



TRANSFORM UTILITIES SANITATION CHALLENGE

LEARNING DISSEMINATION

THE TRANSFORM UTILITIES
SANITATION CHALLENGE SUPPORTED
MALINDI WATER AND SEWERAGE
COMPANY (MAWASCO) IN KENYA,
AND SOUTHERN WATER AND
SANITATION COMPANY (SWSC) IN
ZAMBIA, FROM DECEMBER 2019 TO
JUNE 2022 TO TEST AND LAUNCH PIT
LATRINE EMPTYING SERVICES FOR
LOW-INCOME CONSUMERS IN THE
COMMUNITIES THEY SERVE.



WHAT'S IN THIS REPORT

01

INTRODUCTION

02

PROJECT PARTNERS

03

PROJECT REFLECTIONS & RECOMMENDATIONS

- **Phase 1** - Application, contracting and building a team
- **Phase 2** - Early workshops
- **Phase 3** - Field testing and assumption validation
- **Phase 4** - Prototypes to inform and MVP service
- **Phase 5** - MVP Pilot setup and launch
- **Phase 6** - In-pilot learnings
- **Phase 7** - Complete business modelling
- **Phase 8** - Transition and scale up

04

TOOLKIT

Links to helpful templates and resources with examples from the recent projects

05

APPENDIX

Links to more detailed accounts of phases 2-6 from the recent projects



INTRODUCTION

01

INTRODUCTION

The TRANSFORM Utilities Sanitation Challenge was launched in January 2019 to support utilities in Sub-Saharan Africa to test market-based solutions to provide sanitation to low income communities. The challenge received 120 applications and the two utilities selected were Malindi Water and Sewerage Company (MAWASCO) and Southern Water and Sanitation Company (SWSC).

Both projects coincidentally focused on the launch of pit latrine emptying services, formalising and professionalising the current informal emptying practices. The services engaged Manual Pit Emptiers (MPEs) and provided them with tools, training and protective equipment. The utilities marketed the new service to prospective customers and invited them to call a dedicated phone line or visit customer care centres to book their service.

In both cases, payment was made (sometimes in instalments) to the utility and their staff dispatched MPEs to perform the job. Waste was sealed in covered barrels and transported by flatbed truck to the designated disposal point.

This report seeks to support utilities and development actors pursuing similar goals, providing them with insight into the successes, challenges and pitfalls experienced. The structure of this report is not intended to be a direct account of the tasks completed or an accurate chronology of the process followed by SWSC and MAWASCO, since the project experienced significant disruption caused by the Covid 19 pandemic. Instead it reflects the collective opinions of key project stakeholders regarding how similar projects might be approached in future with the new knowledge gained.





Generally I'm really proud of what we've achieved. We are undoubtedly serving the community better. For a long time people had no better ways of taking care of the sanitation facilities. The norm was to bury waste and dig new pit latrines leaving residents with no space in the yards. By starting to change this behaviour, we have created an enabling environment in homes. Residents have more space for gardening, more space for children, less smells. It's a great environmental health achievement. And although this has not been tested, I feel we must be improving the groundwater conditions too which is really important for borehole users on the property or nearby. The project is also creating employment opportunities for community members through pit-latrines emptying and is generating new revenues for the company. The lessons learnt will enable the company to scale up the business to other towns with appropriate considerations to sustain the service long term while fulfilling SDG6 of increasing access to clean water and sanitation for all."



Eustakia Milimo
Hamuchenje, Community Relations Officer, Southern Water & Sanitation Company (SWSC).



I'm proud that we have designed and implemented a very attractive and admirable project. It has enabled MAWASCO to embrace and define our sanitation mandate and I'm currently looking at other investment opportunities. The results have helped us win trust from funding organisations like the World Bank and we're proactively being asked by other partners to scope a phase 2 for scale up. We are currently in discussions with the County Government Department of Urban Planning and Housing on how to work with them on sanitation projects too. TRANSFORM has been a great stepping stone and we'll be talking about this project for a long time to come. Due to the success story, our partners WSUP and Sanivation are continuously connecting us with potential funders to support upscale of the good work we have begun."



Priscillah Githinji-Oluoch,
Head of Sanitation & Programs, Malindi Water & Sewerage Company (MAWASCO).

PROJECT PARTNERS

02

PROJECT PARTNERS

THE PROJECTS WERE LED BY:

- Southern Water & Sanitation Company (SWSC), the mandated water utility for the Southern region of Zambia, including the city of Livingstone.
- Malindi Water & Sewerage Company (MAWASCO), the water utility serving the communities of Malindi sub-county in Kenya.

BOTH TEAMS HAD SUPPORT FROM EXTERNAL PARTNERS. THE SWSC TEAM WAS JOINED BY:

- Water & Sanitation for the Urban Poor (WSUP) – a non-profit organisation specialising in urban sanitation services who provided technical advice on establishing the new service line, from pit emptying technologies to assessing the enabling environment. WSUP Advisory, the consulting arm of WSUP, provided financial and business modelling support.
- TRANSFORM – a joint initiative between Unilever, the UK's Foreign, Commonwealth and Development Office (FCDO) and EY which provides grant funding and business support to market-based solutions to the world's biggest development challenges. Through TRANSFORM, Unilever provided project management and guidance on how to prototype the new service and understand its users. Through TRANSFORM, EY teams provided business coaching to the utility teams on business & financial management and change management.

THE MAWASCO TEAM WAS JOINED BY ALL THE PARTNERS ABOVE, BUT ALSO:

- Sanivation – a Kenya based social enterprise providing sanitation services, including design and operation of faecal sludge treatment plants, resource recovery from faecal sludge, and technical advice on management of non-sewered sanitation. Sanivation supported all aspects of prototype development, including training personnel, testing tools and design of the transfer station design.
- BoPInc. – An innovation consultancy, specialising in helping organisations to design and deliver commercially and socially viable business models, bridging the gap between private and development sectors. BoPInc provided support to develop and test online and offline marketing strategies, design communication materials and measure pilot performance through stakeholder interviews.

APPENDIX

For more detail and examples of the key deliverables from SWSC's and MAWASCO's journey throughout the project, please refer to the appendix directory at the end.

TOOLKIT

Throughout this report you will also find sign-posts to specific assets collated in a shared content repository. We hope that these serve as shortcuts in the form of repeatable tools and templates that might be of use. These are freely available and all links are listed under '[Toolkit Resources](#)' at the end.

PROJECT REFLECTIONS & RECOMMENDATIONS

03

PHASE 1

APPLICATION, CONTRACTING & BUILDING A TEAM.

KEY OBJECTIVES:

- To establish the right project mindset and an environment for learning.
- To introduce and understand key behaviour change concepts.
- To build trust and create awareness of inevitable power dynamics.

REFLECTIONS & KEY LEARNINGS

The premise of the Transform Utilities Sanitation Challenge was to support projects tackling the complex issue of safely managing human waste. But specifically, the Challenge wanted to see application of behaviour change frameworks and agile, rapid prototype methodologies to ensure trial of truly human-centred approaches. A fund designed around these principles proved to be an effective and interesting way to challenge traditional thinking and drive utility staff to adopt a more customer-centric mentality.

Customer-centricity is a crucial requirement for designing and delivering effective water and sanitation services. Customer care and satisfaction is regularly cited by utilities as a priority area to improve and up skill, not least because it is linked to reducing customer churn and debts, and increasing customer advocacy and tolerance during service disruption. The challenges in selling sanitation services are well documented.

The success and sustainability of sanitation initiatives arguably rests on how appealing services are to customers, but often operational, commercial and logistical feasibility takes precedence, resulting in sub-optimal long-term results.

The application process asked utilities to demonstrate how they would tackle the underlying human challenges associated with sanitation service provision. This triggered a mindset shift from the very beginning. Applicants had to position their ambitions in the context of how the project would identify, challenge and change incumbent, unfavourable behaviours and cement new behaviours across a range of stakeholders. This challenged a common default belief that *'if we build it then they will come'*, where supply side interventions are prioritised over demand side. In practice, this approach is flawed but rarely is a project designed to actively discourage this mindset in such an overt way.

This mindset shift was also needed to create the foundations for a more prototype-led approach. Defining a Minimal Viable Product/service (MVP) is an inherently user-centric exercise. It shifts the conversation from 'what can we provide?' to 'what do our customers want and need at the most basic level?' Being able to determine an acceptable MVP in the minds of consumers and other stakeholders was critical, and understanding this made embracing an agile approach, rooted in behaviour change, much easier to design around.



The behaviour change approach was very interesting for us. As a utility, we're used to thinking in terms of infrastructure development and what new service provision means for the company. It was good for us to start by thinking about what the community requires and question what currently prevents them from practising the correct sanitation behaviours."

Priscillah Githinji-Oluoch
Head of Sanitation & Programs,
Malindi Water & Sewerage
Company (MAWASCO).



We learned that understanding human behaviour is critical and would advise any utility undertaking a similar project to ensure they truly know what behaviour they want to change and what the desired behaviour looks like. This helped us design a much more sustainable service by thinking more about bringing value to our customers"

Eustakia Milimo Hamuchenje

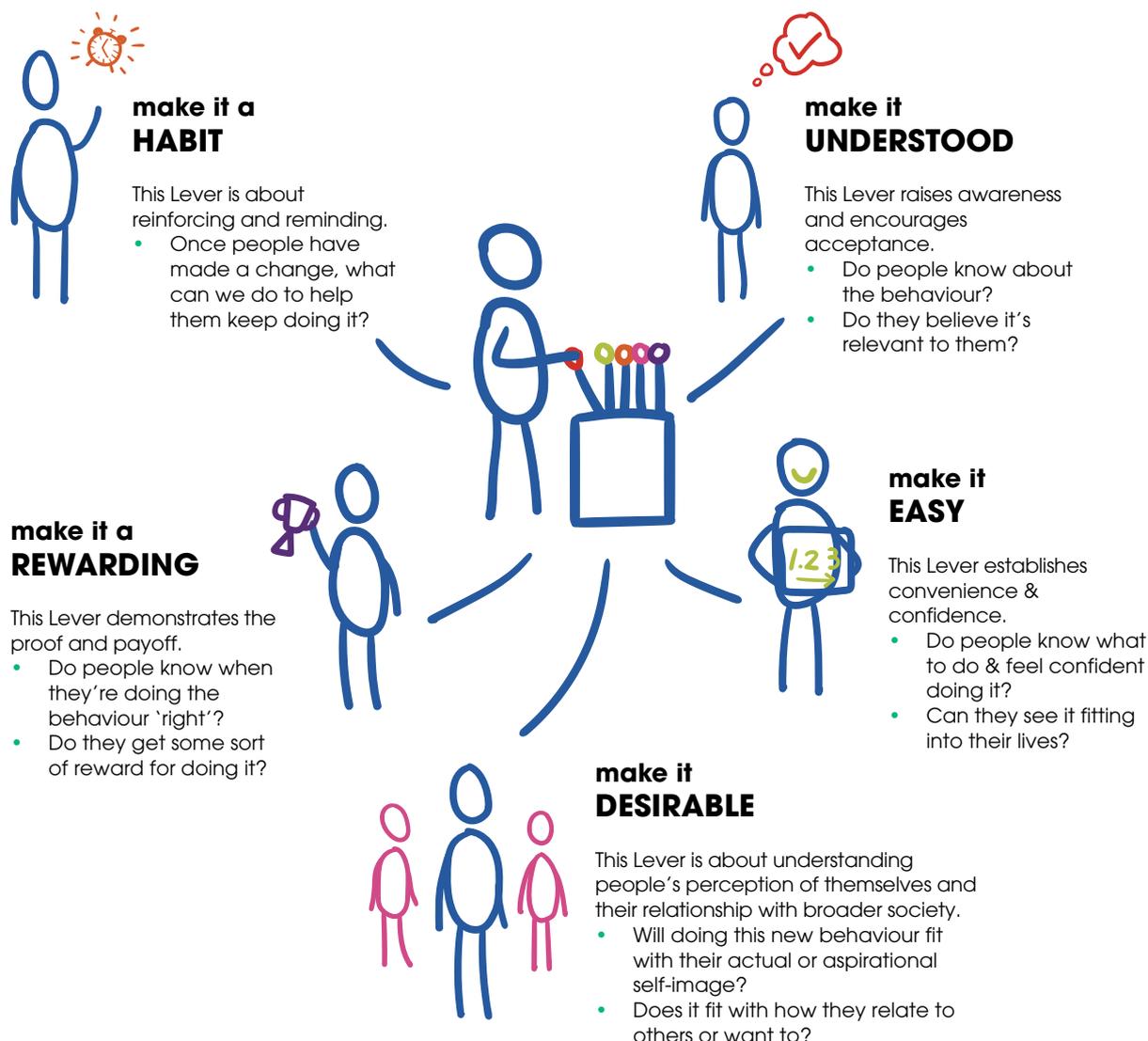
This is not to say that achieving such a mindset shift was easy. During these projects a lot of time was spent ensuring the teams fully understood the behaviour change models, as well as how they related to the contract milestones, and building a safe space where everyone felt able to voice any concerns or confusion. On reflection, there are three ways this process could have been accelerated and avoided the risk of misunderstanding:

01

INCLUDE AN INTRODUCTION TO BEHAVIOUR CHANGE AS PART OF THE APPLICATION PROCESS.

Unilever's 5 Levers of Change model was effective at encouraging each project team to explore their shared understanding and assumptions regarding current sanitation practices. The theory behind the model is that new behaviours are likely to be better adopted if they are understood, easy, desirable, rewarding and habitual.

Rather than wait until early workshops to introduce the model, providing an introduction to the model alongside the invitation to submit an application would have helped all parties to think in the best way from the outset, and would have avoided any surprises when the awarded parties weren't able to dive straight into implementation (as is usual for the other projects that utilities work on). A key application requirement could be to ask proposal writers to **Use the 5 Levers of Change (or another similar behaviour change methodology) to demonstrate which sanitation behaviours you would seek to change as part of this project.** The exercise may not be completed perfectly at this stage but it would allow applicants to practice and demonstrate their understanding of the approach.



THE FIVE LEVERS FOR CHANGE

The first step is to revisit what you know about your users. We systematically identify:

- **BARRIERS** - what are the things that stop people from adopting a new behaviour?
- **TRIGGERS** - how could we get people to start a new behaviour?

- **MOTIVATORS** - how can we help them stick with the new behaviour?

Next, take all those insights and consider how to inspire the change that's needed using each of Unilever's Five Levers for Change.

02

INVEST TIME ESTABLISHING ROLES & RESPONSIBILITIES AND RAPPORT BUILDING.

It was difficult to have an honest conversation about any challenges and confusion in the early days, for two reasons. Firstly, utilities typically operate under a hierarchical structure and culture and it is common practice for senior staff, even Managing Directors, to attend calls with funders. This is great because it sends a message to everyone that the project has senior stakeholder buy-in and launches the project with a sense of ceremony. However, it can also stifle open discussion and ideation later in the project as implementers defer to their superiors.

Secondly, in the case of this project Unilever's role was multifaceted. Unilever representatives led the initial behaviour change education and

provided hands-on support and consultation throughout the programme, whilst also being the funding manager. This introduced a complex power dynamic and it took a while for the utilities to feel comfortable talking openly about their challenges with the same person who would determine whether milestones had been sufficiently met to release the next tranche of funding. This was eventually resolved by a series of one-to-one meetings between Unilever and key project leads to build personal relationships between team members. Unilever also said explicitly that their intention was not to find fault with the delivery of the milestones, but that the goal was to create a learning environment where everyone could learn how to overcome the challenges the project encountered together.



One thing I really liked that we did differently in this project was the regular check in meetings. It was great because it brought a sense of partnership and feeling safe in the hands of the funders. We knew you're there to guide us on a day-to-day basis and it also brought a sense of accountability. We've now adopted this internally and have our own weekly regular check-ins every Monday at 8am.

This behaviour has been enshrined in the team. The boardroom is always booked out for us and we take stock of the past week, challenges encountered and plan the weeks ahead. I've seen other teams start to copy us too, having their regular check-ins on other days."

Priscillah Githinji-Oluoch, Head of Sanitation & Programs, Malindi Water & Sewerage Company (MAWASCO).

03

KEEP CONTRACT MILESTONES BROAD IN THE INITIAL APPLICATION.

Finally, it became apparent early in the project that the teams felt unsure about how to commit to project milestones that initially felt intangible and unpredictable. Committing to having defined a set of testable prototypes and not being able to predict the subsequent action until the results were in, felt like a hard sell into the utility board (who were understandably mindful of resource investment) and seemed like an unfamiliar arrangement with a funder. A template that sets expectations around broad milestones in a sequence would have helped, such as:

- **Milestone 1** - Behaviour change strategy refined and documented.
- **Milestone 2** - Options explored and prototypes defined.
- **Milestone 3** - Tests conducted with results informing an MVP service.
- **Milestone 4** - MVP pilot launched with ongoing test and learn plan in action.

Finally, establishing a consistent project management team with clear roles and responsibilities is essential in maintaining productivity and coordinating effort. Buy-in from senior management helps to ensure adequate time is set aside for key personnel to action tasks in a timely manner. Regular status meetings, where the same, recurring time can be booked in busy diaries, helps to maintain momentum. Good meeting practice such as pre-circulated agendas, minutes and action lists also provide clarity around accountability and keep progress moving. It's important to allow time and space to build rapport across teams from different national and organisational cultures, prioritising trust, respect and openness. This will also stand the team in good stead if personnel changes arise, which is likely over the long duration of the project and as the different phases call for new and different skill sets.



TOOLKIT RESOURCES:

- [Unilever-Sustainable-Living-Plan-5-Levers-for-Change](#)
- [Concept Note Application Template](#)
- [Application Selection Criteria](#)

PHASE 2

EARLY WORKSHOPS

KEY OBJECTIVES:

- To break the ice.
- To build greater familiarity with the behaviour change models.
- To build confidence and a shared understanding of the project milestones.
- To capture an initial understanding of key stakeholders and target audiences.
- To define a first draft of the current and desired behaviours.
- To engage senior management early, setting the strategic vision and the grounds for mainstreaming the new service line in the future.

REFLECTIONS & KEY LEARNINGS

The early workshops are a crucial opportunity to revisit and cement everyone's understanding of the behaviour change models. It is also where the teams start to finalise:

- **whose** behaviour needs to change
- **what** the **current** behaviour looks like
- **what** the **desired** behaviour looks like
- **what** might **encourage/discourage** a change in behaviour.

Experience from the projects with SWSC and MAWASCO uncovered that diving straight into drafting a Behaviour Change Strategy in a complex sanitation context can be challenging. It can lead to identifying too many behaviours, missing out key stakeholders or even a sense of demotivation, where the barriers seem insurmountable and the triggers over simplistic.

“

We probably needed more time to understand the concepts and upskill the project teams on how the project would play out using these methodologies. We couldn't see how this exercise would lead us to implementation. Maybe some interviews to ensure shared understanding of the process would have helped.”

Eustakia Milimo Hamuchenje

For instance a key barrier to informal pit emptiers changing the behaviour of illegal dumping, might be that there is no other place to dispose of waste. This might lead the team to suggest investment in a faecal sludge treatment plant (FSTP) as the obvious trigger to change the behaviour. However this neglects to explore some of the ingrained attitudes, beliefs and norms driving the current behaviour and jumps to a costly solution without any guarantee it will be enough to instigate change. Smaller interim tests are required to build confidence in this approach and ensure more innovative alternatives haven't been overlooked.



Producing the behaviour change strategy in the early days was a stretch. The utility was busy working at capacity and it was difficult finding the time to complete a task we didn't fully understand. We were all a bit confused by the examples discussed in the early workshops and were not clear on what was expected of us to achieve the desired milestones. At this time we thought we'd be taking some funding to build some transfer stations. But having additional external team members from organisations like WSUP helped to facilitate conversations where greater clarity was needed."

Priscillah Githinji-Oluoch

ON REFLECTION, A MORE EFFECTIVE APPROACH MIGHT HAVE BEEN TO TAKE THE PROJECT TEAMS THROUGH A MULTI-DAY WORKSHOP, BREAKING THE TASK DOWN AND BUILDING UP THE LEVEL OF COMPLEXITY. FOR INSTANCE AN AGENDA OVER SEVERAL DAYS MIGHT INCLUDE:

ICE BREAKER

An icebreaker that exposes any potential reluctance to engage with the subject of poo! It may be surprising to learn that many utilities have only recently been mandated by the industry regulator to include non-sewered sanitation within their service provision. And human waste is still a taboo subject for many. Members of the project team may not have much career experience discussing human waste as part of their daily role and it can be helpful to introduce some accepted terminology and create space for questions to be asked.

REVISITING THE 5 LEVERS OF CHANGE IN ITS SIMPLEST FORM

An effective way to practice application of a theory or methodology is to put it into a personal context that is relatable and easy to understand. As an introductory exercise, participants could choose a simple behaviour they want to change in their own lives, such as to do more exercise, eat healthier or call their family more often. They could then outline an approach to change this behaviour by analysing their own barriers and triggers using the Behaviour Change Strategy template and the 5 Levers of Change.

PRACTICE THE 5 LEVERS OF CHANGE IN A UTILITY CONTEXT

The next level up would be to introduce changing the behaviour of a third party, preferably a group of utility staff or customers. For example this might be to get customers to call rather than come to the office with queries, or to get staff to book their annual leave further in advance. Utilities are likely to have lots of ideas for behaviours they want to change in relation to water – e.g. getting customers to pay their water bills on time. However, it is advisable to keep the example more generic so attention is not distracted away from sanitation services.

REVISIT THE 5 LEVERS OF CHANGE AS IT WAS DEMONSTRATED IN THE APPLICATION

By this point, it may be clear to the project members that they want to amend the way they presented behaviours to be changed in the original application. Now they can start to complete the Behaviour Change Strategy template tackling the complex issue of safely managing human waste. The key will be to ensure all relevant stakeholders are captured, recognising that the triggers and motivators for a landlord will differ from a tenant, for example. This might mean multiple copies of the template per project.

RAPID VALIDATION

The next phase of the process explores how to validate any assumptions made as part of the Behaviour Change Strategy in more detail. However, a useful way to transition into the next stage and get the teams familiar with quantitative market research would be to conduct a simple rapid survey in the field. This allows the team to validate the main stakeholders and target audiences and firm up an understanding of the current behaviours. For pit latrine emptying sanitation models, a simple emptying practices survey would explore who is responsible for arranging or instigating pit emptying, who usually completes the task (i.e. the utility's competition) and who pays. The value of asking the team to undertake a rapid survey at this stage is that it stops talking to potential users being something unusual or intimidating, and starts to create a feedback loop demonstrating how and why utilities should check their assumptions in the field.





“Seeing the value of regular interaction with the customer was significant for us. Previously we were making decisions on our own and simply informing the community. We now know that if they have a better understanding of what we’re doing and why, they will work with us. For example, we always thought price was going to be a barrier in customers’ choosing SWSC services over the competition. This was validated in research when we confirmed the community was currently paying less than the prices we’d be charging. However a trigger we wanted to trial was

a pay-by-instalment approach and consultation with the community resulted in positive feedback and suggested that customers may be willing to pay the higher price when they can spread the cost.

However, it is very important to communicate to customers who engage in early research activities that the service being discussed with them may not be available for a while and give a clear timeline. For us, some customers began to feel that SWSC was positioning a service that they may not be able to provide.”

Eustakia Milimo Hamuchenje

SENIOR MANAGEMENT ENGAGEMENT

The Transform Utilities Sanitation Challenge focused on commercial utilities with a formal mandate for complete sanitation provision. Alongside the prototypes, a parallel change management stream with senior leadership was required.

In this initial stage a kick off meeting with senior management should be held to:

- position the project as part of the utility mandate and to inform future long term development of essential services
- underscore the importance of reaching city wide services as an essential public good.

This kick-off meeting would aim to de-risk the work by the project team and also highlight the potential to leverage funding from other, potentially less flexible, funding partners.

(Further touch points for this senior management engagement are highlighted at the end of key sections).

TOOLKIT RESOURCES:

- [Behaviour Change Strategy Practice Tasks](#)
- [Behaviour Change Strategy Template \(with example\)](#)
- [Simple Emptying Practices Survey](#)

PHASE 3

FIELD TESTING & ASSUMPTION VALIDATION

KEY OBJECTIVES:

- To build capacity around designing and conducting market research.
- To confirm identification of the right stakeholders and target audiences.
- To validate assumptions regarding current and desired behaviours including potential barriers and triggers around behaviour change.
- To develop a high level understanding of the market potential.

REFLECTIONS & KEY LEARNINGS

Before progressing to prototype development, it is crucial to validate any assumptions about existing behaviours, barriers and triggers. The rapid validation is likely to have only scratched the surface and it's important to invest in qualitative methods to add richness to the team's understanding of the audience and the market.

In the most recent project, both teams approached this validation exercise differently with differing degrees of success which made apparent the importance of capacity building around research design (more detail on this is available in the Appendix).

It may be helpful to consider the tasks within this phase in two parts. Firstly establishing **what** information needs to be gathered and what questions should be asked. And secondly considering **how** that information should be collected, and the best research methods or discussion tools to employ.

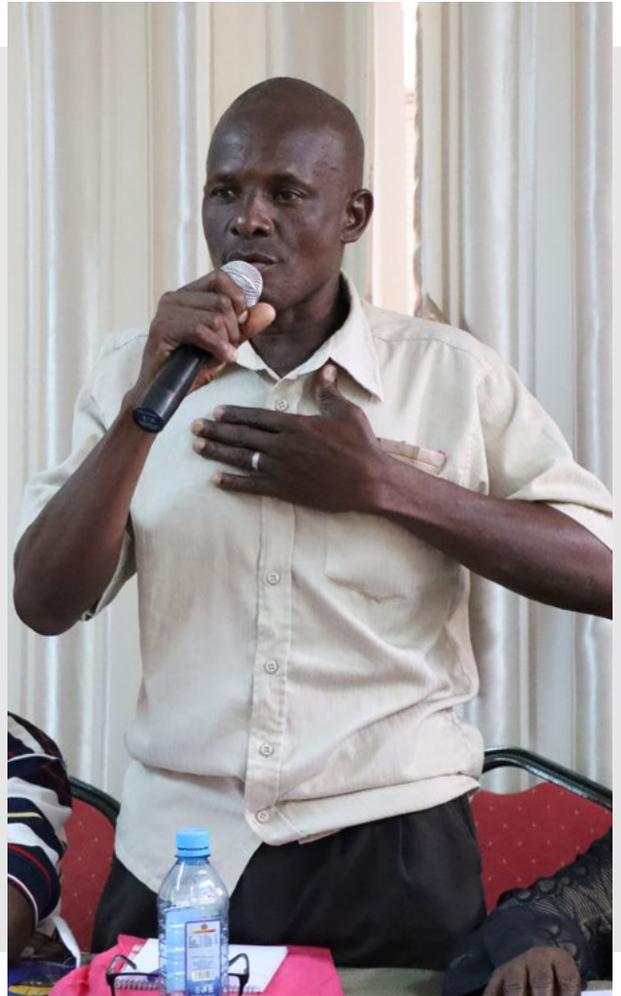
For both teams, a priority objective was to create stakeholder maps for the project and validate their target audience and current emptying practices. This involved understanding:

- How people currently empty – i.e. when, by whom, the tools used, and where waste is disposed
- Who usually pays for the service and how much it costs
- Whether these practices differ between landlords, homeowners and tenants
- Who regulates the sector and therefore are potential allies and/or blockers.



SWSC largely collected this information by conducting numerous surveys, community consultations, door-to-door interviews and focus groups. Focus group discussions proved particularly valuable in exploring more complex decision-making drivers and allowed for more creative questioning approaches such as card sorting exercises and prioritisation. The Toolkit Resources contains an example interview and focus group discussion guide that illustrates how the SWSC team sought to better understand:

- Competition and alternative services
- Perceptions of value
- Non-negotiable customer expectations
- Willingness and ability to pay (including how expenses are impacted by seasonality)
- Communications preferences



01

UNDERSTANDING PERCEIVED DRIVERS/INDICATORS OF VALUE ARE KEY.

It's important to understand what customers deem worth spending money on. Doing so requires discovering how a target market determines the extent to which something is justified in demanding a higher price point and what is looked for as indicators of good value for money.



02

UNDERSTANDING PERCEIVED DRIVERS/INDICATORS OF QUALITY ARE ALSO CRUCIAL.

When it comes to sanitation provision, formalised services should always be offering a superior customer experience to the status quo – whether that be in terms of safety, hygiene, reliability, sustainability, dignity etc. However a 'quality service' to one person, could be frivolous, unnecessary, or still suboptimal to another. Before attempting to design and deliver a 'better alternative' – it's critical to truly understand what 'better' means to the target audience by uncovering sources of frustration and delight in other purchases and service experiences familiar to them.

03

MARKET RESEARCH MUST BE CONDUCTED FREE FROM JUDGEMENT.

The SWSC team had identified public health authorities as a key stakeholder for supporting their service launch efforts, because they were able to distribute concurrent messaging about the consequences and sanctions for unsafe sanitation practice. However, they deliberately sequenced engaging them until after the initial research to avoid potential customers altering their answers to the survey to fit with what they had recently been reminded was legal practice.

Part of understanding current practices also involves understanding the competition and taking time to explore the different types of competitors (i.e. direct, indirect, alternative services and the choice to do nothing). One way of gathering this information was as part of surveying and talking with customers, but engaging other formalised and informal pit emptiers (another key stakeholder) was also hugely valuable to both teams.

It built knowledge of:

- Pricing anchors in the market (what customers expect/are used to paying)
- Service quality benchmarks (speed, reliability, cleanliness)
- Service norms (waste disposal expectations)
- Responsiveness (how quickly customers are serviced following initial enquiry)



The practice of conducting regular market research has become more ingrained in our everyday practice. The team often wants to conduct small surveys and ask customers about their experience. They've become more confident as researchers having seen the importance."

Priscillah Githinji-Oluoch



A secondary benefit to gathering insights directly from competitors is that it builds these relationships early and helps secure buy-in from informal workers from the start. Often informal emptiers were not satisfied with certain elements of the current practice and so these insights enabled us to craft an alternative service of mutual benefit to the customer and provider.

The team in Malindi, Kenya, did not embark on the same level of original validation research. As part of a separate recent project, external consultants had conducted baseline research and delivered a detailed report regarding the state of sanitation service provision across Malindi sub-county, including how a lack of infrastructure was driving current practices and behaviours.

Whilst utilisation of existing research and resources presented an opportunity to save time, on reflection it was felt that the project team in Malindi missed out on the chance to familiarise on a deeper level with the nuances driving customer behaviour. This led the project to become more heavily skewed towards operations in the early stages and it took more active effort later to keep MAWASCO's prototypes user centric. This became apparent when tools designed to improve management of the customer experience (such as efficient booking processes) were refined and adopted much later than the SWSC team.

On the other hand, the SWSC team found developing these research skills and being able to conduct effective market research so useful that they repeatedly used certain tools, such as rapid surveys, each time they found themselves making assumptions about current behaviours. For instance, later on in the project, the service marketing team entered a new community location where pit latrines were shallower, requiring emptying more often, and at lower volumes. This introduced nuance to customer demand and a rapid survey was used to build a better understanding, so that marketing and pricing strategies could be evolved accordingly.

“

Marketing is an area where customer research is still having a major impact. We're continually using customer feedback and input (particularly referral sources for emptying customers) to guide future marketing - from how we formulate messages, to the adverts we create and how we deliver communications.”

Eustakia Milimo Hamuchenje



Stakeholder maps, completed along the whole service chain, identified the complex and overlapping mandates related to sanitation in the context of wider urban development and who to engage. Sanitation services are regulated by public health, environmental and labour law, in addition to water and sanitation. Engagement of these different regulators needs to be resourced and considered in budget allocations during this Phase. Further reflections are given in Phase 8, but should be considered throughout.

SENIOR MANAGEMENT ENGAGEMENT:

A strategic vision and a high level understanding of market potential and potential obstacles at the city level is essential. Later prototype development can then be framed within this vision. For example an overview of the total future market would be used to size initial pit emptying teams.

Robust strategic planning is based upon having good baseline information for your city. If this is not already available then as much data as possible should be collated during this phase, including the following:

- Extent of off-site and on-site systems
- Types of on-site facilities
- Condition of containment and emptiability – as far as possible
- Current emptying practices
- Ability to pay (economic profile) and willingness to pay (prioritisation).

For example in Livingstone, the citywide baseline enabled a strong understanding of market sizes and challenges. This included customer insight suggesting that the major market shift would be moving from self-emptying to formal emptying (rather than moving from informal to formal). This made the service much more price sensitive. This data would also support earlier discussions around long-term regulatory interventions, for example bylaws to improve containment.



TOOLKIT RESOURCES:

- [Stakeholder map \(MAWASCO & SWSC example\)](#)
- [Behaviour Change Strategy Validation – Interview & Focus Group Guide](#)
- [Market Sizing Insights for Livingstone \(SWSC example\)](#)

PHASE 4

PROTOTYPES TO INFORM A MINIMUM VIABLE PRODUCT/SERVICE (MVP)

KEY OBJECTIVES:

- To define 'minimum viability' for all relevant stakeholders.
- To develop potential value propositions for the service.
- To document options for what the service could look like in its MVP form.
- To identify prevailing unknowns or blindspots preventing collective certainty in a 'best option'.
- To design rapid tests that will answer any unknowns and address blindspots.
- To initiate discussions around change management.

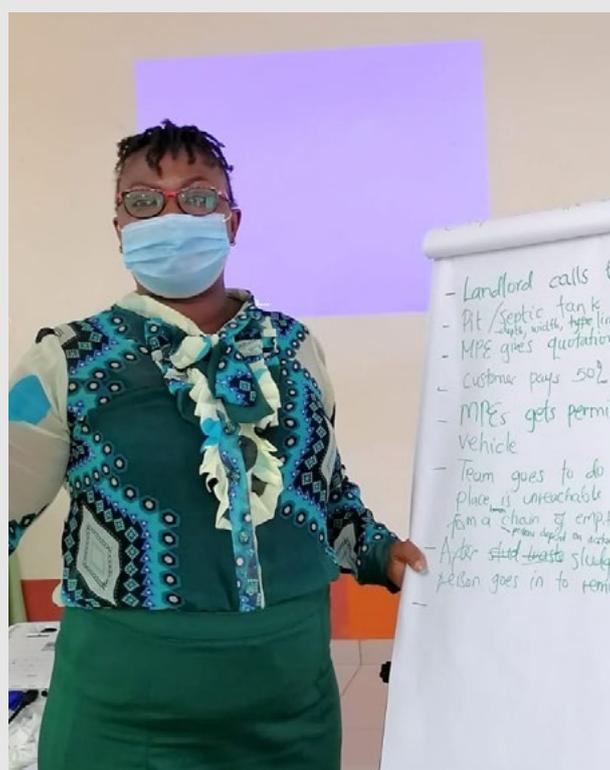
REFLECTIONS & KEY LEARNINGS

During the project, four team members from SWSC, WSUP and Unilever completed Acumen's free course '[Lean Startup Principles for the Social Sector](#)'. The course focused on the basics of customer discovery, designing MVPs and running lean experiments. The videos were an engaging way to quickly understand a topic and the project in Livingstone was used as the case study for the 2-hour weekly workshops.

“

The lean approach helps because it gives a consistent way of doing things and understanding the concept behind the problem. It simplifies the way to approach a problem you are trying to solve.”

Eustakia Milimo Hamuchenje



The course was excellent, and provided structure and a deeper understanding, which was particularly valuable in this phase.

The purpose of phase 4 is to design a set of rapid tests that will inform what a minimal viable product/service may look like at the point of launch. A useful way to kick-start this prototyping phase is to use consolidated findings from phase 3 to prioritise the biggest barriers and triggers to behaviour change. This helps to identify and capture the 'non-negotiables' from a customer perspective and outlines what 'viable' means to the target audience. A value proposition canvas proved to be a useful tool to document this information (see Toolkit Resources for an example).

Next, discussion can focus on any 'non-negotiables' for the utility – taking into consideration resource availability, health & safety or rulings from the regulator and actively engaging them if possible.

It is tempting to include too much in the minimal viability requirements and important to constantly question if a requirement is necessary, since having unnecessary requirements will make the job of creating the solution much harder.

The MVP service needs to strike the middle ground between the 'non-negotiables' for the customer and the 'non-negotiables' for the utility. Having these clearly defined, the teams can brainstorm different options for what a MVP service might look like.

There will still be some unknowns and blindspots that make it difficult to choose between the different options. These unknowns might involve prevailing questions regarding operational processes, logistics, pricing, emptying tools, staff training requirements, marketing approaches etc.

FOR SWSC THESE UNKNOWNNS INCLUDED:

- The optimum technical solutions for how to empty and transport waste.
- The optimum operational arrangements for managing logistics between SWSC and the manual pit emptiers.
- Deciding which of three potential treatment sites should be upgraded.
- To what extent use of the Faecal Sludge Treatment Plant (FSTP) would be accepted by Manual Pit Emptiers and how this could be encouraged.

Prototype tests included staging emptying jobs using professionals from the city of Lusaka and inviting stakeholders to share their opinions, provide feedback on the process and equipment used to complete the job. The team also conducted logistics tests, transporting barrels of water across a typical emptying route, to determine vehicle requirements. And finally, selection of the FSTP to upgrade was determined using a set of evaluation criteria during site visits involving all four stakeholder groups (Manual Pit Emptiers, customers, SWSC and private vacuum truck operators).

THE MAWASCO TEAM CONDUCTED SIMILAR TESTS TO ASSESS TECHNICAL SOLUTIONS FOR EMPTYING AND TRANSPORTING WASTE BUT ALSO EXPLORED:

- The optimum approach to engaging informal manual pit emptiers and convincing them to work with the utility.
- The optimum location for a new faecal sludge transfer station, trailing low risk approaches to seeking buy-in from the relevant authorities.

The MAWASCO team experienced huge success with the former hypothesis but ran into challenges with the latter.

Despite encountering hurdles regarding the transfer station, MAWASCO hosted a 'pre-registration event' for manual pit emptiers, promoted via radio announcement and word-of-mouth leveraging known contacts in the sector. Attendance, engagement and insight gained was overwhelming. 46 manual pit emptiers shared their views and shed light on blindspots the team felt they were battling regarding how to get informal emptiers to overcome the behaviour change barriers identified earlier in the project.

Both teams documented the tests through concept posters and the results were used to cement plans for launch and any further test and learn strategies that would continue throughout the pilot. A template for the concept posters and some examples of the bespoke tools and evaluation templates used during individual prototype tests can be found under Toolkit Resources. More details on how these prototype tests were conducted and the results can be found under the Phase 4 section of the Appendix.

“

Before the TRANSFORM project we had been working with a multi-stakeholder committee on city-wide inclusive sanitation (CWIS) provision. This had primed their mindset and it became apparent quickly that they had firm views on certain issues – one of which being that every project should come with sufficient budget to purchase land for necessary infrastructure. This was never going to be a part of this project and the rejection of any interim solution or compromise over a transfer station dampened spirits and dented our relationship. Trying to win over the group as a whole was potentially a mistake, in future we might see more success engaging the committee office by office.”

Priscillah Githinji-Oluoch

A key takeaway observed from both teams was the importance of ensuring prototypes are designed and selected to effectively answer the big questions of the project. Whilst rapid results are important to maintain an agile and iterative approach, it can be easy to make the mistake of prioritising what is quick and easy to test, over what is truly valuable in terms of shaping the future service.

SENIOR MANAGEMENT ENGAGEMENT:

By the end of this phase discussions around wider change management within the utility should be initiated. Significant changes – far beyond the Faecal Sludge Management unit – are required to achieve full implementation of an on-site sanitation business within the utility. As a minimum, the commercial, financial, customer care and operations departments would be impacted.

Appreciating the scale of change, mapping the impact across the organisation and starting to plan for it, should move forward in parallel with prototype development and in advance of the business model development.

This change management process would again position prototyping as supporting the design of a future permanent business line, not separate project activities.

TOOLKIT RESOURCES:

- [Concept Poster Template](#)
- [Emptying Tools Evaluation Form](#)
- [Modified Garden Tools Assessment Template \(SWSC example\)](#)
- [FSTP Site Evaluation Criteria](#)
- [Complete Value Proposition Canvas \(SWSC example\)](#)
- [Commission Model Presentation \(SWSC example\)](#)
- [MVP Review Presentation \(MAWASCO example\)](#)
- [Value Proposition Canvas video on YouTube](#)



PHASE 5

MVP / PILOT SETUP & LAUNCH

KEY OBJECTIVES:

- To identify and resolve any key decisions that need to be made following the results of the prototype testing.
- To confirm all resources needed and establish an operational blueprint for the pilot (this is likely to feature additional rapid testing or mini prototypes).
- To start outlining the business model with rough costs, pilot tariffs and means for engaging pit emptying staff.
- To cement KPIs and monitoring processes.
- To define a sales and marketing strategy with continual learning.
- To design and conduct all necessary training.

REFLECTIONS & KEY LEARNINGS

Results from the prototype tests are likely to have made many decisions easier, highlighting the optimum approaches and, where necessary, the most acceptable compromises. However at this point in the project, utilities may find themselves at a crossroads, having to make important decisions.

The outline business model should start to be developed at this stage to inform these decisions. Developing the business model in an iterative way, alongside the MVP service, also supports utility ownership of the process. This is discussed further under Phase 7.

A key decision point experienced by MAWASCO was deciding how much control they wanted to retain over the work of the MPEs. Initially, they had imagined a relatively hands-off arrangement where MPEs self-organised into teams and were endorsed by the utility in return for adhering to new and improved standard operating procedures and safer emptying practices. This would have meant that most operational logistics, liaison with customers and payment exchanges happened without utility intervention, and their role would be limited to high level quality control and ensuring adequate levels of service provision. However, nearer to the pilot launch, MAWASCO felt an endorsement-style arrangement placed too much reputational risk on the utility brand with insufficient opportunity to guarantee service quality levels. This led to developing a much more hands-on approach where the service was marketed as a 'MAWASCO service' with all customer bookings and transactions going through the utility and MPEs engaged almost on an informal employment basis instead.



Below is a summary of some of the other key decisions useful to consider at this stage in the process. Alongside each is a reflection on the process and tools used by the SWSC and MAWASCO teams.

CONSIDERATION

What will a typical end-to-end customer journey look like, from enquiring about the service through to post-purchase feedback? And therefore, what resources and processes are required to make this happen?

APPROACH AND TOOLS USED

Visually mapping out the service experience for customers in a flow-chart style format creates a useful discussion tool. Both teams adopted this approach during internal workshops. It helped the utility teams visualise and appreciate the level of back-end processes and resources needed to give customers the experience they're looking for. SWSC also shared the journey map with a small focus group of customers providing them the opportunity to share more about how they want to request, pay for and receive emptying services. There will always be compromises where the utility's ability to deliver a service is misaligned with customer expectations, but a visual illustration and regular team discussions help to map out how limitations of physical, human or technological resources may have a knock on effect on the customer experience and potentially their willingness and ability to pay promptly. A customer journey mapping template and an example purchase journey created by the SWSC team is available in the Toolkit Resources.



CONSIDERATION

What size team is likely to be needed to service the anticipated level of demand and how do we select that team?

APPROACH AND TOOLS USED

Earlier market research is likely to have uncovered huge market potential in terms of the number of serviceable pit latrines under the utility's jurisdiction. However, it is important to consider how many customers are likely to be ready and able to pay in an average week, as well as the service capacity to transport and dispose of waste. Both teams found that they may have recruited too many emptying staff for the volume of customer jobs. It is easier to scale up than scale down and risk disappointing workers.

MAWASCO used an MPE Selection Criteria as a way to fairly select the pilot team from the large number of applicants. An example of this criteria is within the Toolkit Resources.

CONSIDERATION

Roughly what budget are we going to need to run this service for long enough to gather meaningful learnings?

APPROACH AND TOOLS USED

By phase 5 of the process, it should be possible to estimate approximate costs to deliver the service. These estimates do not have to be set in stone. In-pilot learning under phase 6 is likely to inform final business modelling, which is refined in phase 7. However, at this stage it is important to consider affordability when making decisions such as:

- The price of the service during the pilot.
- How much emptying staff will be paid during the pilot.
- Budget required for additional utility staff to support back-end processes.
- Budget required for marketing tactics such as printing posters, paying door-to-door marketers, advertising on local radio etc. (A useful template for how to determine a marketing budget is available in the Toolkit Resources).
- Costs to purchase or hire transport, PPE and emptying equipment.
- Disposal fees.

A simple unit economics model proved useful to help make key decisions and make sure that the teams were testing something that could be viable in the future.



CONSIDERATION

What marketing messages are likely to be most compelling when positioning the benefits of our new service, and what sales techniques should we employ?

APPROACH AND TOOLS USED

When developing a proposition for the service, it is worthwhile investing time to explore the right messages to sell the service in the most compelling way. A co-creation approach with the target audience helped to ensure the right languages, dialects and terminology were chosen for final marketing materials. Both teams underwent a process of developing draft materials to trial different sales angles which highlighted different service benefits. These were tested in customer focus groups through poster mock ups, role play sales pitches, headline materials and prototype audio adverts. MAWASCO also used a WhatsApp group of landlords who had attended their in-person sessions to gather rapid feedback on posters later in the process. More detail on this process can be found in the Appendix and example materials in the Toolkit Resources. In both cases one or two preferred messages were selected, allowing marketing to be more focused.

CONSIDERATION

Who do we need to train on the different elements that make up the service delivery model?

APPROACH AND TOOLS USED

Effective training is crucial to ensure all staff and relevant stakeholders are equipped with the skills and knowledge to perform their roles within service delivery. Tailored training sessions over multiple days might include:

- **Emptying Staff:** Health & safety, a reminder of the emptying process and best practice including use of equipment, tips for dealing with customers, work etiquette e.g. time keeping, uniform care, and admin processes such as job briefings, reporting on work complete and collecting pay.
- **Marketing Staff:** How to pitch, rehearsing key messages, marketing tools available, answering customer questions, work etiquette and admin processes such as capturing customer leads and passing on feedback.
- **Admin Staff:** Customer service best practice, how to document, nurture and convert customer leads, admin processes such as using customer booking tools, collecting payments and liaising with emptying staff to brief jobs.

It is also likely that other utility staff who are not involved with the sanitation service, such as meter readers, will encounter customers with questions about the service. It is worthwhile delivering basic FAQs to all staff so they feel empowered to signpost customers to the correct personnel for information. An example FAQ document and training presentation used by MAWASCO are available in the Resource Toolkit.



CONSIDERATION

How much should customers be charged during the pilot?

APPROACH AND TOOLS USED

Both teams determined a tariff structure for the pilot period, acknowledging that this might be revisited later when more was learned about true cost of service and the market's ability to pay.

MAWASCO agreed on a subsidised introductory price of 12,000 ksh for a typical empty. This was presented as a promotional discount on the customer receipt, shown alongside the full cost of the emptying so that the customer could understand how much this would likely cost in the future. 9000 ksh was reserved to pay the emptying staff.

SWSC offered a price based on the minimum required to cover the cost of the service but charged by volume, allowing customers the option to purchase partial empties if preferred. 1-12 60 L barrels were charged at 320ZMK, 13-24 barrels at 450 ZMK and 25-32 barrels at 700 ZMK. A flat 60% of the revenue was apportioned to pay the emptying staff.

“

We learned that once we had launched the service, our customers behaved differently to the feedback that they gave us in our initial research and focus groups. For instance, customers expressed a primary preference for a clean and hygienic service, but once we launched the service we realised they also want competitive prices, fast response and professionalism in service delivery. We only realised once we had launched how truly price sensitive our customers were.”

Eustakia Milimo Hamuchenje



CONSIDERATION

How do we keep track of success?

APPROACH AND TOOLS USED

Before launching the service, it is essential to capture and agree how performance will be tracked and success measured. Key performance indicators may be revised to support mini tests conducted to enrich learning during the pilot, but it is useful to have some constant measures in place such as:

- Number of customers reached with promotional efforts.
- Number of customer enquiries.
- Number of pits emptied.
- Revenue generated.
- Profit generated.
- Accuracy of estimated costs to deliver the service.
- Customer satisfaction – e.g. with response times.
- Staff satisfaction (both emptying and utility staff).
- Observations to improve market knowledge, for example building a database on the condition of facilities, emptiability etc.

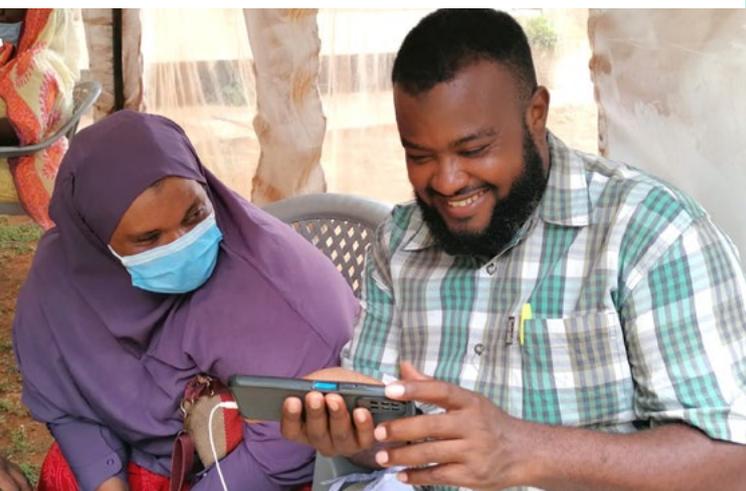
An example KPI tracker used by the SWSC team is available in the Toolkit Resources.

SENIOR MANAGEMENT ENGAGEMENT:

At this stage it should be possible to start to give an indication of the likely scale of subsidies needed to meet the utility's vision for sanitation services. This would be needed to initiate discussion around future sanitation surcharges, options for cross subsidy and potential need to leverage external funders for capital investment. Further reflections are given in Phase 7.

TOOLKIT RESOURCES:

- [Customer journey map template](#)
- [Purchase Journey \(SWSC example\)](#)
- [MPE Selection Criteria \(MAWASCO example\)](#)
- [Messaging prototypes \(MAWASCO example\)](#)
- [Poster Prototypes for Message Testing \(SWSC example\)](#)
- [Poster Design Focus Group Discussion Guide \(SWSC example\)](#)
- [Pricing Poster \(SWSC example\)](#)
- [Service Promotion via Audio Prototype \(SWSC example\)](#)
- [Audio Prototype Interview Guide \(SWSC example\)](#)
- [Poster testing Interview Guide](#)
- [Considerations for a marketing budget](#)
- [Success metrics for service launch](#)
- [Sanitation team training deck \(MAWASCO example\)](#)
- [Pit Emptying Services Staff FAQs](#)



PHASE 6

IN PILOT LEARNING

THE KEY OBJECTIVE WITHIN THIS PHASE IS TO LEARN AND OPTIMISE AS MUCH AS POSSIBLE IN IMPORTANT BUSINESS AREAS SUCH AS:

- Launching the pilot service
- Serviceable locations including any nuances/limitations
- Logistical efficiency – e.g. route optimisation, staffing levels
- Tool/equipment efficiency and effectiveness
- Staff experience, expectations and satisfaction
- Customer experience, expectations and satisfaction
- Pricing and payment options
- Sales and marketing tactics
- Adherence to best practice
- True costs to deliver the service or blindspots preventing collective certainty in a 'best option'.

REFLECTIONS & KEY LEARNINGS

At this phase in the project, the service is finally up and running and generating revenue. However, this is not project completion. The prototype testing in phase 4 is a fantastic opportunity to seek clarity on the bigger questions relating to how an MVP pilot service should be delivered. However, there will always be day-to-day realities of operation which are difficult to recreate in prototypes. This is why continual, iterative improvement is important to refine service delivery throughout the pilot period.

It is not the intention of this report to recommend an optimum tariff, commission model or team composition. This will be dependent on a host of factors unique to the utility and community context. Instead, the takeaway is to be flexible on the model during the pilot period. Open dialogue between the utility and the sanitation workers can lead to new ideas, trialling new approaches and iterations to ensure mutual benefit and improvements in response to market demand.



FOR BOTH TEAMS, THE FOLLOWING AREAS BECAME A FOCAL POINT FOR CONTINUOUS TEST AND LEARN CYCLES:

01

SERVICEABLE LOCATIONS

Deciding where the pilot should take place is an important decision, and over the course of several weeks the utility may find they are able to reach out to numerous communities.

However, MAWASCO and SWSC found that without a clear criteria for selecting pilot locations, they occasionally came across barriers such as ultra-low income households, absent landlords (who were difficult to collect payment from), poorly constructed pit latrines or pit latrines so shallow that it was impossible to service them at a sustainable price point.

This can be demotivating and skew the results of a pilot service that might otherwise work for the majority of the serviceable area. A criteria for selecting the appropriate pilot location(s) should be developed to ensure an appropriate balance of:

- Being a location/test environment representative of the markets the utility is seeking to serve long term.
- Being a location/test environment favourable enough to deliver sufficient success, proof-of-concept, learning opportunities and revenue to fund future expansion and iterations.

It is important to note that these more difficult areas will eventually be serviced, since the utility's mandate is to provide sanitation for all. However, in the launch pilot it makes sense to focus on the mass market in refining the core model. The difficult 'edge cases' can be tackled later once the core business has been established and the team's ability to innovate has developed.

02

MARKETING TACTICS

During market and audience research under phase 3, teams may have gathered insights on how customers prefer to receive communications from the utility or about new services available in their area. This is helpful to know by the time the project reaches phase 6, because it provides guidance on which marketing channels should be used to promote the service during the pilot.

During this project SWSC found most success with interpersonal communication channels, primarily door-to-door sensitisation using paid marketers, and leveraging community leaders and scheduled gatherings to encourage word-of-mouth. Some posters were also affixed in high footfall areas such as places of worship, public transport stations and market squares. They also focused marketing efforts in areas where public health officials had recently conducted inspections of toilets and issued notices that pit latrines must be emptied.

MAWASCO employed many of the same tactics but also trialled use of social media through their Facebook page and public announcement systems at scheduled roadshows to generate buzz. They found that the roadshows certainly led to a boost in enquiries and was a cost effective way to achieve wide reach. Social media was less effective as an enquiry generation tool, although some sales were made through the channel. It helped build awareness of the service but promotional posts often got lost in the noise of concurrent water-service messaging and it is suspected that most social media users are more likely to be influencers of the service-purchaser, not the target customer themselves.

Both teams continued to seek feedback on marketing materials, for instance surveying responses to poster materials to establish if iterations should be made. An example poster survey is available in the Toolkit Resources.

03

INCENTIVISING SALES & ADJUSTING COMMISSION MODELS

Over the course of the pilot both teams found that reaching large numbers of prospective customers through marketing efforts wasn't particularly challenging, but converting them to sales was. Where paid marketers were being used, this meant that marketing efforts weren't delivering a sustainable ROI. Training the pit-emptying staff to conduct their own door-to-door marketing was tested as an opportunity to reduce marketing costs and keep emptiers busy during quiet periods. However, the working business model didn't allow for pit emptiers to be paid a salary outside of the emptying jobs. In response, the MAWASCO team developed some commission model options and worked with the emptiers to select which they felt was most fair and motivating. The emptiers selected option B.



We plan to continue using a range of marketing tactics because we've learnt they serve different audiences and different purposes. Roadshows are great for broadcast but limited in terms of two-way interaction. Social media initially unleashed largely negative comments due to customers responding to issues with their water service

but having a trained and dedicated social media manager, we're now seeing an improvement. Going forward this will improve general communication with our customers on social media."

Priscillah Githinji-Oluoch



OPTION A

All MPEs who perform the empty are paid 3000 ksh. The person who brings in the lead gets 0 ksh extra. So the person who brings in the lead is paid 3000 ksh total and the other emptiers are paid 3000 ksh (totaling 9000 ksh)

OPTION B

All MPEs who perform the empty are paid 2500 ksh. The person who brings in the lead gets 1500 ksh extra. So the person who brings in the lead is paid 4000 ksh total and the other emptiers are paid 2500 ksh (totals 9000 ksh)

OPTION C

All MPEs who perform the empty are paid 2000 ksh. The person who brings in the lead gets 3000 ksh extra. So the person who brings in the lead is paid 5000 ksh total and the other emptiers are paid 2000 ksh (totals 9000 ksh)



“

We're still testing new ways to incentivise sales champions beyond the emptiers themselves. Just this week we introduced free gifts including cups and wall clocks for landlords that recommend the service and we're introducing financial bonuses for Community Health Volunteers and any utility staff member who brings in new sanitation business. This project has shown us how integral sales and marketing is to the strategy, so continuing to think about who and how we're going to market the service is key.”

Priscillah Githinji-Oluoch

04

PRICING & PAYMENT MODELS

Perhaps unsurprisingly, affordability and perceived high price were the most commonly cited reasons for customers not converting from awareness to purchase. Adjusting tariffs and pricing mid-way through the pilot would have been challenging for several reasons. Firstly, it would risk confusing customers and create dissatisfaction if neighbours were offered different prices. In some instances the pilot tariffs had already been subsidised with project funding to stimulate sufficient demand to gather learnings from the pilot. Charging less would have had a knock-on effect on the funds available to pay emptiers, making the work unfeasible for them.

Instead, pay-by-installment options were trialled, with customers given the option to open an account with the utility and pay off the cost of their empty gradually in advance. This was warmly received by residents during consultation but few managed to make enough payments to cover a full empty during the pilot period. A key learning here was that this level of accounting administration can take a while for the utility to set up. Therefore, if this is likely to be a favourable approach for customers, setting the back end processes in motion before service launch may allow for faster conversions during the project timeplan.

05

SUPERVISING ADHERENCE TO BEST PRACTICE

In some cases, slow uptake of the new service led to manual pit emptiers seeking to breach the terms of their agreement with the utility. This often meant undercutting the utility-set tariffs and taking side jobs. Without wanting to resort to harsh sanctions in the first instance, the utility consulted with the emptying teams to negotiate a fair way forwards and methods for closer supervision were trialled with utility staff members.

Any utilities embarking on a similar arrangement with informal emptiers might want to consider creating a behavioural charter or similar document of shared understanding and encourage all parties to commit to set rules for engagement at recruitment.



06

TEAM EFFICIENCY

Achieving optimal operational efficiency and effective deployment of a team that can work at 100% capacity is key for financial feasibility and takes a degree of trial and error. Both teams found staff and vehicles idle at quiet periods but trialled different approaches to keep teams busy and create fair earning opportunities.

The most important factor in team efficiency is having the right team size to begin with. SWSC over-recruited and then had to find alternative jobs for their six MPEs. This was something that MAWASCO took into account when they later recruited their MPEs, and chose to try the pilot with one team of three people.

The SWSC team saw success dividing teams with one group operating the faecal sludge treatment plant whilst the other group serviced customers in the community. The teams would alternate weekly and split all proceeds equally. This was made possible by the commission model used in Zambia; emptying teams were paid a flat 60% of the revenue generated regardless of the role performed.



We found that the division of the emptying teams improved time management. It was more efficient, and allowed the field team to work on a larger number of pits in a shorter time frame, with less back and forth and less time spent dealing with the sludge collected in between jobs.”

Eustakia Milimo Hamuchenje



07

OPTIMISING OPERATIONAL TOOLS

Finally some of the most significant project breakthroughs seemed to occur through introduction of seemingly simple tools and practices. Once the service was launched, it became apparent that dedicated staff were required to manage day to day tasks such as:

- Answering inbound customer enquiries
- Following up on warm customer leads
- Accepting payments
- Passing job details onto the emptying teams

Capturing key learnings such as staff and customer feedback as well as the common lead referral sources.

Both teams quickly discovered that a full time Sanitation Officer would be required and without standardised tools and processes, critical operational data would be contained to the minds and personal devices of a few key personnel. Laborious paper-based documentation quickly became difficult to manage, so both teams quickly adopted a simple online spreadsheet to keep track of bookings. For SWSC, who trialled pay-by-installment methods, this spreadsheet also allowed them to keep track of customer savings. An example Lead-to-Bookings template is available in the Toolkit Resources.



It's important not to underestimate the value of investing in institutional capacity building around these peripheral tasks. Smooth internal operations have an instant impact on customer experience and ultimately satisfaction as well as staff acceptance of new roles. However, what's even more critical is ensuring that staff feel empowered to feedback, adapt and amend day-to-day tools to ensure they continue to work best for them.

Often, opportunities to test different tactics are brought about by recognising a hurdle or lack of intended behaviour change. For instance, customers struggling to find money to pay for the service. Or, MPEs continuing to empty pits at night. At these points, it can be valuable to refer back to behaviour

change methodology and consider whether the problem is operational or behavioural. Perhaps one of the triggers identified in phase 2 and validated in phase 3 can be better leveraged to unblock a resistance to behaviour change.



Having operational tools and records has been key in keeping the service running smoothly. For us, starting with a customer journey map was significant because it helps to understand what you want to get out of the service and how you're going to have to manage job allocation, essentially handing over parts of the process from one person to another. Having job cards, a google sheet to capture bookings, pit assessment forms etc. means there's always a reference.

It means you can identify which individual or department you need to go to if there's a delay, a customer complaint or even a recurring trend you want to look into. It's also helping us replicate service delivery in new areas. We have records of what's working and what's not so we know how to offer the service better and where to improve in future."

Eustakia Milimo Hamuchenje



TOOLKIT RESOURCES:

- [Job card \(SWSC example\)](#)
- [Pit Assessment Job card \(SWSC example\)](#)
- [Leads-to-Booking Template](#)
- [Poster – Professionalism Proposition \(SWSC example\)](#)
- [Poster – Cleanliness Proposition \(SWSC example\)](#)
- [Poster – Reliability & Satisfaction Propositions – English \(MAWASCO example\)](#)
- [Poster – Reliability & Satisfaction Propositions – Swahili \(MAWASCO example\)](#)
- [Customer flyer \(SWSC example\)](#)
- [Field Survey for Poster Design](#)
- [MAWASCO pit latrine service brand playbook](#)
- [MAWASCO Social Media Plan](#)
- [Social Media Management Training](#)

PHASE 7

COMPLETE BUSINESS MODELLING

KEY OBJECTIVES:

- To capture the true costs to deliver a viable service for all stakeholders.
- To document relevant 'what if' scenarios.
- To present potential options for scale up.
- To build a business case for key stakeholders such as: industry regulators, utility board members, future funders and investors etc.

REFLECTIONS & KEY LEARNINGS

The priority for this phase is to develop an outline business model so that key costs can be understood and pricing decisions made. However, it's important not to race head first into intricate detail which can overwhelm and confuse at this stage. Outline financial models based on assumptions should be developed as a decision-making tool to illustrate the real cost of providing the service and promote discussion on pricing and cost recovery. For example, understanding the cost implications of different technology options or marketing team structures.

However, it may not be possible to develop a full financial model because, as became apparent in both the MAWASCO and SWSC projects, one of the main barriers to adopting the new service is likely to be organisational change.

Ultimately, it may be more important to focus on building a shared understanding of the organisational change needed to adopt and scale the FSM service, and to build a high level projection of demand and scale of subsidies required. This work is discussed in more detail under phase 8.



IN THE MEANTIME, THE KEY BUSINESS MODELLING STEPS WE ENCOURAGE YOU TO CONSIDER ARE:

01

TRY TO PHASE FINANCIAL AND BUSINESS MODELLING, WHILE BUILDING CAPACITY IN THEIR USE.

Throughout the recent projects there was a delicate balance to be struck between phasing the level of detail in the model (given the level of uncertainty around costs), and developing a model which would be sophisticated enough to take into account the larger system, whilst being user friendly and intuitive enough to be picked up and used autonomously by utility staff.

Financial models should be co-created and developed iteratively in parallel with the prototyping process wherever possible, and be adapted to align with the skills sets of those using them. This requires dedicated contacts within each utility to be identified early on, with the mandate to develop and revise the model(s) jointly through regular co-working sessions. It does mean a greater demand on utility staff time and external advisory teams, however it also ensures greater use of the models to inform decision making and utility ownership of the direction of the business.

02

BE SURE TO BALANCE AFFORDABILITY AND FINANCIAL VIABILITY FOR BOTH MPES AND THE UTILITY.

Improving and formalising service quality increases the cost of service delivery. Service cost to the utility is likely to be significantly higher than the affordable price. The financial model should seek to estimate the full service cost, including utility staff costs and at least partial cost recovery for utility overheads. In the most recent projects transport was the largest fixed charge, making up more than a third of the total emptying cost, possibly a conservative estimate given the increasing cost of fuel. However, household service charges were priced to cover only direct costs for improved practices by MPEs.

The scale of subsidy required in both locations to cover costs to reach citywide sanitation within the target timescales is significant.

From the MPE perspective, commission from pit emptying alone is unlikely to be sufficient to provide a complete livelihood, at least until the market is established. Pit emptying is often only one of multiple sources of income for MPEs and so the financial model needs to consider multiple ways of engaging MPEs to reduce the risk of side jobs and undercutting utility prices. In maximising MPE retention it's not enough to consider income from pit emptying alone. Consideration must be given to the earnings MPEs may lose by not being able to take additional jobs as masons or labourers etc.



In response to this SWSC engaged MPEs to unblock sewers, MAWASCO engaged MPEs in pit assessments and both utilities engaged MPEs in marketing services. An alternative could be providing a consistent minimum wage.

For both SWSC and MAWASCO, the financial models developed are feeding into discussions on sanitation surcharges with both national regulators. Understanding the true cost seen by the utility and looking at the overall sanitation service chain has been important for the project team.

However, this has at times been a politically sensitive discussion as both the national regulator and commercial utilities are anticipating the new service line to be revenue generating, not a net cost.

Long term cost recovery is discussed further under phase 8. However this process underlines the importance of stress testing willingness to pay assumptions through piloting, and developing a full cost recovery model based on both utility level costs and the full service chain.



03

PREPARE FOR ITERATIVE FINANCIAL AND BUSINESS MODELS, CAPABLE OF MANAGING UNCERTAINTY.

Throughout the project, prototypes will be implemented in a rapidly changing enabling environment. In both Kenya and Zambia there is a progressive shift in responsibility for sanitation from the local authority to the utility, regulations around on-site sanitation are under development

and guidance is being drafted for sanitation tariffs and contracting arrangements. Market size and cost estimations developed throughout the project provided (and continue to provide) new understanding around both physical parameters (emptiability, variance in pit sizing) and social parameters (actual willingness to pay, and oversight and incentives needed to ensure continued compliance by pit emptiers).

Some costs were not estimated, for example, the utility resources required to manage and regulate manual pit emptiers through direct supervision. This means that as both utilities progressively resource sanitation units as they scale, long-term governance and human resource costs will become increasingly apparent. All while both cities continue to rapidly grow and change.

Financial and business models developed need to be flexible and evolve alongside prototypes to reflect these changes. The scope of business modelling activity was revised under the recent projects

to reflect this understanding, placing a greater focus on overall financing and future change management needs, rather than trying to provide definitive answers. The amended scope of the business model development tasks instead considered the implications of the adoption and consolidation of the FSM service in terms of organisational change and a transitional plan detailing the initial steps in the establishment of permanent FSM service. Financial models were developed based on the best available current information and many values are largely indicative.

LIST OF KEY COST HEADINGS:

Parameters	Emptying costs per pit
Population density	Labour (incl. E&T charging / discharging)
Commercial / domestic split	Transport
Type and volume of containment	Equipment and materials
Emptying and transport type	Consumables
Haulage distance	Fuel
FSM unit	Permit and tipping fees
Marketing investment	% marketing
Management costs	% overheads
Regulating contracted service providers	

“

We knew we needed to transition sanitation from a stand-alone project to a fully integrated service within MAWASCO. The first thing we did was ban the word ‘project’ when describing the work internally. We then set about raising awareness and excitement of our new sanitation service among our staff, most of whom were unaware that we had broadened our remit to sanitation.

We rallied all our staff to attend a special launch ceremony, where they could listen to senior stakeholders speak on the importance of sanitation, meet representatives from the residents’ and stakeholders’ associations and hear testimonials from customers who had already received the service.

We have allocated Wednesdays as ‘Sanitation Day’ and challenged all staff to talk about sanitation to at least one customer that day for the next three months. Each Wednesday, all staff wear branded sanitation T-shirts and promote our new service as they go about their duties in the community. We also have a sanitation hour (11am - 12 noon), where we capture moments of our staff talking about sanitation and offer discounts to customers who pay for emptying during that time. All this is really helping to shift both staff and customer perspectives from thinking we are only a utility who provides water to one which provides both water and sanitation services.”

Priscillah Githinji-Oluoch



TOOLKIT RESOURCES:

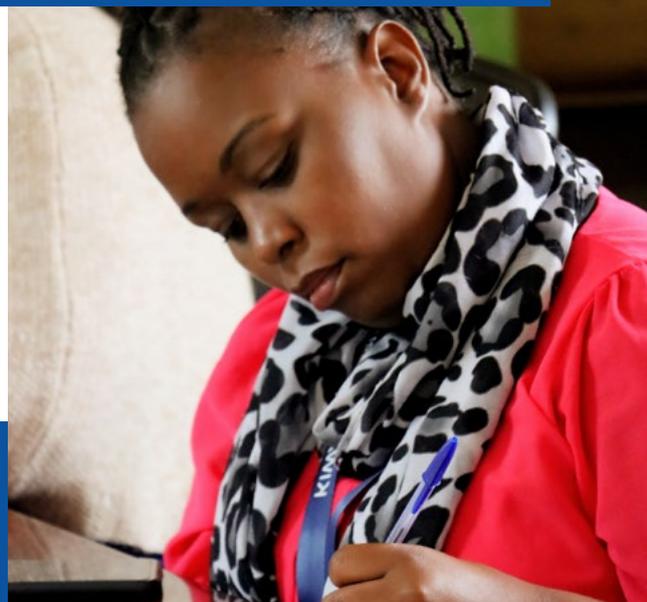
- [Financial Modelling of Water Utilities and Projects – The World Bank](#)
- [The ultimate guide to financial modelling for startups – EY](#)

PHASE 8

TRANSITION & SCALE UP

KEY OBJECTIVES:

- To drive institutional capacity building and long-term change management.
- To secure the continuation of successful service provision.



“

Tailoring the sanitation service to address customer behaviours worked well in helping SWSC become a more customer-centred service provider.

The utility now understands that once customers are onboarded, they can only be retained if the service addresses their needs and gives them an opportunity to feedback into the process for continual service improvement. With this realisation, SWSC will take customer-centred approaches in scaling up sanitation services to its other service towns. This approach brought to light the changes

that need to occur internally to achieve customer centricity. These include a dedicated customer care toll free line, customer care staff and marketing staff. Decentralising customer engagement systems such as payment centres and increasing payment options (i.e. bundled payment) is key to encouraging proactive bill payment especially for low-income communities that make up the customer base for the pit emptying service.”

Eustakia Milimo Hamuchenje

REFLECTIONS & KEY LEARNINGS

We know it is not easy to develop onsite sanitation services for low income communities. The reality is that creating truly sustainable and effective alternatives to the solutions that low-income residents currently rely on will take time, investment and periods of unfavourable interim compromises. In many locations, utilities will embark on this project from a starting position where there is no existing infrastructure, no safe disposal sites, no opportunities for risk-free transfer of human waste. This puts service designers in an impossible position of risking investment in an end-to-end solution that might not be right, or accepting the 'least unsafe' options as an interim step to eliminate some risk.

Project teams will likely encounter concurrent challenges with poor solid waste management and low quality containment making a percentage of latrines either unemptiable, or very expensive to empty. Disruption, debts and unavailability of water services can also make safer hygiene practices even more challenging, and mean relationships between customers and utilities are already fraught. Finally, a price that covers the true cost of delivering adequate sanitation services is always likely to be unaffordable to the world's poorest communities. Simple transaction models will be difficult to launch without subsidy or long-term, low value surcharges that take a long time to build up credit.

This calls for more innovative approaches to finance, systemic support systems and tailored business models to support utilities rise to the challenge of sanitation mandates.



The transition from a high input, grant funded, project to a mainstream utility operation is recognised as a high risk step. Developing a business line in FSM, managing outsourced contracts and regulating MPE activity, requires a significantly different set of skills to managing networked water supply services. Both utility partners featured in this programme have plans in place for scaling up human resources as part of the strategy to reach Citywide sanitation. They are also receiving pro-bono support from EY teams and other organisations through the first months of this stage, which will include workshops and coaching sessions within the utility partners to share relevant theory on organisational change and then apply this to the specific context. However it is anticipated that it would take a number of years for the services to be fully established. One of the key learnings through the development of this project was the need to support utilities through this change process, by providing coaching and facilitating key discussions, rather than focussing on highly detailed business and financial models.

KEY DISCUSSIONS SUCH AS:

01

MAINTAINING CONTINUED ENGAGEMENT AND ADVOCACY WITH LOCAL AND NATIONAL GOVERNANCE STRUCTURES.

Including the national/regional industry regulator as a key stakeholder in the project is essential. FSM services are regulated by a wide range of actors - environmental, public health, labour - in addition to the national water and sanitation regulator. These may have very different drivers and be highly influential on the delivery of sanitation services. Having the support of regulators is essential for affecting long term change and this project has proven the power of prototypes to influence changes in perception through low-risk demonstrations and ideas.

Both SWSC, MAWASCO and supporting partners have been active in engaging with national and local regulators to support the development of the enabling environment. Local and national regulation can be in conflict, for example in Kenya, modified garden tools are an accepted technology at the national level, but were, at least initially, roundly rejected by local stakeholders as not being sufficiently safe, despite being a much cheaper, and possibly more sustainable option.

Many of the changes required to provide the service safely relied on changes in the legal framework to be possible, changes such as allowing pit emptying to be conducted during the daytime, and allowing manual handling of faecal sludge. During the prototype period, a level of flexibility on the part of the regulator to allow for interim solutions and gradual improvements is crucial. Early stakeholder engagement therefore needs to both initiate the process of lobbying for by-laws to support implementation, and also manage expectations and understanding around the concept of agile prototyping.

The significant and ongoing effort by all parties, both before and through the project period, to align and develop legal and regulatory frameworks has been essential to implementation. This work is largely intangible and unseen, but needs to be properly resourced.



02

EXPANDING ENGAGEMENT OF MPES AND CONTINUED COMPLIANCE

It will be difficult to completely remove the risk of both existing MPES competing with formal MPES and formal MPES reverting to previous unsafe practices. Both SWSC and MAWASCO are considering phasing out support on provision of equipment, materials and transport and taking a stronger regulatory role with MPES.

However it is recognised that there may not currently be sufficient financial drivers to retain improved practices, especially while enforcement capacity is limited.

Therefore, a responsive and redistributed approach to MPE monitoring, with a focus on continuing to build relationships and trust with the small groups of MPES, might be the best next step. Options under consideration for future scale up are:

- establishing MPE associations to increase self regulation and support, for example pooled equipment and transport.
- geographically zoned performance contracting to individual or small groups, to incentivise co-regulation, through allocating markets, and delegated responsibility for local regulation.
- ongoing work to support the development of new social norms around safe emptying, ensuring customers have the information to choose safe services, and also potentially report unsafe service providers.

03

FUTURE FINANCING AND THE REALITY OF SANITATION MARKET DEVELOPMENT

The prototype development and testing has provided a strong base for discussions on sanitation surcharges and also to support SWSC and MAWASCO in applying for future government and external grant funding. It is estimated that it would take around 10 years for sustained levels of demand, and therefore a stable level of subsidy, to be reached. Grant or concessional funding from development partners will be critical to supporting scale within the timescale of the SDGs.



Potential financing avenues being investigated by each utility are:

- **Cross subsidies** between industrial and domestic, high income and low income customers and/or from water to sanitation. Sanitation surcharges on water bills are under discussion and are expected to be a significant source of financing. The political viability of large-scale cross subsidy needs to be discussed going forward and also relies on the utilities having a continued secure revenue base, unaffected by external shocks.
- **Monthly payments** for scheduled desludging. This provides a more affordable and easy to manage solution for the customer and leads to a more secure revenue base for the utility. However, greater resources are needed from the utility to manage the service.
- **Financing through resource recovery and sale of reuse products.** Systems for the production and sale of briquettes are built into the sanitation service chain in Malindi. The sale of treated sludge as a soil conditioner is already being explored in Livingstone. This may be a source of revenue to offset some service costs, and is expected to become more important in the future as resource scarcity increases, but is unlikely to be sufficient to drive sanitation improvements at this time.

If there are existing facilities for sanitation surcharges, the conditionality around these funds and the process for use should be checked. For example, whether they can be used for both CapEx and OpEx and whether applications for use need to be in line with annual budget cycles.



04

ORGANISATIONAL CHANGE.

It is anticipated that the change management programme initiated under these pilot programmes will be implemented over at least a 2-3 year period. This duration is in line with management time and financial resources and allows for the FSM business to grow and the organisation to build up knowledge.

As outlined in the ESAWAS guidance the minimum required is a lead person for the FSM service, capacity for inspection and verification of activities, an M&E system to support evaluation and learning, senior management training and development, changes to finance and budgeting and awareness building of customer facing and operational staff.

Priority actions in the first year should include:

- **Building a business case** for either on-site sanitation as a whole or a manual pit emptying service with budgets set for sanitation.
- **Recruitment and training** for people responsible for MPE service. This would factor in target setting around implementation of the service
- **Training for those indirectly responsible** i.e. marketing, finance, procurement, operations, maintenance & logistics etc.
- **Updating finance policy** including chart of accounts, management accounts, and reporting.
- **Setting approved tariffs and charging models.**
- **Having processes in place for** (i) Customer/Complaints Management, (ii) Financial Management of the MPE business line, (iii) Revenue Collection and Payment to MPEs (iv) M&E and MPE performance monitoring (v) Registration and training for MPEs

TOOLKIT RESOURCES:

- [Velocity – the EY 7 drivers of growth](#)

CONCLUSION

Entrepreneurs have a fantastic track record for creating innovative new business models. But since utilities are a key route to scaling sanitation services, we also need intrapreneurs; change makers in utilities who want to create better sanitation services and embed these in the utility's operations.

Priscillah, Eustakia and their teams at MAWASCO and SWSC are proof that such intrapreneurs exist in utilities in abundance. They have the passion and expertise to help their organisations take on the mandate of delivering sanitation. They have launched their organisation's first ever sanitation services for low-income people and grown from being newcomers to the area to experts in their field.

But they need your help. We end this report by asking all of you to support them, and those like them in other utilities too.

We want to make the case for unusual partnerships – after all, who would have thought that a Utility and a FMCG company would have found so much to talk about? Or that a cross-sector team of NGOs, corporates, utilities and start-ups could work together effectively having never met? The reason why such a partnership works is not despite our different perspectives but because we all bring something different to the table. We ask you to consider what you can bring to the table too - and to bring it - because this is the way to scale sanitation services and improve lives.

TOOLKIT

04

TOOLKIT RESOURCES

- [Unilever-Sustainable-Living-Plan-5-Levers-for-Change](#)
- [Concept Note Application Template](#)
- [Application Selection Criteria](#)
- [Behaviour Change Strategy Practice Tasks](#)
- [Behaviour Change Strategy Template \(with example\)](#)
- [Simple Emptying Practices Survey](#)
- [Stakeholder map \(MAWASCO & SWSC example\)](#)
- [Behaviour Change Strategy Validation – Interview & Focus Group Guide](#)
- [Market Sizing Insights for Livingstone \(SWSC example\)](#)
- [Concept Poster Template](#)
- [Emptying Tool & Transport Option Evaluation Form](#)
- [Modified Garden Tools Assessment Template \(SWSC example\)](#)
- [FSTP Site Evaluation Criteria](#)
- [Complete Value Proposition Canvas \(SWSC example\)](#)
- [Commission Model Presentation \(SWSC example\)](#)
- [MVP Review Presentation \(MAWASCO example\)](#)
- [Value Proposition Canvas video on YouTube](#)
- [Customer journey map template](#)
- [Purchase Journey \(SWSC example\)](#)
- [MPE Selection Criteria \(MAWASCO example\)](#)
- [Messaging prototypes \(MAWASCO example\)](#)
- [Poster Prototypes for Message Testing \(SWSC example\)](#)
- [Poster Design Focus Group Discussion Guide \(SWSC example\)](#)
- [Pricing poster \(SWSC example\)](#)
- [Service Promotion via Audio Prototype \(SWSC example\)](#)
- [Audio Prototype Interview Guide \(SWSC example\)](#)
- [Poster testing Interview Guide](#)
- [Considerations for a marketing budget](#)
- [Success metrics for service launch](#)
- [Sanitation team training deck \(MAWASCO example\)](#)
- [Pit Emptying Services Staff FAQs](#)
- [Job card \(SWSC example\)](#)
- [Pit Assessment Job card \(SWSC example\)](#)
- [Leads-to-Booking Template](#)
- [Poster – Professionalism Proposition \(SWSC example\)](#)
- [Poster – Cleanliness Proposition \(SWSC example\)](#)

- [Poster – Reliability & Satisfaction Propositions – English \(MAWASCO example\)](#)
- [Poster – Reliability & Satisfaction Propositions – Swahili \(MAWASCO example\)](#)
- [Customer flyer \(SWSC example\)](#)
- [Field Survey for Poster Design](#)
- [MAWASCO pit latrine service brand playbook](#)
- [MAWASCO Social Media Plan](#)
- [Social Media Management Training](#)
- [The ultimate guide to financial modelling for startups – EY](#)
- [Financial Modelling of Water Utilities and Projects – The World Bank](#)
- [Velocity – the EY 7 drivers of growth](#)

APPENDIX

05

IN THE LINKS BELOW YOU'LL FIND A SERIES OF MORE IN-DEPTH SUMMARIES RELATED TO THE KEY FINDINGS AND OUTPUTS FROM BOTH SWSC AND MAWASCO DURING KEY PHASES OF THE PROJECT.

APPENDIX 1: PHASE 2

EARLY WORKSHOPS

APPENDIX 2: PHASE 3

FIELD TESTING AND ASSUMPTION VALIDATION

APPENDIX 3: PHASE 4

PROTOTYPES TO INFORM AN MVP SERVICE

APPENDIX 4: PHASE 5

MVP PILOT SETUP AND LAUNCH

APPENDIX 5: PHASE 6

IN-PILOT LEARNINGS



TRANSFORM is a joint initiative between Unilever, the FCDO and EY. Established in 2015, it works to accelerate impact enterprises, blending funding and support to deliver market-based solutions to the world's biggest development challenges. TRANSFORM uses its capabilities and expertise in marketing, distribution, digital, and business resilience to deliver transformative market-based solutions to low-income households in sub-Saharan Africa and South Asia that last. For more information on TRANSFORM, visit our [website](#), and follow us on [Twitter](#) and [LinkedIn](#).



The UK's Foreign, Commonwealth & Development Office pursues the UK's national interests and projects the UK as a force for good in the world. It promotes the interests of British citizens, safeguards the UK's security, defends its values, reduces poverty and tackles global challenges with its international partners. For more information please visit <https://www.gov.uk/government/organisations/foreign-commonwealth-development-office>, and follow us on Twitter [@FCDOgovUK](#) and [@FCDOResearch](#).

This initiative has been funded by UK aid from the UK government; however the views expressed do not necessarily reflect the UK government's official policies.



Unilever is one of the world's leading suppliers of Beauty & Personal Care, Home Care, and Foods & Refreshment products, with sales in over 190 countries and products used by 2.5 billion people every day. We have 149,000 employees and around 400 brands found in homes all over the world.

Our vision is to be the global leader in sustainable business and to demonstrate how our purpose-led, future-fit business model drives superior performance. The Unilever Compass, our sustainable business strategy, is set out to help us deliver superior performance and drive sustainable and responsible growth, while: improving the health of the planet; improving people's health, confidence and wellbeing; and contributing to a fairer and more socially inclusive world.

While there is still more to do, we are proud to have been recognised in 2020 as a sector leader in the Dow Jones Sustainability Index and – for the tenth-consecutive year – as the top ranked company in the 2020 GlobeScan/SustainAbility Sustainability Leaders survey. For more information about Unilever and our brands, please visit www.unilever.com.



EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit ey.com.

About EY Ripples

The global EY Ripples program aims to positively impact one billion lives by 2030. EY people, together with clients and other like-minded organizations, use their skills, knowledge and experience to bring positive change across three focus areas: supporting the next generation workforce, working with impact entrepreneurs and accelerating environmental sustainability. Learn more at ey.com/eyripples.



WSUP improves services by working side-by-side with local providers. In cities, strengthening the organisations that have been tasked to deliver city-wide services is crucial. WSUP is a trusted partner to utilities, municipalities, and the private sector, supporting them to develop services, build infrastructure, and attract funding that will help reach low-income communities. For more information please visit <https://www.wsup.com/> and follow us on Twitter @WSUP_Intl



Malindi Water and Sewerage Company (MAWASCO), is located in Malindi town, in Kilifi County, Kenya. It has a mandate to provide quality water and sanitation services in the most efficient and affordable way to a catchment area of 567,547 in Kilifi County, of which 300,000 is urban population.

MAWASCO, like all the other Water Service Providers (WSPs) has the mandate of delivery of both water and sanitation services at the local level. Being a pioneer in embracing this mandate, the Company has been implementing Market Based Sanitation interventions with a sole objective of igniting sanitation markets in Malindi and increase access to improved sanitation alongside implementing phased sanitation infrastructure development.



Southern Water and Sanitation Company (SWSC) commenced operations with the takeover of the systems in Livingstone in April 2000. The Company exists to provide improved supply of clean drinking water and adequate sanitation services in all the urban and Peri-Urban areas in Southern Province. The water utility is regulated by The National Water and Sanitation Council (NWASCO). SWSC is a high performing utility in many respects with the vision "to be the leading and viable potable water and sanitation services provider in Zambia". The national regulator issues annual prizes and SWSC retained first position in the following years 2015, 2016, 2017, 2019 and 2021.



This project was funded by a grant from the Bill & Melinda Gates Foundation, a nonprofit fighting poverty, disease, and inequity around the world.
