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SECURING SERVICES INCOME IN A SOUTH AFRICAN CITY

1. EXECUTIVE SUMMARY

Supply authorities need to deal with an increasingly sophisticated services customer base, bringing with it numerous associated challenges.

A municipality could very easily end up in a situation whereby "revenue-loss supportive processes" lead to losses which can go undetected for extended periods of time. Examples of these may be the creation of new services customers, which through a failure in processes, never receive a bill. Processes may fail due to numerous factors, but some of the common factors are failure to deliver an account due to non-automated processes (that is the application for a service connection is executed, but gets lost before it gets taken up in the billing cycle), due to the non-existence of a formal stand number (what now?), or even the lack of a real street address where an account may be delivered.

The paper does not attempt to provide an exhaustive list of revenue loss factors. It also does not propose a plan to deal with energy theft and illegal connections in a comprehensive way. It does, however, serve as an overview of the elements that contribute to a loss in income and that require attention.

2. KEY PRINCIPLES FOR THE CREATION OF SUSTAINABLE REVENUE INCOME

The following are seen as key principles that need to be adhered to if sustainable income from Water, Electricity and other municipal services are to be realized. A "think-session" in a supply authority's boardroom is bound to add one or two principles, which may be specific to their case.

2.1 Provide a Good Service

Service providers should ensure that a continuous process of improvement and renewal of their services and resources become part of the organizational culture. It is necessary that we indicate the level of service that our customers can expect from us. This level of service shall be applied consistently throughout every street, suburb and town within the City and has a purpose beyond merely creating a ruler according to which our performance can be measured.

The White Paper on the Transformation of Public Service Delivery (1997) sets out eight transformation principles, which aims to transform public service delivery. This document, referred to as the batho pele (people first) paper, favours the customer and places the obligation on the service provider to deliver on the basic customer requirements.

The batho pele principles promote service excellence in the public sector and encourage the public to expect excellent service from us, the implementation arm of Government. Briefly these principles are indicated as *consultation, service standards, access, courtesy, information, openness and transparency, redress and value for money*.

Our services pledge should, in accordance with the second batho pele principle, indicate a standard which we want to surpass regularly, doing better than even we envisage.

If we are found lacking in any of the items listed in this "standards" document, our remedial reactions should be directed in response to those service areas that require attention. More positively stated, the results will drive the service areas in which we are not excelling.

Our approach must be based on the principle that organizations achieve competitive advantage by providing their customers with what they want, or need, better or more effectively than competitors and in ways which their competitors find difficult to imitate.

To ensure that this advantage is achieved, we should be concentrating on the following:

- what does our customer value, and
- how do we provide this valued service to our customer, inclusive of the activities that support us in providing this service in a sustainable manner?

In addition, a structured education campaign in which all spheres in the supply authority participate will ensure that customers are aware of supply and financial challenges with respect to services such as water and electricity.

Services are becoming much more expensive and the provision of viable "escape" or mitigation alternatives should become an additional focus area for a good service provider. For example, the increases in the price of electricity have created pressure on the average customer's financial resources. One way of assisting a customer in this regard, whilst also gaining valuable supply capacity reserves, will be the creation of a solar geyser installation and maintenance program, leveraging all possible resources in the process (carbon funding, subsidies, attractive interest rates and economies of scale).

Energy saved by the solar geyser should be enough to almost pay the monthly installment of a solar geyser and in subsequent years, the savings will put more money on the customer's pocket. The supply authority gains valuable spare capacity on the electricity grid, as well as gains in terms of purchase costs.

2.2 Ensure that the Revenue Value Chain is Understood

The revenue value chain can be contained in the following main disciplines:

- Metering infrastructure
- Meter readings
- Supportive processes (see later in paper)
- Accurate bill delivered
- Manage queries and errors
- Receive payment
- Confirm performance

The complexity built into each one of the above disciplines should not be underestimated and especially so when there are large volumes of meters involved. The continuous, deadline driven, never-ending nature of the tasks creates havoc in the form of backlogs and additional work, should work fall behind due to any reason. The potential for error in each one of the above disciplines is very large, which sometimes makes the actual rendering of an accurate bill surprisingly difficult.

Supportive processes encompass user-friendly tariffs, a good billing system, as well as good meter and account management. The tariff structure should provide for all customer segments, with a special tariff for vulnerable customers, coupled to free basic electricity or water and possibly a connection size restriction.

Prepayment metering provides an alternative to meter readings and their associated problems. A strategy whereby customers are incentivized to change to prepayment meters provides opportunity to get rid of meter reading problems, including inaccessible meters. It is a known fact, however, that prepayment metering brings some its own unique problems, which will need to be managed.

2.3 Effectively Deal with Certain Critical Elements by means of Policy

The use of legitimately created policies ensures that a uniform approach exists to the more difficult aspects of service delivery. These policies are required to deal with matters such as credit control, managing vulnerable customers and other standard, somewhat intangible, aspects.

Vulnerable customers require assistance in the form of free basic electricity and water. There may also be further special dispensations, such as a subsidized service connection, special tariffs (possibly coupled to a limited supply capacity) and in general, a differentiated approach to a customer falling into this segment.

Similarly, a credit control policy will stipulate the details of this type of intervention. It is required to capture practical details, such as no cutoff actions on a Friday, or the day before a public holiday, given the practical aspect that the offices will be closed when the customer arrives to address her/his outstanding account.

Care should be taken that these policies are robust. Consider the following case:

> A fairly large business customer owns separate buildings, in close proximity to each other. These include a bakery, supermarket, large restaurant and liquor store. The customer stops paying for services and by means of clever manipulation, possibly bordering on being illegal, manages to avoid being cut off.
>
> This continues for several months, until credit control processes finally catch up. The combined outstanding accounts are now R3 million. The electricity supply is cut and the customer arrives within 15 minutes, signing an agreement to pay off the outstanding services charges over a period of 3 years, interest free. In accordance with policy, the power supply is restored within hours following the arrangement.
>
> Effectively, the customer has managed to keep the millions of Rand owed in services fees in his own bank account, with monthly interest accumulating to his own benefit. Furthermore, the customer managed to sign an easy, interest free repayment deal over 3 years with the City (read "bank"), which will ensure that the original amount that should have been paid to Council, is put to good use for personal gain.

The above is an actual case that shows how an unintentional loophole created in the policy was identified by a customer, and then fully exploited. The loophole will now be closed.

Removing discretionary powers from officials by ensuring that a single ruler is used for each discipline and customer segment, form an invaluable component of the revenue value chain.

2.4 Create a Simple Metering Policy that will Address the Metering Strategy for the Supply Authority's Unique Customer Base, Broken Down in Customer Segments

2.4.1 A single, written meter recipe, made legitimate and into "law" by means of a Council decision and which is followed by everyone in the supply authority, is essential to create a uniform "meter" direction;
2.4.2 The document must clearly state interventions to be made for each customer segment case, keep in mind that a picture is worth a thousand words;
2.4.3 Such as protective structures and split prepayment meters where payment levels are less than 50 per cent (see Figure 1);

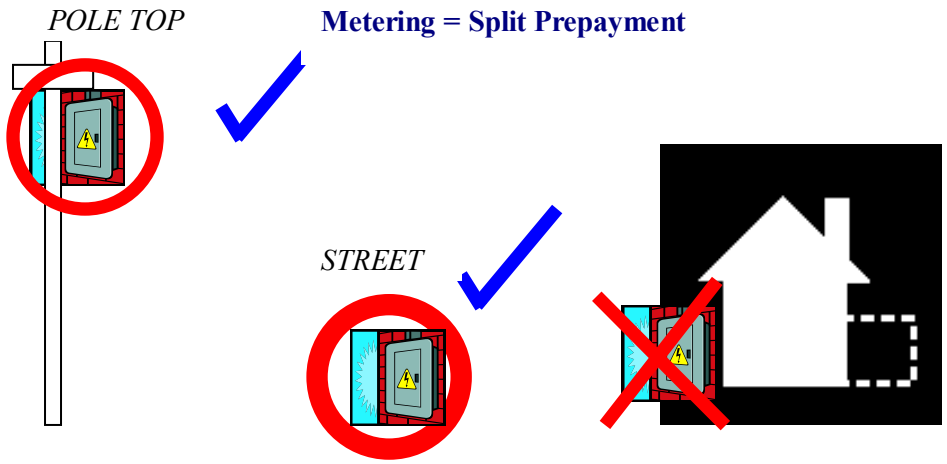

Figure 1: Category C: Established Domestic Areas with Payment Levels Lower than 50%

2.4.4 Such as that status quo metering remains for areas where payment levels are higher than 90 per cent, using credit control and legal action to resolve payment issues;
2.4.5 Such as that internet metering will be used for all demand meters, and
2.4.6 Smarter metering is bound to have an influence on current strategies and will be incorporated where value will be added.

2.5 Automate Revenue Related Processes as far as Possible

Any revenue related process which is not automated, creates unacceptable risk to income.

2.5.1 Create automated workflow processes. These are software driven and ensure that processes that are critical to revenue are always executed in a similar and controlled way. For example, when a customer applies for a new connection, the address details are confirmed and the existence of the stand is checked, the application is captured on the workflow process, after which it gets submitted (automatically) to a specific person in the Finance Department who will open an account. The process now continues from one assigned person to the next until all conditions are complied with, never missing a step. If an assigned person is on leave, the duties can be re-assigned to another authorized official and if an official is underperforming, their in-basket will indicate the hold-up to all users;

2.5.2 All new meters must proceed via an automated workflow process, no meter should be allowed outside of this process;

2.5.3 All replacement meters must proceed via an automated workflow process;

2.5.4 Create automatic uploads where sub-systems are employed (such as internet metering and prepayment metering). In terms of internet metering, this segment contains about 50 per cent of our total monthly electricity service revenue income and the following automated uploads now take place on a monthly basis:

- the main upload of readings by the third day of the new month, consisting of about 99% of all readings;
- the second upload of readings where communications errors occurred, causing the main upload to be missed, and
- the third upload of cases where incomplete or no readings are possible. This upload consists of estimated readings and is indicated as such on accounts.

2.5.5 Ensure one reference point in all systems for common items such as tariff application, and

2.5.6 Employ smarter metering where viable.

2.6 Create a Dedicated Revenue Unit

2.6.1 The revenue unit should combine numerous disciplines, all with one common goal in mind, namely the protection of revenue income to the City. The revenue functions related to Finance, Electricity, Water and Solid Waste, should be managed from this one point, focusing on every possible cause of revenue loss, from the meter, down the entire revenue value chain and ending with a paying customer, even if this payment is encouraged by means of credit control actions;
2.6.2 Manage the revenue cycle effectively and synergized from a single point in the supply authority, as opposed to managing it from Electricity and Water and Solid Waste and Finance, in an uncoordinated fashion;
2.6.3 Manage the business and industrial revenue value chain separately and intensively, in the case of Ekurhuleni, this constitutes about 50 per cent of electricity income;
2.6.4 This must be a dedicated team, under one roof, managing all revenue related aspects, with clear targets;
2.6.5 The team must interrogate existing processes, improve on them and discard inefficient processes;
2.6.6 In short, they should hunt for revenue where it is due, and
2.6.7 Revenue protection strategies should provide for the management of illegal connections and theft.

2.7 Effective Credit Control

2.7.1 Ensure a credit control policy is in place;
2.7.2 Focus efforts where the most income is lost;
2.7.3 Do not neglect instances where smaller amounts are lost in larger quantities, and
2.7.4 Be consistent in the application of credit control, promises to cut supply must be kept.

2.8 Make Strategic Interventions

2.8.1 Do not accept the status quo if it is not working well;
2.8.2 Question existing practices and improve on them;
2.8.3 Ensure that larger customers are measured accurately on both water and electricity consumption, spend capital to ascertain and ensure this fact;
2.8.4 If the supply authority is not confident with their tariff structures and levels, appoint an expert to refresh them. Small, unnoticeable, to the untrained eye, level or structure problems can cause electricity to be sold at a loss under certain conditions. One actual case revealed that a municipality was purchasing from Eskom at an average price of 18c per unit (in the good old days) and reselling to a large customer outside of town at an average price of 10c per unit. This has gone unnoticed for more years than one can mention…

2.9 Measure Performance

2.9.1 Implement regular software based reporting procedures that will create a reliable dashboard of key performance areas for managers and staff, and
2.9.2 Respond quickly to deviations.

3. WHAT COMPONENTS WILL MAKE A SOLID REVENUE INCOME INFRASTRUCTURE?

3.1 Technical Components

The main technical components that are required to build a solid income infrastructure footing may be reduced to the following:

Resource	Associated functions
Good meter infrastructure	• Meters that accurately reflect consumption • Are accessible, can be located, can be read • Are in good working condition, including primary plant such as current transformers, voltage transformers, etc • Capital investment where the above is not possible • Quick response to meter repairs, measured • Regular audit
Good meter readings	• Clear, accurate readings • Dedicated workforce to acquire manual readings • Internet metering for large customers, fully operational

	• Prepayment system fully operational
Good supportive processes	• Good set of tariffs, easy to understand and implement • Good billing system, tariffs applied correctly • New meters added in structured way, no “lost” meters • Meter exchange taking place in a structured way • Creation of an exception list • Timeous reaction to this list • Timeous submission of an accurate file for billing • Quick process to bill estimations where metering is faulty • Internet metering and exceptions dealt with - subsystem integrated with main billing system • Prepayment system and exceptions dealt with - subsystem integrated with main billing system
Accurate bill delivered	• Address details accurate
Manage queries and errors	• Quick response, leading to a sustainably accurate bill in future
Payment	• Revenue circle completed when payment is received • Credit control if payment is not received • Solid prepayment vending footprint
Confirm performance	• Implement a suitable performance management tool, i.e. financial performance, credit control values and numbers, exception lists for defective meters, etc • React to negative trends

3.2 Resources Required

In terms of other resources, the following functions are required in support of the technical functions listed above:

Resource	**Functions required**
Water and Electricity Meter Management section / company	• A 24/7/365 structured, support function to manage meter reading cycles, outsourced if the City is unable to deal with the magnitude • Standardized daily processes, linked to timelines • Driving all meter related processes • Reaction to exception lists • Full responsibility for meter reading cycles • Continuous audit
Meter reading companies	• Execute daily meter reading functions • Go the extra mile to acquire readings
Meter repair companies	• Reaction to exception lists where smaller meters are involved • Repair and replace smaller meters that are faulty, again outsourced if the City is unable to deal with the volumes • Continuous audit
Protection Test and Metering section	• Ensure demand meters are operational • Inclusive of primary plant • Be sure to identify current transformers that are reading over their limit • Continuous audit
Internet metering service provider	• Accurate readings on a daily basis • Published daily on the internet for customers and supply authority to use

	• Billing readings within 3 days after the end of the calendar month • Ensure estimations where readings are not possible (ownership by supply authority) • Continuous audit
Prepayment metering section / service provider(s)	• Vending system operational 24/7/365 • Exception reports extracted • Reaction on these reports • Continuous audit
Credit control section	• Cut-off action where payment is not received • Starting with larger customers • These customers often create technical queries to postpone cut-offs indefinitely, deal with this decisively
Revenue unit	• Combine efforts of Water, Electricity and Finance Departments to manage the revenue cycle, under one roof, dealing with meter and account queries • Billing system maintenance and supervision of outsourced maintenance • Meter management contract supervision • Streamlining of all revenue related processes • Performance bonuses to key managers
Support bids	• Continuous revision of the bids related to outsourced functions • Never late with bids such as meter management, meter read, internet metering, meter supply bids, bids for primary equipment such as VT and CT's, credit control function bids, billing system maintenance bids, etc.

3.3 The Customer

Customers are seldom mentioned in the improved processes and structures that a supply authority need to put in place to ensure revenue is collected. It should be understood that their contribution is a critical part of our revenue process and that our billing inefficiencies impact negatively on customers.

A metering error may lead to a customer being under-billed by 30 per cent over a 3 year period. The error may be such that it went unnoticed by the customer and the supply authority, only to be picked up years later. Electricity and water by-laws allow the recovery of the lost income, thereby placing a huge burden on the customer to finance and repay this amount.

It is therefore in the best interest of all stakeholders that metering and billing take place accurately. This provides an excellent level of service to the customer, given that input costs such as electricity and water consumption can be accurately factored into the customer sales cost determination. Inaccurate billing skews this calculation and creates even higher risk for the customer than for the supply authority.

On the other side of the coin, customers also need to understand their responsibility to pay for services rendered.

4. CONCLUSION

It is the duty of a municipal Council to secure services income in their municipal area of concern. We can be fairly safe when stating the following:

> It will be erroneous and financially dangerous to assume that all is perfectly well in the revenue value chain of any municipal services provider.

The revenue value chain is of a continuous and never-ending nature and every part and process included in this value chain should be interrogated and refined on a regular basis. To achieve this in a meaningful fashion, it is necessary to ensure that skilled, talented and dedicated individuals are employed to safeguard income from services.