government to avoid short-term, piece-meal solutions and enable the interoperability of systems (RMSs and IFMIS). This is both in negotiating better terms with RMS software vendors through collective bargaining, but also in learning from and building on the experience with different approaches in each

city so as not to repeat similar mistakes. **NLGFC and Directorate of Urban Development in the Ministry of Local Government should take lead in this.**

Areas for Further Research

- Analysing the long-term impacts of RMS's on revenue administration, collection and taxpayer compliance, as well as isolating different aspects of digitalisation to better understand where the benefits are gained.
- Isolating whether impacts of technology are due to technology itself, or simply a result of change and increased focus on system reform.
- Analysis on practices of tax collectors, particularly on factors promoting fraud, enforcement and compliance.
- Mapping stakeholder interests at different points along the tax collection and enforcement chain and how changing incentives might address lack of interest in reform.
- The impact of digitisation on the cost and efficiency of revenue collection.