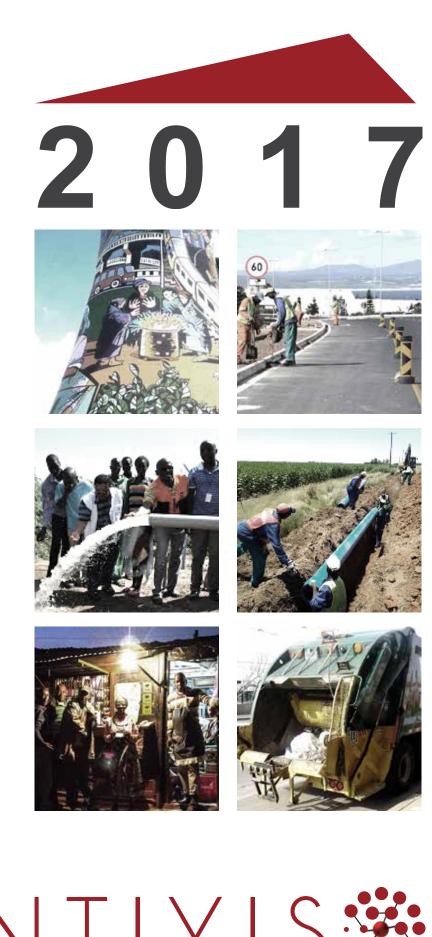


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MUNICIPAL REVENUE Conversion strategies 2017

Contents

About Ntiyiso Consulting	1
About Ntiyiso Consulting's Revenue Management & Enhancement Practice	1
About Nascence Advisory and Research	1
Preface	2
Executive summary	4
Diagnosing Municipal Revenue Challenges	10
Understanding current municipal revenue performance	11
A deeper analysis of municipal revenue streams	11
The debt problem and challenges with revenue collection	14
Assessing ability to pay	17
Factors affecting willingness to pay, or lack thereof	21
Ensuring that all barriers to payment are removed	23
Are municipalities always willing to enforce payment?	25
Concluding remarks on the diagnostic	25
Municipal Revenue Turnaround Strategies	27
Proposing Strategies for Revenue Coverage	28
The R65 billion additional municipal revenue coverage opportunity	29
Revenue potential from property rates	30
Revenue opportunity from reducing non-technical electricity losses	33
Revenue opportunity from better aligning water prices with the cost of delivery	34
Revenue opportunity from under-explored revenue sources	37
The case for economic development	40
Local and global examples of successful economic development initiatives	42
Proposing strategies for revenue conversion	44
Strategies to improve ability to pay	48
Strategies to improve ability to ensure payment	49
Concluding thoughts	56
References	57



List of Exhibits

Exhibit 1:	Cumulative debt across South African municipalities	7
Exhibit 2:	Revenue coverage and conversion strategies	8
Exhibit 3:	Municipal revenue aims	9
Exhibit 4:	Municipality income breakdown, 2015 - 16	12
Exhibit 5:	Municipality revenue break down by municipality type, 2015 - 16	13
Exhibit 6:	Municipal debt by service, 2015 -16	14
Exhibit 7:	Debtor age analysis by customer type, 2015 - 16	15
Exhibit 8:	Debt by customer type, 2015 - 16	18
Exhibit 9:	Factors influencing revenue conversion and challenges faced in each	17
Exhibit 10:	Indigent programme composition breakdown by selected province 1	19
Exhibit 11:	Electricity tariff structures in selected municipalities	21
Exhibit 12:	Customer satisfaction as a driver for payment	23
Exhibit 13:	Municipal tariff revenue increase potential	29
Exhibit 14:	Growth in property values and property rate revenues, South Africa	30
Exhibit 15:	Average property rates	32
Exhibit 16:	City Power non technical losses	34
Exhibit 17:	Water sales and purchases price growth rates	35
Exhibit 18:	Additional revenue sources worth exploring	37
Exhibit 19:	Initiatives to resolve challenges	45
Exhibit 20:	High level components of a coherent revenue turnaround strategy	47





About Ntiyiso Consulting

Founded in 2005, Ntiyiso Consulting is a black-owned management and consulting firm with expertise across all major industries. The firm uses innovation to deliver services through three practices, viz. Governance & Strategy (GOS), Revenue Management & Enhancement (RME), and Business Process Outsourcing (BPO).

The GOS practice renders holistic organisational improvement interventions, resulting in increased productivity and sustainable profitability. The RME practice assists organisations to realise completeness of revenue, elimination of revenue leakages and increased revenue from existing and new sources. The BPO practice advises clients on developing and implementing sourcing strategies of non-core business functions such as payroll, accounting and call centres, among others. Ntiyiso Consulting also assists all tiers of government to position themselves as preferred outsourcing destinations, to drive economic development.

About Ntiyiso Consulting's Revenue Management & Enhancement Practice

Ntiyiso Consulting's Revenue Management & Enhancement practice has served over 10 African municipalities on a wide range of topics, including Revenue Enhancement, Debt Collection, Operations Improvement and Local Economic Development. Our leaders in the practice are former municipal executives with in-depth knowledge of municipal operations that they gained while managing municipalities themselves.

About Nascence Advisory and Research



Nascence is an advisory and research firm that provides consulting and research services to a wide variety of clients. Nascence's goal is to work with clients and their teams to co-create tangible and value-adding solutions to their challenges. With their strong collective of management consultants, programme managers, research associates and industry experts, the firm's aim is to bring together a wide range of experiences and fresh thinking to resolve their clients' challenges.



Preface

In August 2016, South Africans went to the polls for the fifth time since the dawn of our democracy, to elect local government officials. The new local government officials will take control of over 257 municipalities of varying levels of service delivery efficiency, audit cleanliness and consumer debt.

In 2015, 164 service delivery protests were recorded across the country, many of which were directed at councillors and local government officials. In the same period, the expenditure budget for the municipal sphere totalled R379 billion. Municipalities with clean audit opinions represented R147 billion (39%) of this amount, while those with unqualified opinions represented R155 billion (41%). Municipalities with qualified audit opinions made up R53 billion (14%) of the total budget, while those with adverse and disclaimed opinions represented R23 billion (6%). The municipalities with outstanding audits constitute R1 billion of the total expenditure budget. These results indicate some challenges within municipalities.

In this report, we attempt to understand the revenue performance of municipalities and also provide lessons learnt from revenue coverage and conversion successes as well as challenges from municipalities across the country and the world. **Revenue coverage** speaks to municipalities' ability to ensure that they explore and optimise all revenue streams available to them, while revenue conversion speaks to municipalities' ability to realise cash flows from their billings to consumers.

We share these learnings with the aim of providing ideas to local government officials on how they might begin to reverse sub-optimal revenue performance. We believe that better revenue performance will have a positive impact on municipal service delivery output and administration. With more money to deploy on service delivery and training of officials, municipalities can start to operate as the efficient organisations they must be in order to meet the many demands put on them.

The bulk of the examples contained in this report are mainly from metros and secondary cities, because these municipalities tend to provide the full spectrum of municipal services and thus provide a good source of lessons. We strongly believe that the lessons learnt from these municipalities can, with some contextualising, be easily applied to a wide range of municipalities. Future iterations of this report will focus more on applying these lessons to a broader range of municipalities.

We are extremely grateful to the officials from multiple municipalities who agreed to be interviewed and provided data for this report. Their experiences at the coalface of municipal revenue management have greatly enriched the recommendations in this report..



In 2015-16

257 Municipalities

R 346.9 bn Revenue

R 113.5 Bn Customer debt

R 335,9 bn Costs



Executive Summary



Executive Summary

A 2009 World Bank report titled *Improving Municipal Management for Cities to Succeed* argues that "cities now host half the world's population and provide seventy percent of its gross domestic product (GDP), making them engines of growth". Managing these economic centres well is essential for development. This trend is especially true for emerging countries like South Africa where rural development is low and migration to cities is ever increasing.

The persistent challenges of poverty, inequality and unemployment compound those presented by spatial and demographic changes in South Africa. Cities bear much of these challenges since they are the closest government entities to people and communities in the provision of basic services such as water, sanitation and electricity, as well as the creation of environments that are conducive to the thriving of businesses.

These demands are such that municipalities must have effective strategies that not only cover all critical revenue sources, but also increase coverage to other revenues sources. The concept of *revenue coverage* is important since it is a crucial requirement for municipalities to have all their revenue well understood, monitored and effectively captured. Furthermore, municipalities must protect as well as grow their financial resources – finding creative and developmental strategies to not just collect revenue, but to also grow revenue sources.

Within this context, *revenue conversion* is absolutely important. While municipalities are able to provide services for a fee, it is crucial that they actually convert their consumer invoices into cash in order to continually meet their financial obligations. *Revenue conversion* continues to be a challenge for many municipalities for a variety of reasons. A strategic response is therefore required.

In order to understand municipal revenue dynamics more holistically, one has to look at revenue sources as well as the financial performance and standing of municipalities. In the 2015/16 financial year, South African municipalities raised R346.9bn in income from revenue sources such as property rates, electricity, water, sanitation and refuse removal (the **Big Five** municipal revenue streams), as well as grants and subsidies, and ancillary revenue from provincial and national government. Over 50% of total municipal revenue was from the Big Five revenue sources, making these sources the largest components of municipal revenue.

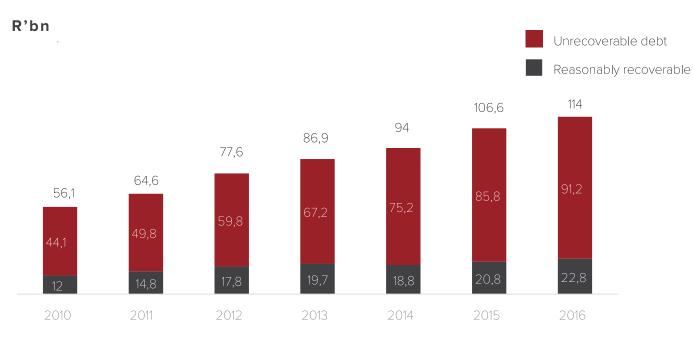


A number of opportunities exist for municipalities to increase their revenue sources beyond just the Big Five sources. Municipalities across the country have explored additional revenue sources such as selling prime outdoor advertising spaces, rental and or leasing of land and buildings, sale of prime land parcels that are not necessary for service delivery, and car parking services. Beyond that, a number of municipalities have begun to look at designing and implementing economic development strategies in order to attract more corporates into their cities. Many municipalities have seen the benefits of having corporates as a large customer base. Not only do corporates provide a stable revenue base for municipalities, they also provide jobs to citizens of the city, thus enabling them to better afford paying for services.

However, municipalities face challenges in converting revenue from the provision of services as measured and reflected in their books, into actual cashflows in order to meet the day to day financial demands of municipal functions. As a result, aggregate municipal consumer debt amounted to nearly R114 billion at the end of June 2016. This is up from the R107 billion of the same period one year earlier. Only about 20 percent of this debt is considered reasonably recoverable since the rest of the debt is older than 90 days. This suggests that South Africa's municipalities will likely lose or not convert the R91 billion of debt into cash flow.

To put the problem of consumer non-payment into context, South African municipalities have borrowed just over R60 billion - in long term loans, marketable bonds, bank overdrafts etc. - attracting an annual interest charge of R8 billion. On the other hand, municipalities are owed R114 billion by consumers. This debt is considered quite difficult to recover with a portion of it possibly unrecoverable, and R4.1 billion immediately written off. Were this debt recovered, it would settle all municipal debt, saving municipalities billions in interest payments every year.





Cumulative debt across South African municipalities

Source: South African National Treasury, Statistics South Africa

A number of revenue inefficiencies and challenges exist amongst municipalities. These include metering and billing inefficiencies, suboptimal tariff strategies, and lack of active engagement of customers by municipalities.

Given these revenue challenges, municipalities across the country have implemented a number of revenue conversion strategies with varying results. Some strategies have shown no demonstrable results, while others have yielded significant increases in municipal revenue conversion. These strategies have touched on a number of management practices and relate to proven successes seen in commerce and industry.

Among the notable examples of revenue conversion strategies that have begun yielding results is the Mmogo re a Gola Programme run by the City of Tshwane, which led to a noticeable increase in revenue collection rates. Ekurhuleni Metro also had a successful revenue conversion and coverage initiative which they called the Revenue Management and Enhancement Programme. The also had a customer revenue awareness programme called Siyakhokha Siyathuthuka. The success of these revenue conversion programmes depended on resolving the challenges that impact customers' willingness and ability to pay. These challenges include inaccurate billing, customer dissatisfaction and customer service inefficiencies. Some of these initiatives included detailed customer segmentation and service design, improving customer service culture, optimising pricing, and using advanced data analytics to understand customer trends.



Revenue coverage and conversion strategies



Source: Municipal official interviews, Ntiyiso Consulting research

The high levels of debt faced by South African municipalities require a concerted effort by municipalities not only to convert revenue and debt into cash, but also to stem the tide of the rising debt levels that are a result of non-payment for services rendered. T his report directs focus on a number of revenue conversion strategies that municipalities could look into implementing within their unique contexts.



$E \times h i b i t 3$

Municipal revenue aims







Diagnosing Municipal Revenue Challenges



Understanding current municipal revenue performance

In the 2015/16 financial year, South African municipalities reported an income of R346,9bn, R202bn of which was from revenue charges to consumers. The rest was from national and provincial government grants. This was an improvement from the R317bn of the previous financial year. In the same period, municipalities were owed R114, up by R9bn from the R106.6 of the previous year. Despite municipalities' best efforts to improve revenue conversion, debt to municipalities has been rising consistently year after year. The increases in debt owed to municipalities are somewhat moderated by standard debt write-offs – with the 2015/16 write off amounting to R10,2bn.

A deeper analysis of municipal revenue streams

Municipalities raise revenues through charging tariffs for services and levying taxes and penalties. Moreover, municipalities receive grants from provincial and national government, an example of this being equitable share grants from the national treasury, as specified by the Division of Revenue Act, 2015.

The largest proportion of municipal revenue comes from tariffs levied for municipal taxes and services such as property rates, electricity, water, refuse removal and sewerage and sanitation. In the 2015 financial year, these BIG FIVE revenue sources constituted over 50% of overall municipal revenue.

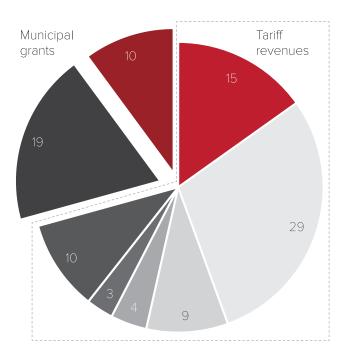
The challenge for municipalities is to optimise revenue from both service tariffs as well as additional sources. Our analysis of municipal revenue performance suggests that there are a number of opportunities to extend revenue coverage across some of the major revenue components.





$E \times h i b i t 4$

Municipality income breakdown, 2015 - 16



Percent, (100% = R346.9bn)



Source: South African National Treasury , Statistics South Africa

While there is constant pressure to optimise across all revenue sources, it is their service or tariff revenue that municipalities can influence the most, since grants result from separate processes over which municipalities have little influence.

In the 2015/16 financial year, service or tariff revenue constituted just over 50% of municipality revenue. While total municipal revenue was at R346bn – representing charges to customers as well as grants - municipalities only received R326bn in cash flow. This implies an income deficit of R20bn. Nearly R15bn of that amount is attributable to service charges, and R2.5bn can be attributed to property rates. While the rest is attributable to outstanding capital investment allocations from provincial and national government departments.



Municipality revenue break down by municipality type, 2015 - 16

Percent, (100% = R346.9bn)

Percent	Property rates	Service charges	Investment revenue	Grants / equitable share	Other	Total
Total revenue	14	43	1	34	8	100
Metros	16	49	1	25	9	100
Secondary cities	14	54	1	25	6	100
Rest(others)	10	25	1	58	6	100

Source: South African National Treasury

Of course, the revenue profiles of municipalities differ according to municipality size. As indicated in the table above, metros and secondary cities tend to make the bulk of their revenues from service charges, while smaller municipalities make the bulk of their revenues from grants and equitable share allocations. This makes sense since wealth **(affordability)** levels amongst the different municipality types vary greatly.



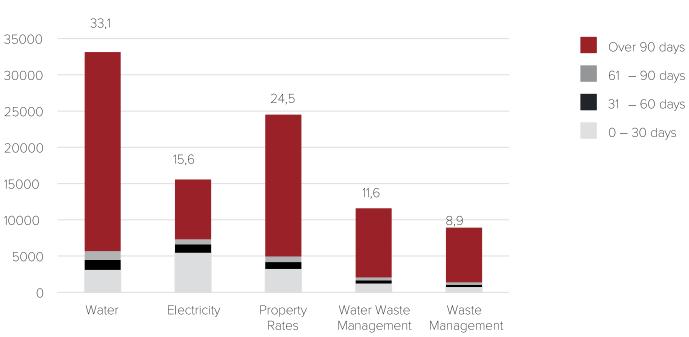


The debt problem and challenges with revenue collection

In the 2015/16 financial year, South Africans owed municipalities R113.5bn after write-offs. Water is the most owed for service. This high water debt rate is driven by a number of factors, including limitations on municipalities' ability to cut off water in cases of non-payment.

Exhibit 6

Municipal debt by service, 2015 -16



R'bn

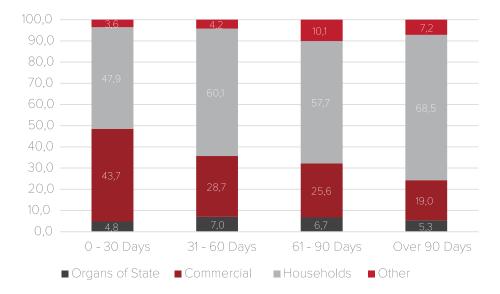
Source: South African National Treasury

The first concerning aspect about this municipal debt is that most of it is older than 90 days. Such debt is typically considered unrecoverable and thus has to be forgone, despite municipalities having used resources in providing the services.

If this holds true for municipalities, then it constitutes tens of billions of Rands in uncollected revenue for services with a high cost of provision in the form of infrastructure, capital investments and operating costs. This implies that any municipal revenue conversion strategy would have to be two-pronged: firstly, attempting conversion before debt gets to 90 days, and secondly, finding better strategies to recover late stage debt. Successful conversion relies heavily upon being proactive rather than reactive. Debt collection strategies will also need to take a customer-centric approach to collections by applying collection methods tailored to suit each customer group.



Debtor age analysis by customer type, 2015 - 16



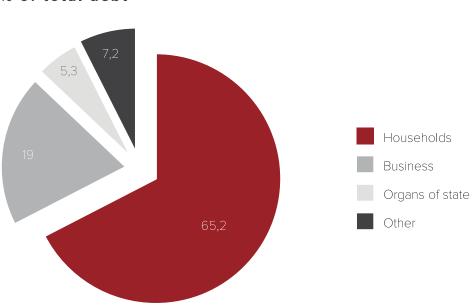
% of total debt per customer type

The second concerning aspect is that the bulk of the debt is from household consumers. Over 60% of municipal debt is household debt. Thus the sheer number of debtors that each municipality has to manage is such that it makes conversion complicated if not nearly impossible.



Source: South African National Treasury,

Debt by customer type, 2015 - 16



% of total debt

These high debt rates clearly indicate a breakdown in revenue conversion in both upstream and downstream activities. Upstream activities relate to the management processes and systems within the municipality (meter reading, billing, credit control, etc.) and the human resources (level of skills and capacity) that are responsible for implementing the functions. Downstream activities relate to the external factors that would encourage consumers to pay their municipal bills e.g. customers receiving municipal bills before the payment due date, alternative payment options, etc. The major question that municipalities thus need to answer is how they can get customers across all groups to pay for their municipal services **in full, on time, all the time**. This question is best answered by understanding some of the challenges faced by municipalities across the four key factors that influence revenue conversion. These factors relate to customers' ability to pay; customers' willingness to pay; municipality's ability to enforce payment; and municipality's willingness to enforce payment.



Source: South African National Treasury

Factors influencing revenue conversion and challenges faced in each

Ability to pay	Ability to ensure payment		
 Hous ehold income issues Mispricing 	 Metering challenges Billing inaccuracies Unresponsive customer relationship management Limited data analytics People and culture issues Policy challenges 		
Willingness to pay	Willingness to ensure payment		
 Dissatisfaction with service 	 Political pressure 		
delivery	 Perceptions around debt 		
 Perceptions about municipal 	management		
bill payment			
 Customer education 			

Source: Municipality officials interviews, Ntiyiso Consulting research

Assessing ability to pay

The discussion around municipal revenue conversion in South Africa happens within the context of an urban population faced with economic challenges. With over a quarter of the population reported to be unemployed, municipalities have to also deal with the fact that some citizens are simply unable to pay for the municipal services they consume.



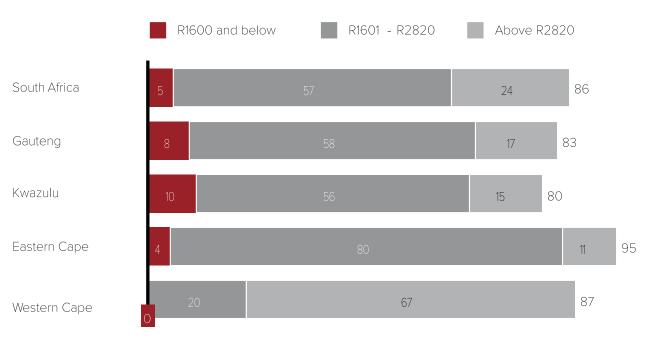
According to the 2010/11 South African Income and Expenditure Survey (IES), South African household income averages just over R95 000 per annum. This average drops significantly to R56 000 for Black households, who constitute the majority of South African households. With such constrained household income, many South African households battle to meet their municipal payments. The IES estimates that households spend about 32% of household income on housing and municipal services.

Municipalities across the country recognise that affordability is an issue and have implemented indigent programmes to assist destitute households in accessing basic municipal services. In 2015, South African municipalities recorded 10.9 million customer accounts, of which 3.57m were considered indigent. These numbers were up from 10.4 million and 3.48 million respectively in 2014. In simple terms, over a third of municipal account holders are considered indigent and therefore cannot realistically pay for their municipal services.





Indigent programme composition breakdown by selected province ¹



% of indigents in each monthly income group

1 Percentages don't add up to 100% as some municipalities don't have indigent programmes

Abuse of indigent programmes remains a concern for many of the municipal officials that were interviewed for this report. A common practice that officials have identified is one where supposedly indigent households use services such as water and electricity at a much higher rate than the average household. The suspicion here is that there might be fronting or even selling of free services to neighbours.

Another regime used by municipalities to address the ability to pay is tariff pricing. Municipal tariffs are typically driven primarily by base pricing guides from bulk service providers, and by regulators in the case of electricity and water. Municipalities then price services such as refuse removal and sewerage according to usage volume or property value. For example, the approved tariff to remove a 240L bin in Tshwane is R250 per month compared to R87 for the removal of an 85L bin.

In their attempts to ensure that tariffs are progressive and to encourage reasonable consumption of services, municipalities use per-unit cost increases with increasing usage volumes. However, our analysis shows that this strategy might lead to increasing the debt burden on users since they tend to consume services such as electricity and water far beyond the minimum threshold, which leads to much higher tariffs than if tariffs were household income linked.



Source: Statistics South Africa

The example of refuse presents an interesting case study. In the City of Tshwane (CoT), refuse removal tariffs are based on usage volumes as indicated above, whereas in the City of Johannesburg (CoJ), these tariffs are based on the ratable value of each property. This would imply the the CoJ refuse tariffs are more progressive in nature, where higher earning users (suggested by their property values) are charged more for the service. Moreover, when levying refuse collection charges to complexes, CoJ levies a charge for each property contained within the complex. Our analysis shows that CoT, on the other hand, levies a charge based on the number of bins provided to the complex, with the result that the per-unit refuse removal charge to each unit is lower. Again, this raises questions about the wealth levels of people who can afford to stay in complexes and how their tariffs should be structured compared to lower income people living in stand-alone houses in low-income areas.

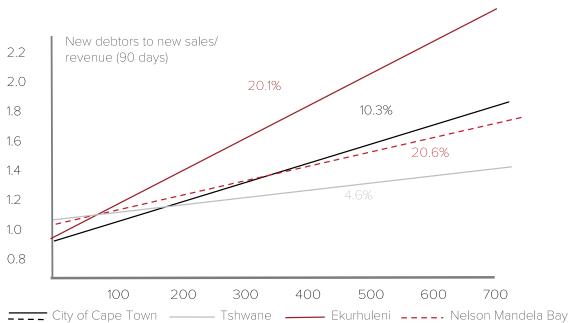
It is worth noting newspaper reports that came out in May 2016, where residents of Soshanguve in Tshwane took to the street upon realising that their refuse removal tariff had more than doubled due to increased bin sizes. They complained that they would not be able to pay the new tariff.

This raises questions about municipal tariffs and their contribution to defaults on payments. It also raises questions about whether municipal tariffs are calculated with income disparities in mind. Currently, municipalities with steep tariff increases at high usage volumes for services such as electricity, tend to also have low revenue conversion levels, and thus high debt levels.





Electricity tariff structures in selected municipalities



Electricity tariff per kWh at given consumption levels

Vertical axis: Rand per kWh, Horizonal axis is kWh, Consumer Debt as % of Revenue

Source: www.broadband.co.za, Ntiyiso Consulting research

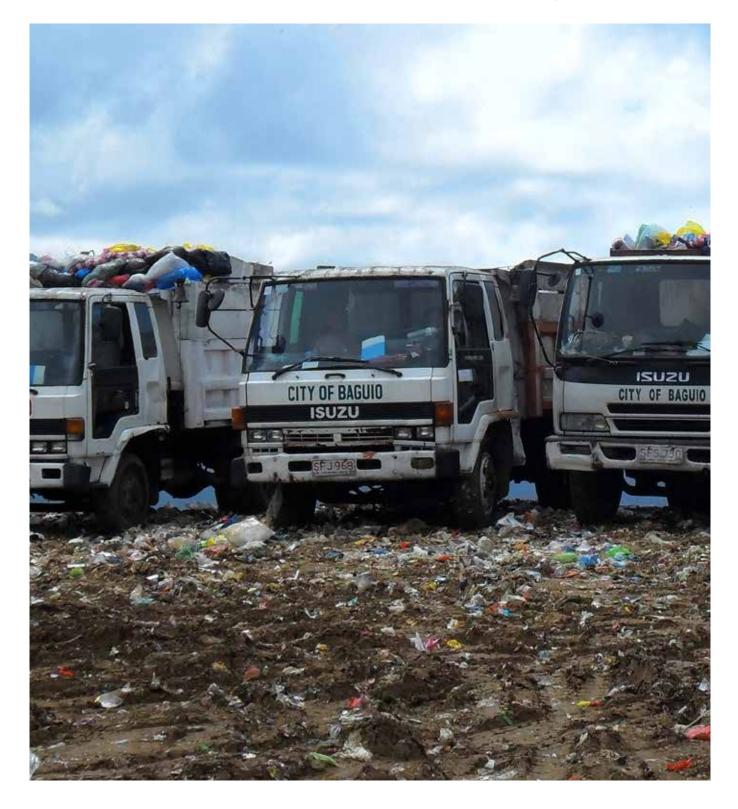
In the example of electricity, indicated by exhibit 11 above, we see that municipalities with steep increases in electricity tariffs at high usage levels also have higher debt increase rates. Ekurhuleni Metro is a case in point. They have the steepest tariff increases at high usage levels and saw a 20% increase in monthon-month debt during the period analysed. Of course, a number of factors contribute to municipal consumer debt. The question here is whether tariff mispricing contributes to the problem.

Factors affecting willingness to pay, or lack thereof

If the numbers are to be believed, more than 60% of municipal account holders are considered capable of paying their municipal accounts. However, with municipal debt hovering over R100bn and increasing by over R10bn before write-offs each year, it is clear that even the non-indigent account holders are not paying their accounts as consistently as they should. Furthermore, indigent account holders also significantly contribute to the municipal debt due to over-consumption that is beyond the free basic service allocation.



To understand the drivers of non-payment beyond affordability, this report undertook to understand customer perceptions about municipalities as a possible driver for non-payment. Analysis of municipality customer surveys suggests a correlation between bill payment and customer satisfaction, with municipalities where customer satisfaction is higher also reporting higher bill payment. Among the key drivers of customer dissatisfaction were perceptions around low service-delivery standards.





Customer satisfaction as a driver for payment



% customer satisfaction and revenue collection

Source: Municipalities Annual Reports 1 Revenue

1 Revenue Collection number is based on target for 2015

Moreover, senior municipal officials indicated that according to feedback they had received from customer interactions, customers regarded municipal bill payment as a grudge purchase rather than payment for valuable services.

These kinds of perceptions suggest the need for municipalities to direct some effort towards winning the hearts and minds of customers. Improving customer engagement and customer relationship management could go a long way in achieving this. Customer engagement strategies are discussed later in this report.

Ensuring that all barriers to payment are removed-Improving ability to ensure payment

Over and above their reluctance to pay, customers sometimes also believe that they have legitimate reasons for not paying their bills. During interviews and focus group discussions with customer service consultants in one of the metros, a number of operational issues affecting customer payments were identified. Chief amongst them was incorrect statements. Customer service consultants reported bill accuracy queries as one of the commonest query type. Specific examples of bill inaccuracy queries included incorrect estimations where customers complained about getting high bills even though they had been away on holiday during the month for which they were being billed.



In many cases, estimations are driven by a host of reasons including delays in meter readings, meters not being read and readings being rejected due to errors. One of the municipalities surveyed for this report reported conventional meter reading rates of 50 to 70% each month. Another had set a monthly read rate target of 85%, as they believed they could never achieve a 100% read rate. These low read rates are attributed to challenges such as delays in fixing faulty meters, meter reading human resource shortages and inadequate meter reading systems. Regarding property rates, municipal officials indicated that they experience challenges when it comes to keeping up with the supplementary valuations required to keep the valuation roll up to date. As a result, some property rates are underestimated, further hurting revenue. In instances where the supplementary valuations rolls are completed, the actual updating of the new property values to generate the property rates on municipal systems takes place many months, leading to inconsistent billing. This results in consumer backlash against the municipality.

Delays in billing, billing not being effected on accounts and using wrong readings and/or tariffs that results in over inflated accounts, are other issues that are seen to negatively impact revenue conversion. Analysis of municipal queries revealed a number of queries relating to customers being retrospectively billed for months of unbilled items.

This was especially prevalent with property rates, where customers were under-billed for multiple months and then expected to make lump sum payments once billing was corrected.

These issues are operational in nature and require municipalities to look within for solutions. A number of common operational issues were identified across a number of the municipalities analysed for this report. These included:

- Suboptimal metering speed and accuracy
- Misalignment between meter reading and billing timelines
- Delays in valuation roll and property rate updates
- Delays in name changes post move-in/move-outs
- Delays in billing
- Limited use of data to drive revenue decision making
- Limited use of technology to improve metering to billing operations
- Concerns about people capabilities, leadership and culture
- Unresponsive customer relationship management
- Limited and unstructured customer engagement



Are municipalities always willing to enforce payment?

Many municipalities use electricity cut-offs as their main debt recovery mechanism for delinquent customers. However, this tool has clear limitations in that it increases the likelihood of meter breaching and also reduces per capita customer revenue, since consumption is reduced during the cut-off period. Another major negative aspect of this tool, of course, is that it further alienates customers. As it is, South Africa already experiences a number of service delivery protests each year, and so large scale customer disconnections turn into a volatile debt recovery tool.

In recognition of these limitations, some of the municipal officials interviewed for this report indicated that they were piloting more proactive strategies to manage delinquent customers. These included activities such as prioritising delinquent customers for prepaid metering as well as focusing customer education programmes on those areas with high levels of delinquency. This more proactive approach to delinquency management is a great departure from the previous municipal default position of first waiting for non-payment and then carrying out cut-offs.

Concluding remarks on the diagnostic

From the discussion up to this point of the report, it is clear that municipalities are faced with a number of challenges that negatively impact revenue conversion. Thankfully, many of these issues are within municipalities' control to resolve. Already, a number of municipalities are reporting positive results from the strategies they kicked off in their bid to resolve some of these issues. The rest of this report provides a number of high impact strategies that municipalities could look into implementing, based on the challenges that they face.







Municipal Revenue Turnaround Strategies



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PANKA

Proposing Strategies for Revenue Coverage



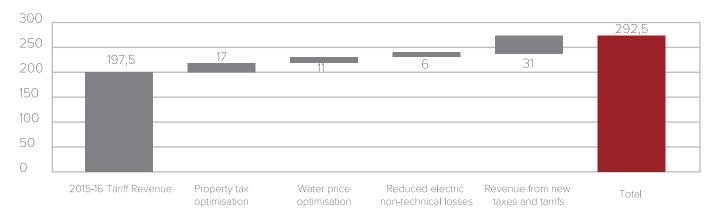
The R65 billion additional municipal revenue coverage opportunity

In the 2015/16 financial year, South African municipalities generated revenues of close to R347 billion, of which R197,5 billion was attributed to tariffs for municipal services and taxes such as electricity, water and property rates. We believe that there is a great opportunity to increase annual municipal revenues by an additional R34 to R65 billion per annum, which would constitute a 20% to 30% increase in tariff revenue.

Exhibit 13

Municipal tariff revenue increase potential





Source: SA treasury, NERSA, media search, Ntiyiso Consulting research

This additional revenue could be attained through:

- Better aligning residential property rate pricing with increasing residential property valuations as well as looking into increasing municipal property rates
- Significantly reducing electricity non-technical losses
- Better aligning water pricing with the ever increasing cost of delivering water to households
- As well as adding completely new revenue sources, such as new municipal taxes and attracting new consumers into municipalities



Revenue potential from property rates

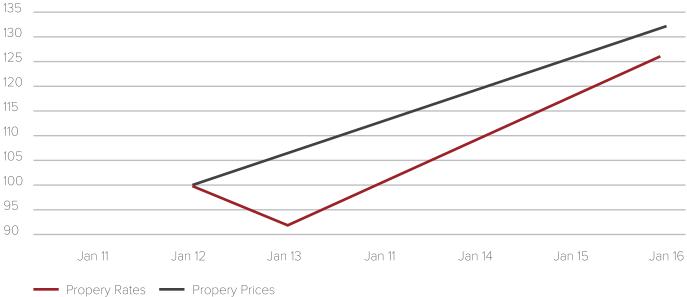
In terms of section 4(1)(c) of the Municipal Systems Act, municipal councils may, inter alia, levy rates on property to finance operational expenditure of the council. And according to the Municipal Property Rates Act (MPRA), property rates are levied and calculated based on the value of the property. The value of the property means the market price at which the property would realistically be sold in the market. The rate would also depend on the type of property, e.g. agricultural land or free standing home.

In line with the legation references above, South African municipalities levy property rates and taxes on residential properties. These rates differ from municipality to municipality, but tend to go up to a maximum of 1% of property value. Property rates and taxes yielded R51,9 billion in municipal revenue in the 2015/16 financial year.

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Growth in property values and property rate revenues, South Africa





Source: FNB property index, South African Treasury



However, analysis of growth rates in residential property valuations and property rates revenue indicates that the growth rate in residential property values far outstrips the growth rate in property rates revenue. This should not be the case since property rates revenue growth should be pegged to property value growth.

Moreover, many municipalities have over the years increased the property rates they levy. If anything, therefore, the reverse should apply in that the growth in property rates revenue should be outstripping the growth in housing values. The compound annual growth rate (CAGR) for property values over the past 5 years is 7.1%, while the CAGR for property rates is 6.1%. Closing the CAGR gap could yield an additional property tax opportunity of approximately R7.6 billion each year.

Furthermore, a comparison of South Africa's property rates revenue performance to that of OECD municipality indicates a clear opportunity. As previously mentioned, South African municipalities charge property rates of up to 1% of property value. This number is significantly lower than OECD municipalities that typically levy rates of up to nearly 2% of property value.

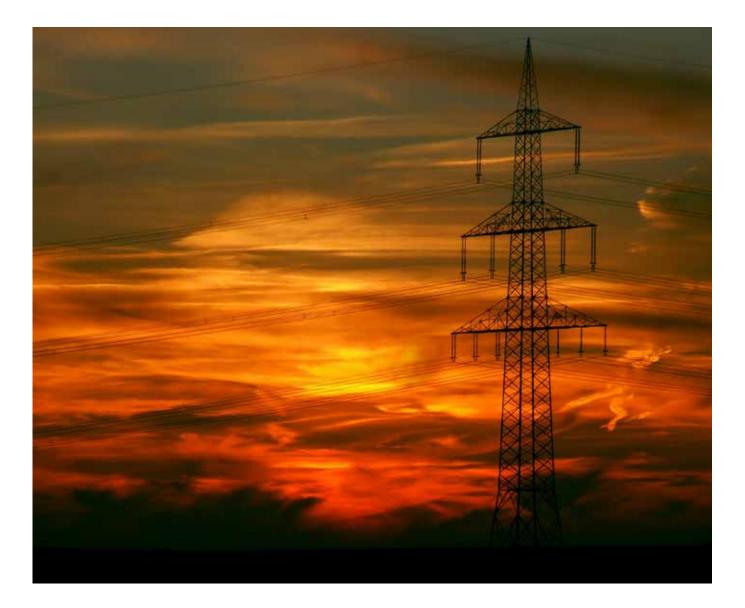




Exhibit 15

Average property rates

%

Country		Average property rate	Minimum personal income tax
	South Africa	1,1%	18%
	Brazil	0.3%-1%	15%
	Russia	0.3%-1,5%	20%
۲	India	6%-10%	8.28%-22.33%
*):	China	4%	5%
•	Japan	1.4% - 2.1%	3.4% - 5.9%
₩	Australia	>1.6%	24.38% - 25.66%

Source: Global property guide

As a result of these lower property rates, revenue from property rates is far lower in South African municipalities than in OECD municipalities. The ratio of property rates revenue to GDP in South Africa is 1.1%, while this number is 1.9% amongst OECD municipalities. If South African municipalities were to match this ratio, it would yield an additional R27 billion in property tax revenue each year. Perhaps a target for South African municipalities to set could be the average of the R7.6 billion and R27 billion opportunities articulated in this section, which would be a target of R17 billion.

To begin realising this opportunity, municipalities have to undertake a number of short term and long term initiatives. Short term initiatives should be aimed at ensuring that municipalities are realising the full amount of revenue available under the current property tax dispensation. And in the long run, focus has to turn to a detailed analysis of opportunities to increase the property tax rates that are currently far below global levels.



Increasing property tax revenues in the short term will require municipalities to implement processes and systems that ensure almost real-time updating of their valuation rolls as property values increase. This can be achieved firstly by conducting regular analysis of house valuations compared to property rate revenue. South Africa has a number of rich data sources that can provide municipalities with property valuation data up to suburb level. This data would enable municipalities to run desktop analyses that would enable them to quickly identify areas where property re-valuations are required.

Moreover, closer co-ordination between municipal property valuation departments with their finance departments could go a long way in ensuring that valuation roll updates are reflected in customer invoice at a faster pace. Many of the municipalities interviewed for this report indicated that their process of updating finance records once property values change was not as seamless as it could be. Perhaps there is also an opportunity for automation here.

In the long run, an analysis of opportunities to increase property tax rates is required. This analysis has to take into account both what is permitted by law and what consumers can bear, given their total tax exposure across all levels of government. The analysis has to begin with the principle that current property tax rates are lower than those of peers, while the demands on our municipal infrastructure are the same or even more.

Revenue opportunity from reducing non-technical electricity losses

The National Energy Regulator of South Africa (Nersa) estimates that 18% of electricity bought by municipalities does not reach paying customers. Of this, approximately 12% is lost due to non-technical losses including illegal connection, meter tempering and sales of illegal electricity vouchers. This is likely a conservative figure since Nersa disclosed that six municipalities lost an amount of 40% of the electricity they purchased, while 18 lost between 30% and 40%, and a municipality in KwaZulu-Natal suffering 63% of such losses.

Reducing these losses could add up to R11 billion to electricity sales revenue. According to Nersa, 54% of this revenue would come from business consumers, and the remainder, from household consumers. Non-technical losses are driven by intentional illegal activities on the part of consumers. Thus, any solution to non-technical losses would have to focus on changing consumer behaviour by creating a sufficient disincentive for participating in these kinds of activities.

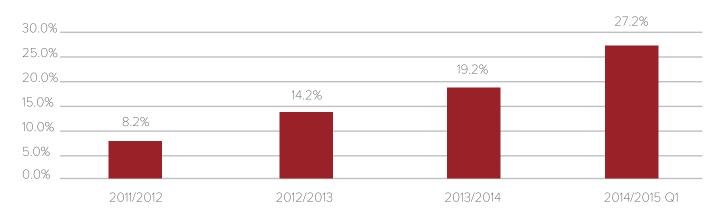
Some of the municipalities analysed for this report were already implementing some impressive initiatives to battle non-technical losses. At the base of these initiatives has been significant investment in improving energy balancing analysis. Energy balancing is useful in helping municipalities better understand what are their monthly target revenues from electricity. This enables municipalities to quickly identify periods where there are non-technical losses, because electricity billing will tend to fall far below target. Many of the energy balancing models we saw were detailed to a suburb/township level, allowing officials to quickly identify problem areas.



Exhibit 16

City Power non technical losses

Percentages



Source: African Utility Week

Once illegal activity was identified, municipalities tended to employ similar rehabilitation strategies, which included cut-offs and even cable ripping for offenders. Moreover, upon reactivation, former offenders were put on watch lists, where random checks of their meters were conducted from time to time. Another strategy worth exploring is to increase community awareness about the dire consequences of these illegal activities.

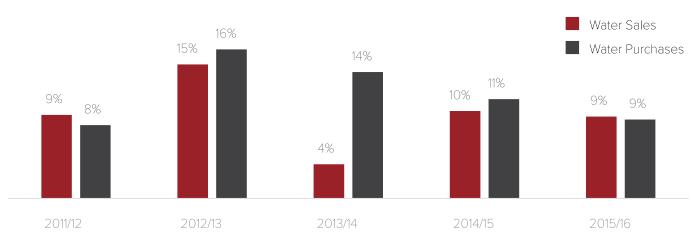
Revenue opportunity from better aligning water prices with the cost of delivery

The pricing of water is a rather politically delicate exercise. Since water is such a critical service, municipalities have to take great care to ensure that there are no barriers to accessing water. Higher tariffs could be such a barrier. Thus municipalities have to tread carefully.

However, it is worth remembering that the distribution of piped water to consumer premises carries a cost that needs to be covered by sales in order to ensure sustainability in delivering the service. Our analysis indicates that the current water tariff regime might be unsustainable as water tariff increases do not keep up with the price increases of water purchase prices, water infrastructure investment costs and water distribution operating expenses.



Exhibit 17



Water sales and purchases price growth rates

Percent

In terms of water price increases, municipalities have not been keeping up with the price increases from bulk water providers. Over the past five years, the compound annual growth rate (CAGR) of municipal water purchases has been 12%, while the CAGR of municipal water sales of the same period has only been 9%. Given that volumes remain constant between sales and purchases, this differential can be attributed to municipalities not increasing water prices enough to keep up with increases from bulk water suppliers.

It will take a water tariff increase of at least 3% just for municipalities to keep up with bulk water purchase price increases. This percentage will likely have to be higher so that municipalities can make up for the shortfalls of previous years, which were likely subsidised by other municipal services.

Once municipalities align water pricing with bulk supplier costs, they then also have to factor in the cost of infrastructure investment and operating expenses to come to the final tariff they pass on to consumers. Over the past five years, municipalities have been spending an average of R3.7 billion per annum on water infrastructure. This investment rate is set to remain the same or increase in the coming years as municipalities battle to keep up with water infrastructure delivery backlogs and with providing additional infrastructure to connect even more households to piped water. The bulk of this investment is currently derived from grants from the provincial and national governments. However, these grants might soon not be available, as there have already been calls from national government for municipalities to become more self sustaining.



Finally, municipality operating costs have also increased by 11% over the past two years. Assuming that operational costs are closely linked to sales, it can be deduced that operational expenses related to water delivery are at approximately R25 billion per annum. This increase in operating expenses also has to be covered through increased pricing, if municipalities are to become self-sustaining. Thus, to keep up with water price increases, infrastructure investment and operating expenses, we estimate that municipalities have to increase water prices by at least 10- 20% per annum. This would yield R3bn to R6bn in additional revenues per annum.

To begin realising this opportunity, municipalities must get a better understanding of household affordability levels within their municipalities. The private sector greatly relies on affordability analysis to inform pricing. This tool may be useful to municipalities as well. An increase in water prices might also mean that municipalities would have to review their indigent scheme thresholds and revise them to ensure that no citizens are left without water due to price increases.



Revenue opportunity from under-explored revenue sources

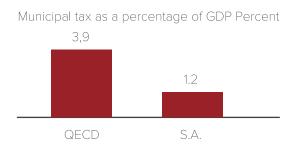
There is a lot of scope to greatly increase revenues within South African municipalities, beyond the current base of tariff revenues currently available to municipalities. Firstly, there is opportunity for municipalities to levy taxes on property owners and developers, beyond the current property rates regime. Secondly, there are a number of economic development opportunities that could have the impact of directly increasing municipal revenues, as well as contributing to increasing incomes and property values within the municipality. The impact then would be increased municipal revenue through high property taxes and tariff revenues.

South Africa's municipal taxes constitute 1.2% of GDP while the ratio in OECD countries is 3.9%. If South Africa were to fully match the OECD ratio, the result would be an additional R155bn in revenues.

$E \times h i b i t 18$

Additional revenue sources worth exploring

- SA municipal revenue as a percentage of GDP is much lower than QECD peers
- Matching QECD peers would yeild R155 bn in revenue



Oppertunities to increase revenue

- 1. Additional municipal taxes
- Municipal transport cost sharing tax to businesses
- Taxes on gated communities
- Development contribution taxes for new developments
- 2. Economic Development
- Tourism promotion
- Economic Development Corporations
- Business improvement Areas
- Advertising
- Partnerships with the private sector

Additional municipal taxes as a new revenue source

As a start, South African municipalities could aim to attain 20% of this potential additional revenue. That target would equate to an additional R31 billion in revenue.

The are a number of specific interventions that municipalities could look into in order to achieve this revenue increase target. The rest of this section outlines these interventions.



Levying surcharges

Section 4(1)(c) of the Local Government Municipal Systems Act No.32 of 2000 (as amended) confers the right to municipalities to impose surcharges on consumers. Some municipalities are already exploring the idea of imposing surcharges on targeted consumer groups. For example, in one municipality, officials are looking at imposing a surcharge on consumers who receive electricity directly from Eskom and not from the municipality. The rationale here is that municipalities use some of the profits they raise on sales of electricity to finance community infrastructure such as roads. Thus, consumers who get electricity directly from Eskom do not make their fair contribution towards the infrastructure financed from electricity profits. So, to remedy this, the municipality seeks to impose a surcharge based on average consumer electricity usage.

Greening Levy

Where a municipality is responsible for infrastructure development which increases the value of surrounding properties, the municipality could levy a tax on those property owners as a fixed or variable fee in lieu of the created wealth or the municipalities' contribution to the wealth. Further regulatory analysis and business case building for this kind of intervention would be required for different municipalities.

Tax for gated areas

Some communities, mainly the affluent, have started securing roads or streets and controlling access to these streets. This may mean increased use of other local roads and therefore, the need for municipalities to spend more on extra maintenance since the use of streets and roads will be no longer evenly distributed. To compensate, municipalities could levy a tax or fee for the closing-off of community roads.

Development Contributions tax

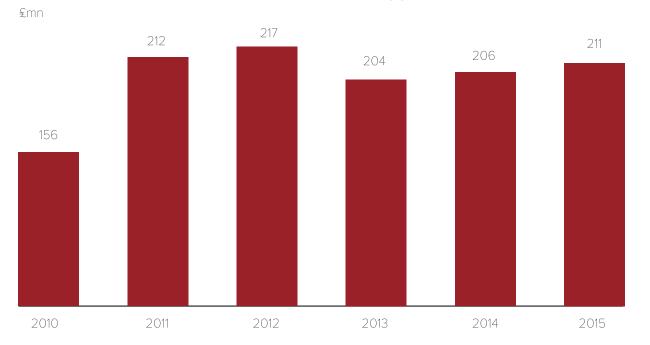
Municipalities can and some are already levying a special tax to property developers to compensate for new infrastructure, increased municipal services and resources dedicated to the development since municipalities must continue to provide more infrastructure and services to meet the extra demands brought on by new and often large developments. These are currently paid for by municipalities and subsidized by other taxpayers since municipalities much provide this new infrastructure and extended services.



Case Study: Crossrail Business Rate Supplement

City of London levy on large business to finance infrastructure

In 2010, the City of London introduced the Crossrail Business Rates Supplement. This is an additional tax levied on business properties in London with a ratable value of over £55,000 in order to finance the expansion of the rail network in the city. Small businesses are exempt from this tax. In this regard, the tax is paid by 17% of London business. So far this tax has contributed 1,2 billion Pound Sterling to local government coffers for the purposes of infrastructural development.



Revenues from Crossrail Business Rate Supplement

This is an interesting example of how cities can continually increase their tax base in order to raise revenue, and meet various demands of a growing, modern and self-reliant municipality.

Relying only on a limited pool of funding from national government in no longer is sufficient or sustainable model for cities and this is clear from international practice.



The case for economic development

As required by law both in the constitution and in the Municipal Systems Act of 2000, municipalities should draw up an annual and five-year Integrated Development Plan (IDP) with a clear economic development strategy. These strategies, or Local Economic Development Strategies (LED), are to be reviewed regularly.

These plans can and should form part of municipalities revenue strategies, cutting across goals to convert revenue as well as expand revenue coverage. This means that municipalities should aim at covering more areas of revenues or bring more sources into their revenue universe.

Doing this requires municipalities to develop detailed and practical strategies for economic development. These could range from small business development to large business support and engagement. Also, municipalities should look to becoming competitive by formulating strategies which make them preferred destinations for business, investment and skills. Important areas which make cities competitive include ease of doing business, service delivery, safety and security, cultural diversity and vibrancy.

The 2016 State of South African Cities report notes that cities have higher levels of output, employment, income and productivity, and have the potential to lead South Africa's economic recovery through greater innovation, human capital and investment. It further notes that, however, much needs to be done to make city economies more competitive and productive, and capable of providing work and economic opportunities. This sections proposes a number of strategies for economic development.

This report focuses strongly on the importance of municipalities changing their outlook to that of competing product and service providers to customers. This approach requires strategies which will include creativity and the adoption of a competitive stance similar to that of product or service providers everywhere. In this section we discuss a set of important interventions that municipalities could explore in their efforts to be competitive, grow and thus achieve higher levels of revenue. The list of interventions highlighted below is not exhaustive. However, the interventions are related and even mutually reinforcing. It is important to recognize that some of these interventions will suit some municipalities more than others. The point is to identify the relevant ones and focus on them.

An audit of existing resources and advantages

Historical factors, natural resources and other contextual paradigms can be of special and sometimes even unique advantage to some specific areas. Municipalities should look into their own specific circumstances so as to identify areas of development.

Some areas have vast water resources for agricultural activity. Others have natural beauty for tourism. Others are home to historical figures and icons, while others boast opportune proximity to resources and even transport infrastructure such as ports. All these represent opportunities for investment and economic activity for growth.



Regeneration of fallow industrial activity

Over time and due to business cycles and other social and economic factors, some areas have amassed unused industrial infrastructure which could be made productive again with the right kind of support and interventions. For example, some municipalities that were once industrial towns still have the infrastructure except it stands idle. Maybe it is time to revive and subsequently utilise that infrastructure through attracting potential businesses with various incentives.

Foster an attractive investor and tourist climate

As this report has argued, municipalities should see themselves as competitive entities, alongside all other consumer focused entities. Being competitive means being attractive to various stakeholders. One way to be competitive is to have a strong focus on cultural activity. This report focuses on this in greater detail later.

United voice and coherent policy to engage with business and communities

The message sent out to business and investors is critical. Therefore, municipalities must at all times pay attention to what they are communicating to stakeholders. Negative or conflicting messages in terms of business and political issues can be harmful to growth.

Further, constant engagement with stakeholders is critical in creating an environment conducive to growth and sustainability.

Partner with business on key infrastructure projects

Related to continued and good relations with stakeholders such as business, is collaboration. Public Private Partnerships (PPPs) are becoming more and more important as far as making sure that development happens quickly and efficiently.

Development of basic Infrastructure to facilitate ease of doing business

The role of economic and developmental infrastructure cannot be underestimated in terms of increasing revenue coverage as well as collection. No economic development can happen without supportive infrastructure. This includes reliable transport, energy and other economic infrastructure.



Promote and support the informal sector for a robust and inclusive local economy

A local economy must have certain factors in order to thrive. They include, most importantly, being diverse yet inclusive. This means that the informal sector, which creates self-sufficiency and robustness, must live alongside the formal sector. Municipalities can undertake some key interventions and directed policies in their effort to broaden revenue coverage. These include:

- Infrastructure to support informal business: from platforms to security and storage
- Effective spending to support local economic activity
- Supply chain management tilted towards local business

Local and global examples of successful economic development initiatives undertaken by cities

Below is a discussion of various well-known and iconic cultural and business events and hubs. These have been in existence for a while and have contributed immensely to the fortunes of their surveyed host cities.

Tourism promotion

City of Cape Town: Cape Town International Jazz Festival (CTIJF)

This festival has grown over its many years of existence. It contributes greatly to the city's finances and international status. Through labour-income multipliers, the impact of the CTIJF has increased to more than half a billion annually.

Research has found that loyal 'festinos' travel to Cape Town mainly to attend the festival, and that they spend most of their money on accommodation, food, restaurants and transport to the festival. The event itself generates over R50 million based on visitor spending, with the city hosting more than 33 500 tourists.

Rio Carnival

The Rio Carnival is known as the largest carnival in the world, with a million expected visitors in 2016 adding to the millions of locals who attend. Rio officials estimate the contribution to the local economy at US\$740 million (R10 billion) over a two-week period. The carnival is an international spectacle. It has sold the city as a capable host and testifies to the city authorities' ability to deliver services and provide an environment for business in a safe and secure paradigm. This makes Rio de Janeiro a competitive city for tourists, business and skills.



Small and large business development and innovation

Silicon Valley

Silicon Valley in the US is home to many of the world's largest high-tech companies, and thousands of new small and medium business ventures. It began as a small area of research and venture capital before becoming an economic hub that drives investment and innovation.

Such hubs are critical for local economies and have immense impact on authorities and wider economic growth. Local authorities should thus be innovative in driving such hubs, combining local resources and endowments with aspirations of growth and innovation.

Tshwane

The City of Tshwane is known to have the largest compilation community of universities in Africa – including University of South Africa, The University of Pretoria and Tshwane University of Technology. It is also houses research centres like the Council of Scientific and Industrial Research (CSIR). Added to this is that Tshwane is the capital city of South Africa and hosts the second largest population of international diplomatic missions in the world.

This combination, strategically managed, and with the right kind of investment, could make Tshwane the 'Silicon Valley' of South Africa, attracting investment and more consumers for the city's services.





Proposing Strategies for Revenue Conversion



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PANKA

Municipalities across the country have implemented a number of interesting initiatives to convert revenue. A number of these initiatives have yielded positive results that have yielded significant increases in municipal revenue collection rates. These initiatives have touched on a number of proven management practices, that have shown results in other industries.

Exhibit 19

Initiatives to resolve challenges

 Well managed indigent programmes Advanced pricing analytics 	service differentiation Improved metering speed and accuracy Value chain operating models	
	Creative partnerships with the	
Willingness to pay W • Robust customer engagement •	private sector Willingness to ensure payment	
and education	 Proactive debt prevention Better partnerships with councillors 	

As municipalities continue to implement revenue turnaround strategies, the list of initiatives presented in this section provide a useful reference. It is however worth noting that implementation of any one of these initiatives without a coherent revenue turnaround strategy is unlikely to yield lasting results.



A coherent revenue turnaround strategy is one that begins with getting a deep understanding of each specific municipality's unique challenges, and then defines a response using some of the initiatives outlined in this section, followed by implementation and results tracking. Municipal revenue turnaround strategies also need to take into account that municipalities are in competition with other service providers for consumer share of the wallet as well as likely competitors for services. Customers have a number of service providers competing for their wallet and attention and municipalities need to ensure that they are top of mind.

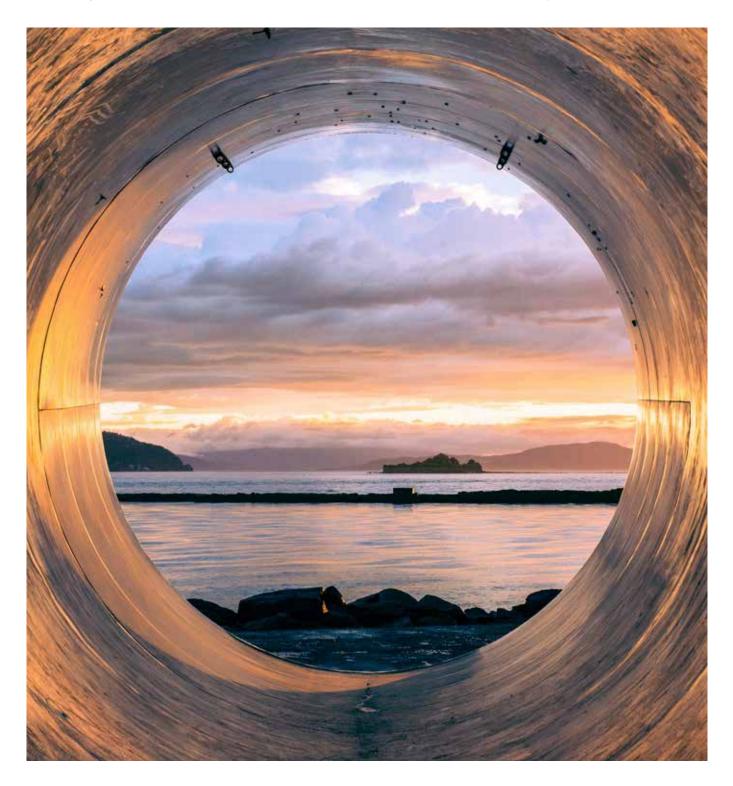




Exhibit 20

High level components of a coherent revenue turnaround strategy

Diagnostic data analysis	Response design	Implementation	Monitor and refine
 Understand current revenue performance Understand debt situation Understand challenges across the revenue value chain Data analysis around additional issues e.g., customer query resolution etc., Define business case for turnaround strategy 	 Define list of initiatives to address challenges Define budget, resources and support required to implement the initiatives Define metrics for KPIs to be achieved by the programme Agree on approach and programme plan with key internal and external stakeholders 	 Appoint dedicated team to initially implement the programme Define skills transfer plan from the programme to day to day staff Define programme sustainability plan, indicated how initiatives will be transferred to day to day operations in the long run 	 Monitor changes in KPIs for key metrics compared to previous periods Report successes to stakeholders on an on going basis, to maintain momentum and interest Refine initiatives where desired outcomes are not being achieved

Moreover, the emergence of off-grid solutions, for example, is likely to impact municipal revenues in the long term, as wealthier more lucrative customers choose these options over municipality provided services. Thus any revenue turnaround strategy needs to also respond to these factors.



Strategies to improve ability to pay

Given all the issues that impact customers' ability to pay their municipal bills, municipalities need to think about how they can best alleviate some pressure from customers. Interviews and analysis of municipal initiatives to help relieve pressure on customers, yielded a number of interesting initiatives that are worth considering.

Well managed indigent programmes

Municipalities have woken up to the fact that it is not enough to merely have indigent policies and programmes. These have to be well communicated to customers, so that the households that need them the most know about them. The Tshwane indigent programme for example involved setting up a dedicated project team to manage technology integration, customer education and coordinating indigent registrations with the social development division within the city. This programme saw a large number of qualifying households registering for the benefits due to them.

The key lesson here is that indigent progammes need to take a proactive approach to finding qualifying households and registering them. Alignment with stakeholders in the Department of Social Development is also key in ensuring that indigent programmes reach as many qualifying people as possible.

Pricing/tariff analytics

Given the pricing related issues mentioned earlier in this report, it would benefit municipalities to start thinking about reviewing their pricing strategies. In the private sector, pricing analytics are widely utilised to determine prices that will yield the highest revenues. Retailers such as Amazon and Coca Cola, amongst many, build robust pricing models that take into account production costs as well as market dynamics to determine prices for their products in each market that they operate in.

Private sector players consider a number of factors in building their pricing models. These include:

- Public demand
- Revenue/income maximisation
- Cost of production
- Competitor and complement pricing
- Target market ability to pay
- Customer income

Of course there are many other factors one could consider in pricing. It is important that municipalities conduct analyses regarding factors that matter the most to them and to their customers and then review their pricing in line with those factors. Analysis in this report indicates that volume driven tariff increases for electricity, for example, might be contributing to the debt issue. A review of the income and usage volume assumptions that influence these tariff increases might help municipalities to better price their services. Better pricing could go a long way in enabling a larger number of consumers to afford their monthly municipal bills.



It is worth noting that tariffs for services such as electricity are regulated for the most part, and thus municipalities have little room to wiggle, as far as pricing. However even in these instances, an analysis of electricity profit margins across multiple municipalities indicates that there is room for pricing analytics. Economists speak of the "equilibrium price" of a good or service, being the best price point to charge customers. Pricing analytics could be useful in finding the equilibrium point for municipal services.

Strategies to improve ability to ensure payment

Once they have catered for indigent customers, municipalities must then ensure that all barriers to easy revenue conversion are removed for all other customers too. There are a number of initiatives that municipalities can implement to improve payments.

Segment customers and tailor relationship management to the needs of each segment

Many municipalities segment customers by type. This segmentation is mostly used to drive tariff differentiation on the most part i.e., business tariffs tend to be higher than residential tariffs. However, municipalities can succeed in improving revenues by segmenting customers along criteria that are important for revenue conversion. In one of the municipalities surveyed for this report, their top 1% customers are assigned key relationship managers to ensure proactive relationship management. In another municipality surveyed, data analysis by the head of customer care revealed that over 60% of that municipality's revenue is derived from the top 2% commercial and residential customers. That municipality is now working on a strategy to provide tailored service to these customers, in order to ensure that all revenue due from these customers is indeed received each month.

The key lesson here is that customer relationship management cannot have a one- size-fits-all nature for all customer groups. Other service industries such as banking and gyms successfully enhance per customer revenues by offering a differentiated service based on anticipated revenues, in the form of private banking and premium gyms respectively.

Individual municipalities need to decide on where they place the customer service function within their broader organisation. Some municipalities have customer services as a stand alone department, while others have it housed within the finance department. This choice depends on each municipality's unique circumstances.

One of the concerns municipal leaders have about customer segmentation and service differentiation is the perception of favouring higher revenue, and by implication wealthier customers, with more convenient relationship management. While this concern is valid, it is worth noting that section 97(2) of the Municipal Systems Act allows municipalities to adopt credit control and debt management policies that differentiate among different categories of ratepayers, service users, debtors, taxes, services, service standards, and other matters as long as the differentiation does not amount to unfair discrimination.



Improve metering speed and accuracy

Improving the speed and accuracy of billing has been identified as a priority by a number of the executives surveyed for this report. In most cities, water and electricity usage is measured monthly through conventional meter readings, while property rates and taxes are calculated with varying frequency through property valuations. Many of the interviewed municipalities conduct property valuations every four years, in line with the Municipal Property Rates Act 6 of 2004. Accurate data about service usage volumes as well as property values forms the basis for the monthly billing of customers.

Ensuring timely meter readings, property valuations and updates thus becomes one of the major drivers for revenue. To improve billing speed and accuracy for services, more and more municipalities are rolling out smart metering programmes. Smart meters reduce the effort required in gathering monthly metering data. Municipalities have also introduced self reporting platforms that allow customers to read their own meters and report readings to municipalities.

With regards to property valuations, municipalities could look into using the advanced property valuation data analytics tools that banks use. Various tools enable banks to rapidly update property valuation data for input into mortgage lending risk models. This has the impact of significantly reducing property valuation lead times in that industry.

Create integrated value chain operating models

One of the main challenges that most officials mentioned is the difficulty they face in integrating across silos within their municipalities. In one municipality, front office customer service staff complained of long lead times by back office infrastructure delivery teams to resolve customer queries, with limited feedback to the front office. In another municipality, the property valuations manager and the property rates manager faced challenges with timeous updates of supplementary valuations data onto the property billing system. This challenge led to inaccurate rates billing, because property valuation changes were not being reflected timeously on the property rates systems. And another municipality's regional offices responsible for on the ground revenue conversion complained that they were not receiving the data they needed to enable them to carry out more targeted revenue conversion initiatives. This data resided with a centralised finance function and was not trickling down to the people that needed to use it to make decisions.

A potential solution to these misalignment issues is creating opportunities for regular touch point amongst departments that need to interact. Some of the executives surveyed for this report indicated a number of tangible results that were driven by forming committees and task teams that streamlined communication and focused cross-department teams on key goals. The key to the success of these committees lay in setting up clear goals and roles and responsibilities and then using committee meetings for reporting successes and holding teams accountable for missed targets.



Moreover, municipalities are also using technology workflow systems to better manage integration across departments. In one of the municipalities surveyed, executives in the property valuations and property rates departments were working together to implement a system that would automatically match data entries between the valuations and rates departments. This automation would ensure data alignment between the two main departments involved in the property rates billing value chain. There are a number of opportunities to use technology to improve workflows within municipalities. Process mapping and re- engineering is a good tool for understanding the extent of these opportunities in each municipality.

Employ advanced data analytics to better understand customer trends

Municipalities are capable of gathering a lot of useful customer data. However, this data is usually not exploited to gather insights about customer trends. Data analytics around usage variations, for example, have been used by municipalities to identify potential meter breaching and indigent programme abuse cases. Moreover, data analytics around energy balancing helps municipalities identify potential revenue leakages.

However, given the data available through municipal systems, these data driven revenue initiatives only scratch the surface of what is possible. There are a number of opportunities to use municipal data to drive decision making to aid in improving both revenue and service delivery.

In one of the municipalities surveyed for this report, regional officials were able to implement revenue conversion initiatives targeted at "high defaulting communities". By using data to drill down to debt by community and service type, the officials were able to identify where they needed to focus their customer education and engagement efforts. Furthermore, global municipalities are using analysis around customer query types to design models that proactively identify service delivery issues and trigger automated job cards to resolve issues.

There are a number of data driven decisions that municipalities can make given the data that municipalities are typically able to gather. However, in order to be able to make such decision with confidence, municipalities need to invest in ensuring that their databases contain accurate customer data. And once data accuracy is achieved, investment in business intelligence systems will be required, in order to automate data analysis and provide reports an insights to the executives that need them for their day to day work.

Moreover, there is great opportunity for municipalities to share consumer information with each other, in order to get a more holistic view of consumers that own properties across municipalities. This would be particularly useful in assisting municipalities better model consumer usage and payment behaviour more holistically.



Build people

From metering to billing to customer relationship management, the revenue value chain involves human resources that must be motivated and capacitated to do their jobs. Thankfully municipal executives recognise the central role that staff have to play in improving revenue conversion. A number of revenue focused initiatives around people have been implemented by municipalities across the country. These have included:

Staff reward and recognition programmes: Many municipalities have staff reward and recognition programmes that seek to identify and reward staff members that consistently deliver beyond expectations. Reward and recognition events tend to be as small a mention in a team meeting with a small gift to elaborate annual staff awards. The excitement created by these programmes has helped these municipalities to create excitement and healthy competition among staff, which has translated to improved customer service and service delivery and thus revenue.

Staff capability building: During the analysis for this report, a number of capability building initiatives related to revenue were identified across a number of municipalities. These included a wide scale customer service training programme for all customer facing staff in one municipality. To a leadership development programme focused on managers and high potential junior staff in another municipality. Many of the staff development programmes that were identified were implemented with the express goal of improving revenue conversion. And some have started yielding results as staff with a greater awareness of revenue challenges begin to take more initiative to be involved in solving revenue related problems.

Culture change programmes: A number of municipalities reported facing issues with staff culture that discouraged service excellence, taking initiative and decision making. To address these culture issues, one of the municipalities surveyed for this report launched a wide scale staff engagement initiative, as part of a larger revenue enhancement programme. This initiative sought to help staff better understand their role in revenue conversion and the importance thereof. Moreover, the initiative sought to get their staff to buy into their overall revenue turnaround strategy. The result of this initiative was a visible improvement in customer service culture as well as turnaround times in customer query resolution.

Staff-leadership engagements: A consistent complaint from staff in some municipalities was that they didn't get to engage with senior leadership within the municipality and thus either didn't feel like part of a larger team or didn't understand overall municipal revenue strategy beyond the silo in which they found themselves working. As part of a revenue turnaround strategy, one municipality created opportunities for junior staff to engage with leaders and ask them questions through town halls and one-on-one interactions with promising junior staff. This initiative had the impact of motivating staff and creating alignment on planned revenue conversion initiatives.



Re-imagine municipal debt conversion of dated debt

Section 78 of the Municipal Finance Management Act mandates municipal managers to take all reasonable steps to ensure that municipal revenue is collected. To meet this mandate, municipalities have adopted credit control and debt collection policies, that are in line with the prescriptions of Section 96 of the Municipal Systems Act.

However, there is a lot of room for improvement for municipalities as far as their debt collection efforts are concerned. It is worth noting that debt collection is not a core function of a municipality, but becomes necessary in light of high and ever increasing debt. Currently, a number of municipalities tend to overly rely on cut- offs as a debt collection mechanism. As previously indicated, this mechanism is a risky one as it has the unintended consequence of further alienating customers.

There are a lot of lessons about debt collection operations to be learnt from the private sector. Industries such as banking have been employing some interesting debt collection initiatives that could be easily transferable to municipalities. Some example of these include well managed debt collection call centres as well as automated proactive payment reminders to delinquent customers.

One of the metros surveyed for this report started an outbound debt collection call centre in mid-2015. A year later, they report having processed debt reminder calls for bills adding up to R1.5bn in the past year alone.

In order to achieve similar results, municipalities need to build a strong business case for implementing a variety of debt collection interventions, which might include a call centre. Implementation of these interventions could either be conducted in house or outsourced to debt collection specialists. Examples of debt collection initiatives implemented by municipalities and government agencies across the world include:

- In-house or outsourced debt collection call centres
- Customer account consolidations
- Debtor segmentation to identify large collection opportunities
- Specialist teams to collect from top debtors
- Specialists teams to collect from debtors with multiple properties
- Specialist teams to collect from government departments, sales in execution and deceased estates and liquidations
- Automated technology driven collections processes

These initiatives have seen municipalities and government agencies obtain noticeable uplift in debt collection. The key take away here is that service cut offs are not the only tool available to municipalities for debt collection.



A new partnership model with the privates sector

Beyond encouraging businesses within each municipality to pay their bills and create more jobs, there is a great opportunity for municipalities to work with business to improve revenue conversion. For example, exploring a partnership with banks might prove impactful. Many properties are under bonds with banks, thus requesting banks to levy property rates on bond repayments and then pay these over to municipalities, might be an impactful initiative.

Moreover, one of the municipalities surveyed in this report indicated a successful outreach programme that was targeted at getting large companies within their city to encourage their employees to pay their bills. Municipal officials believe that adding the "voice of the employer" to the bill payment message had a positive impact.

Another example was of a municipality that was approached by a small insurance provider to explore the idea of offering grave digging insurance. While this sounds like an outlandish idea at first, it is worth noting that some municipalities charge up to R4 000 for grave digging. Thus, a nominal monthly insurance payment was thought attractive, especially to lower income users.

Improving willingness to pay and willingness to ensure payment

Having looked at the internal improvements required to improve revenue conversion, municipalities need to look outward and begin managing customer perceptions. Service providers in the private sector understand the importance of consumer perceptions on revenue. This is why they spend billions of Rands on advertising each year. In managing consumer perceptions, municipalities need to find impactful ways to engage with communities and be seen to be taking steps to respond to consumer issues.

Engage customers with a compelling message about bill payment

Some of the municipalities surveyed for this report reported great success in revenue uplifts that were driven by targeted customer education programmes. These programmes included municipal employees leaving their offices and going into communities to answer customer queries and to engage with residents. They also included working closely with councilors to organise community meetings and to distribute consumer information material.

Messages to consumers need to focus on showing that bill payment goes beyond individual households, but that it enables municipalities to provide community wide services. Moreover, municipal officials need to make sure that they are ready to listen to communities as they engage and that they are willing to take active and visible steps to respond to issues raised by residents. This idea of educating residents about the overall benefits of bill payment was identified as a key communication success factor in one of the municipalities surveyed for this report.



Of course, there is no one-size-fits-all approach to customer engagement. Each municipality is faced with different challenges. The important message here is that municipalities need to do the work required to understand communication and education gaps in their municipalities, and then craft a compelling story to tell to its residents.

Closer partnerships with councilors

A number of municipal executives interviewed for this report mentioned the importance of involving councilors in revenue conversion initiatives. One of the municipalities had plans in place to provide councilors with debt levels for their respective wards, so that councilors would assist in engaging the community in instances where there were high levels of debt in specific communities. Another municipality has already reported success in improving community outreach programme attendance through working through councilors to plan such engagements.





Concluding thoughts

It is worth repeating that there is no one-size-fits-all solution to municipality revenue coverage and conversion. Each municipality faces challenges that are unique to its internal and external environments. Some municipalities are in urban centres and have access to both high income residents and skilled employees. Others are based in remote areas and serve economically disadvantaged residents and have limited access to the resources required to run large organisations. Thus, any strategy aimed at improving revenue conversion and coverage needs to begin with a detailed analysis of each municipality's unique challenges.

Only once a clear diagnosis is completed and its findings agreed upon by the key stakeholders can a municipality start thinking about defining their revenue turnaround strategies. Again, these strategies need to address each municipality's unique challenges and must be implemented within the contexts and constraints of each municipality.

As a result, this report is not at all an attempt to replace the work that needs to be done in creating revenue turnaround strategies. Rather, it seeks to provide municipal executives with the latest insights and lessons from across the country and across the world, with the hope that these might be helpful in initiating and stimulating pertinent concepts.

This report began with an overall diagnostic of municipal revenue performance across the country. This was intended to show that even 6 years after the promulgation of the Local Government Turnaround Strategy that was driven by the then Department of Cooperative Governance and Traditional Affairs, revenue conversion within municipalities still remains an urgent issue.

This report is intended to be used by municipal managers as a resource to engage with revenue turnaround ideas from across the country. Perhaps in reading it, municipal managers might recognise challenges that they share with other municipalities. And in this recognition, perhaps a national dialogue around revenue conversion and coverage could be kicked off.



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